INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

ISOLATED WETLAND INDIVIDUAL PERMIT

PERMIT NO.: IWIP 2022-448-72-JBT-A

PROJECT NAME: I-65 Added Travel Lanes

INDOT DES: 1700135

AUTHORITY: IC 13-18-22-3

DATE OF ISSUANCE: June 28, 2022

DATE OF EXPIRATION: June 28, 2024

APPROVED: _____

Brian Wolff, Branch Chief
Surface Water, Operations, and Enforcement
Office of Water Quality

APPLICANT AND PERMITTEE:

Indiana Department of Transportation
Attention: Jennifer Curry
100 North Senate Avenue, IGCN 758-ES
Indianapolis, IN 46204

PROJECT LOCATION: Scott and Clark Counties

On Interstate 65.

From just north of Moonglo Road in Scottsburg
(Latitude 38.710, Longitude -85.7962)
to just south of Blue Lick Creek and Biggs Road in Memphis
(Latitude 38.498, Longitude -85.771)

An Equal Opportunity Employer

A State that Works

Recycled Paper

ISOLATED WETLANDS ON PROPERTY:

Wetland ID	Class	Acres	Forested / Not Forested
Wetland 2	II	0.098	FO
Wetland 4	II	0.029	FO
Wetland 5	II	0.125	NF
Wetland 6	II	0.132	NF
Wetland 7	II	0.003	NF
Wetland 8	II	0.099	NF
Wetland 10	II	0.019	NF
Wetland 11	II	0.017	NF
Wetland 13	II	0.011	NF
Wetland 14	II	0.009	NF
Wetland 15	II	0.003	NF
Wetland 16	II	0.004	NF
Wetland 17	II	0.022	NF
Wetland 18	II	0.015	NF
Wetland 19	II	0.095	NF
Wetland 20	II	0.027	NF
Wetland 21.2	II	0.007	NF
Wetland 22	II	0.023	NF
Wetland 23	II	0.064	NF
Wetland 24	II	0.008	NF
Wetland 25	II	0.037	NF
Wetland 26	II	0.122	NF
Wetland 27	II	0.004	NF
Wetland 28	II	0.012	NF
Wetland 29	II	0.006	NF
Wetland 30	II	0.085	NF
Wetland 31	II	0.091	NF
Wetland 32	II	0.054	NF
Wetland 33	II	0.013	NF
Wetland 35	II	0.13	NF
Wetland 37	II	0.128	NF
Wetland 38	II	0.189	NF
Wetland 39	II	0.06	NF
Wetland 41.1	II	0.163	NF

Wetland 43	II	0.037	NF
Wetland 44	II	0.011	NF
Wetland 45	II	0.005	NF
Wetland 46	II	0.014	NF
Wetland 47	II	0.024	NF
Wetland 48	II	0.021	NF
Wetland 49	II	0.018	NF
Wetland 50	II	0.019	NF
Wetland 51	II	0.012	NF
Wetland 52	II	0.03	NF
Wetland 53	II	0.02	NF
Wetland 54	II	0.034	NF
Wetland 55	II	0.042	NF
Wetland 56	II	0.042	NF
Wetland 57	II	0.044	NF
Wetland 58	II	0.02	NF
Wetland 59	II	0.02	NF
Wetland 60	II	0.041	NF
Wetland 61	II	0.033	NF
Wetland 62	II	0.03	NF
Wetland 64	II	0.012	NF
Wetland 66	II	0.136	NF
Wetland 67	II	0.099	NF
Wetland 68	II	0.322	NF
Wetland 70	II	0.023	NF
Wetland 71	II	0.114	NF
Wetland 72	II	0.013	NF
Wetland 73	II	0.015	NF
Wetland 74	II	0.029	NF
Wetland 75	II	0.022	NF
Wetland 77	II	0.003	NF
Wetland 79	II	0.009	NF
Wetland 80	II	0.004	NF
Wetland 81	II	0.005	NF
Wetland 82	II	0.039	NF
Wetland 83	II	0.015	NF
Wetland 84	II	0.02	NF

Wetland 85	II	0.024	NF
Wetland 87	II	0.027	NF
Wetland 88	II	0.022	NF
Wetland 89	II	0.089	NF
Wetland 90	II	0.016	NF
Wetland 91	II	0.031	NF
Wetland 92	II	0.036	NF
Wetland 93	II	0.019	NF
Wetland 94	II	0.018	NF
Wetland 96	II	0.05	NF
Wetland 97	II	0.055	NF
Wetland 98	II	0.123	NF
Wetland 99	II	0.232	NF
Wetland 100	II	0.8	NF
Wetland 101	II	0.236	NF
Wetland 102	II	0.241	NF
Wetland 103	II	0.144	NF
Wetland 104	II	0.017	NF
Wetland 105	II	0.218	NF
Total Acreage:		5.699	

EXEMPT ISOLATED WETLANDS

Wetland ID	Class	Acres	Forested / Not Forested
Wetland 2	II	0.098	FO
Wetland 4	II	0.029	FO
Wetland 5	II	0.125	NF
Wetland 6	II	0.132	NF
Wetland 7	II	0.003	NF
Wetland 8	II	0.099	NF
Wetland 10	II	0.019	NF
Wetland 11	II	0.017	NF
Wetland 14	II	0.009	NF
Wetland 15	II	0.003	NF
Wetland 16	II	0.004	NF
Wetland 17	II	0.022	NF
Wetland 18	II	0.015	NF

Wetland 19	II	0.095	NF
Wetland 20	II	0.027	NF
Wetland 21.2	II	0.007	NF
Wetland 22	II	0.023	NF
Wetland 23	II	0.064	NF
Wetland 24	II	0.008	NF
Wetland 25	II	0.037	NF
Wetland 26	II	0.122	NF
Wetland 28	II	0.012	NF
Wetland 29	II	0.006	NF
Wetland 30	II	0.085	NF
Wetland 31	II	0.091	NF
Wetland 32	II	0.054	NF
Wetland 33	II	0.013	NF
Wetland 35	II	0.13	NF
Wetland 37	II	0.128	NF
Wetland 38	II	0.189	NF
Wetland 39	II	0.06	NF
Wetland 41.1	II	0.163	NF
Wetland 43	II	0.037	NF
Wetland 46	II	0.014	NF
Wetland 47	II	0.024	NF
Wetland 48	II	0.021	NF
Wetland 49	II	0.018	NF
Wetland 50	II	0.019	NF
Wetland 51	II	0.012	NF
Wetland 52	II	0.03	NF
Wetland 53	II	0.02	NF
Wetland 54	II	0.034	NF
Wetland 55	II	0.042	NF
Wetland 56	II	0.042	NF
Wetland 57	II	0.044	NF
Wetland 58	II	0.02	NF
Wetland 59	II	0.02	NF
Wetland 60	II	0.041	NF
Wetland 61	II	0.033	NF
Wetland 62	II	0.03	NF
Wetland 64	II	0.012	NF

Wetland 66	II	0.136	NF
Wetland 67	II	0.099	NF
Wetland 68	II	0.322	NF
Wetland 70	II	0.023	NF
Wetland 71	II	0.114	NF
Wetland 72	II	0.013	NF
Wetland 73	II	0.015	NF
Wetland 74	II	0.029	NF
Wetland 75	II	0.022	NF
Wetland 79	II	0.009	NF
Wetland 80	II	0.004	NF
Wetland 81	II	0.005	NF
Wetland 82	II	0.039	NF
Wetland 83	II	0.015	NF
Wetland 84	II	0.02	NF
Wetland 85	II	0.024	NF
Wetland 87	II	0.027	NF
Wetland 88	II	0.022	NF
Wetland 89	II	0.089	NF
Wetland 90	II	0.016	NF
Wetland 91	II	0.031	NF
Wetland 92	II	0.036	NF
Wetland 93	II	0.019	NF
Wetland 94	II	0.018	NF
Wetland 98	II	0.123	NF
Wetland 99	II	0.232	NF
Wetland 100	II	0.8	NF
Wetland 101	II	0.236	NF
Wetland 102	II	0.241	NF
Wetland 103	II	0.144	NF
Wetland 104	II	0.017	NF
Wetland 105	II	0.218	NF
Total exemption:		5.56	

REGULATED ISOLATED WETLAND IMPACTS:

Wetland ID	Class	Acres	Forested / Not Forested
Wetland 27	II	0.0036	NF
Wetland 96	II	0.0071	NF
Wetland 97	II	0.0008	NF
Total regulated impact:		0.0115	

PERMITTED ACTIVITY: Placement of clean earthen fill into 0.0115 acre of state regulated wetland for the construction of added travel lanes.

MITIGATION: Purchase 0.017 acre of credit for emergent wetlands from the Indiana Stream and Wetland Mitigation Program.

MITIGATION LOCATION: Whitewater – East Fork White Service Area

MITIGATION RATIOS:
Class of Wetland Impacts: II
Type of Wetland Impacts: Non-Forested
Class of Wetland Replacement: II
Type of Wetland Replacement: Non-Forested
Off-site Mitigation
Required Ratio: 1.5:1
Total Class II Mitigation: 0.017 acres

Conditions of the Isolated Wetland Individual Permit

1.0 General

(a) Implement the project as depicted and described in the application for an Isolated Wetland Individual Permit.

(b) Complete all approved discharges no later than two (2) years after the date of issuance of this Isolated Wetland Individual Permit. You may request a one (1) year extension to the Isolated Wetland Individual Permit by submitting a written request ninety (90) days prior to the deadline stated above. The written request shall contain an account of which discharges and mitigation have been completed and list the reasons an extension is requested.

(c) Allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials:
   (1) to enter your property, including impact and mitigation site(s);
   (2) to have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
   (3) to inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this permit and any mitigation wetland site;
   (4) to sample or monitor any discharge of pollutants or any mitigation site.

2.0 Mitigation

(a) Provide proof of purchase of 0.017 acre of in-lieu fee wetland credits for emergent impacts in the Whitewater – East Fork White Service Area from the Indiana Stream and Wetland Mitigation Program (IN SWMP) within one (1) year of the date of this authorization or before authorized impacts to waters of the State, whichever comes first. Be aware that credits may not be available at all times. Failure to purchase credits by the required date may result in additional mitigation requirements to compensate for temporal loss.

3.0 Erosion and Sediment Control

(a) Implement erosion and sediment control measures on the construction site prior to land disturbance to minimize soil from leaving the site or entering a waterbody. Erosion and sediment control measures shall be implemented using an appropriate order of construction (sequencing) relative to the land-disturbing activities associated with the project. Appropriate measures include, but are not limited to, silt fence, diversions, and sediment traps.

(b) Monitor and maintain erosion control measures and devices regularly, especially after rain events, until all soils disturbed by construction activities have been permanently stabilized.

(c) Use run-off control measures, including but not limited to diversions and slope drains. These measures are effective for directing and managing run-off to sediment control measures and for preventing direct run-off into waterbodies.

(d) Install and make appropriate modifications to erosion and sediment control measures based on current site conditions as construction progresses on the site. The Indiana Storm Water Quality Manual or similar guidance documents

are available to assist in the selection of measures that are applicable to individual project sites.

(e) Implement appropriate erosion and sediment control measures for all temporary run-arounds, cofferdams, temporary causeways, temporary crossings, or other such structures that are to be constructed within any waters of the state. Minimize disturbance to riparian areas when constructing these structures.

(f) Stabilize and re-vegetate disturbed soils as final grades are achieved. Initiation of stabilization must occur immediately or at a minimum within the requirements of a construction site run-off permit after work is completed. Use a mixture of herbaceous species beneficial for wildlife or an emergent wetland seed mix wherever possible and appropriate. Tall fescue may only be planted in ditch bottoms and ditch side slopes and must be a low endophyte seed mix.

(g) Cut and fill slopes located adjacent to wetlands and streams (including encapsulated streams) or that directly discharge to these aquatic features are to be stabilized using rapid/incremental seeding or other appropriate stabilization measures.

(h) As work progresses, areas void of protective ground cover shall be re-vegetated or stabilized using mulch that is anchored, or under more extreme conditions an appropriate grade of erosion control blanket must be used. Erosion control blanket shall be used for areas associated with concentrated flow. The selection of material must be made based on site conditions and all applicable permit requirements. If a construction site run-off permit (327 IAC 15-5) has been obtained, implement the stabilization plan as specified in the stormwater pollution prevention plan (SWPPP).

4.0 Construction

(a) Do not clear trees within the project boundaries during April 1 through September 30 in order to protect any habitat suitable for the federally endangered Indiana Bat (*Myotis sodalis*) and the federally threatened Northern Long Eared Bat (*Myotis septentrionalis)* unless a waiver has been issued by the US Fish and Wildlife Service.

(b) Clearly mark wetlands and streams that are to remain undisturbed on the project site.

(c) Obtain prior approval from IDEM for operation of construction equipment or the placement of temporary run-arounds, temporary cofferdams, temporary causeways, temporary crossings, or other related structures within any water of

the state, unless specifically stated, depicted, or detailed in the aforementioned correspondence and project plans.

(d) Construct temporary run-arounds, temporary cofferdams, temporary causeways, temporary crossings, or other such structures of non-erodible materials.

(e) Construct temporary crossings in a manner that does not impede surface flows for an approximate two (2) year (Q2) flood event.

(f) Cofferdam dewatering activities must be directed to an appropriate sediment control measure or a combination of measures prior to discharging into a water of the state to minimize the discharge of sediment-laden water.

(g) Operate machinery in a manner that minimizes disturbance to waters of the state.

(h) Deposit any dredged material in a contained upland (non-wetland) disposal area to prevent sediment run-off to any waterbody.

Other Applicable Permits

If the land disturbance for the overall project will disturb one (1) acre or more, a construction stormwater general permit is required for the project. Permit coverage must be obtained prior to the initiation of land-disturbing activities. Information related to obtaining permit coverage is available at www.in.gov/idem/stormwater or by contacting the IDEM, Stormwater Program at 317-233-1864 or via email at Stormwat@idem.IN.gov.

This permit approval does not relieve you from the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. You may wish to contact the Indiana Department of Natural Resources at 317-232-4160, or toll free at 877-928-3755, concerning the possible requirement of a Natural Freshwater Lake or Construction in a Floodway Permit, or the IDEM Stormwater Permits Section at 317-233-1864 concerning the possible need for construction stormwater general permit coverage permits if you plan to disturb greater than one (1) acre of soil during construction.

This permit does not:

(1) authorize impacts or activities outside the scope of this permit;
(2) authorize any injury to persons or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;

(3) convey any property rights of any sort, or any exclusive privileges;
(4) preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
(5) authorize changes in the plan design detailed in the application.

Failure to comply with the terms and conditions of this permit may result in enforcement action against you. If an enforcement action is pursued, you could be assessed up to $25,000 per day in civil penalties. You may also be subject to criminal liability if it is determined that the permit was violated willfully or negligently.

This permit is effective 18 days from the mailing of this notice unless a petition for review and a petition for stay of effectiveness are filed within this 18-day period. If a petition for review and a petition for stay of effectiveness are filed within this period, any part of the permit within the scope of the petition for stay is stayed for 15 days, unless or until an Environmental Law Judge further stays the permit in whole or in part.

Notice of Right to Administrative Review (Permits)

If you wish to challenge this permit, you must file a Petition for Administrative Review with the Office of Environmental Adjudication (OEA), and serve a copy of the petition upon IDEM. The requirements for filing a Petition for Administrative Review are found in IC 4-21.5-3-7, IC 13-15-6-1 and 315 IAC 1-3-2. A summary of the requirements of these laws is provided below.

A Petition for Administrative Review must be filed with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the issuance of this notice (eighteen (18) days if you received this notice by U.S. Mail), and a copy must be served upon IDEM. Addresses are:

Director	Commissioner
Office of Environmental Adjudication	Indiana Dept. of Environmental Management
Indiana Government Center North	Indiana Government Center North
100 North Senate Avenue, Room N103	100 North Senate Avenue, Room 1301
Indianapolis, Indiana 46204	Indianapolis, Indiana 46204

The petition must contain the following information:

(a) The name, address and telephone number of each petitioner.
(b) A description of each petitioner's interest in the permit.
(c) A statement of facts demonstrating that each petitioner is:
    (1) a person to whom the order is directed;
    (2) aggrieved or adversely affected by the permit; or
    (3) entitled to administrative review under any law.
(d) The reasons for the request for administrative review.

(e) The particular legal issues proposed for review.
(f) The alleged environmental concerns or technical deficiencies of the permit.
(g) The permit terms and conditions that the petitioner believes would be appropriate and would comply with the law.
(h) The identity of any persons represented by the petitioner.
(i) The identity of the person against whom administrative review is sought.
(j) A copy of the permit that is the basis of the petition.
(k) A statement identifying petitioner's attorney or other representative, if any.

Failure to meet the requirements of the law with respect to a Petition for Administrative Review may result in a waiver of your right to seek administrative review of the permit. Examples are:

(a) Failure to file a Petition by the applicable deadline;
(b) Failure to serve a copy of the Petition upon IDEM when it is filed; or
(c) Failure to include the information required by law.

If you seek to have a permit stayed during the administrative review, you may need to file a Petition for a Stay of Effectiveness. The specific requirements for such a Petition can be found in 315 IAC 1-3-2 and 315 IAC 1-3-2.1.

Pursuant to IC 4-21.5-3-17, OEA will provide all parties with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action. If you are entitled to notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above.

If you have procedural or scheduling questions regarding your Petition for Administrative Review, additional information on the review process is available at the website of the Office of Environmental Adjudication at http://www.in.gov/oea.

If you have any questions about this permit, please contact J. Turner, Project Manager, by e-mail at JTurner2@IDEM.IN.Gov or by telephone at 317-450-7054.

cc: Indiana Stream and Wetland Mitigation Program

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT
INDIANAPOLIS REGULATORY OFFICE
8902 OTIS AVENUE, SUITE S106B
INDIANAPOLIS, IN 46216

July 5, 2022

Regulatory Division
North Branch
ID No. LRL-2021-85-djd

Ms. Jennifer Curry
Indiana Department of Transportation
100 North Senate Avenue, Room N758-ES
Indianapolis, IN 46204

Dear Ms. Curry:

This is in response to your letter of April 1, 2022, regarding the proposed added travel lanes project on I65 in Scott County, Indiana (Des No. 1700135). More specifically, the project is located at Latitude 38.604767° North and Longitude 85.781478° West. The proposed project would discharge fill material into waters of the United States at 16 separate and complete crossings. We have reviewed the submitted information relative to Section 404 of the Clean Water Act.

We have determined that the proposed project is authorized under the provisions of our Nationwide Permit (NWP) 33 CFR 330 (14) for Linear Transportation Projects as published in the Federal Register December 27, 2021. We do require compliance with the enclosed Terms, General, and Regional Conditions of the NWP and the following Special Condition:

1. The Permittee shall comply with the enclosed Water Quality Certification (WQC) 2022-448-72-JBT-A issued by the Indiana Department of Environmental Management (IDEM) on June 28, 2022, which are incorporated herein by reference.

This verification is valid until March 14, 2026. The enclosed Compliance Certification must be submitted to the District Engineer within 30 days of completion of the authorized activity. Note that we also perform periodic inspections to ensure compliance with our permit conditions and applicable Federal laws.

If you have any questions, please contact Ms. Deborah Duda Snyder by writing to the above address or by calling (317) 543-9424. All correspondence pertaining to this matter should refer to our ID No. LRL-2021-85-djd.

Sincerely,

2022.07.05
10:56:30 -04'00'

Sarah J. Keller
Team Leader
Indianapolis Regulatory Office

Enclosures
Copy furnished: IDEM (Turner)

Attachment 14-1

Compliance Certification:

Permit Number: LRL-2021-85-djd

Name of Permittee: Indiana Department of Transportation

Date of Issuance: July 5, 2022

Within 30 days of completion of the activity authorized by this permit and any mitigation required by this permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers
Indianapolis Regulatory Office
8902 Otis Avenue, Suite S106B
Indianapolis, IN 46204

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee (Jennifer Curry) Date

2021 Nationwide Permit Summary

US Army Corps of Engineers
Louisville District ®

Issued: **February 25, 2022**
Expires: **March 14, 2026**

No. 14. Linear Transportation Projects

(NWP Final Rule, 86 FR 73522)

Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, driveways, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge of dredged or fill material in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404).

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges of dredged or fill material for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, ''District Engineer's Decision.'' The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United

States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct

management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district

engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must

include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district

engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not

authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____
_____
(Transferee)

_____
_____
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an

NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many

wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no

work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

F. Nationwide Permit Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not

a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of

the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

INDIANA REGIONAL GENERAL CONDITIONS FOR THE STATE OF INDIANA

These Regional General Conditions are in addition to but do not supersede the requirements in the Federal Register, Volume 86, No. 8, January 13, 2021. Information on pre-construction notification (PCN) procedures can be found in General Condition 32 *Pre-Construction Notification* (pp 2873), while *loss of waters of the United States* is defined in the Nationwide Permit Definitions (pp 2876).

Regional Conditions Applicable to Specific NWPs within Indiana:

1. Notification in accordance with General Condition 32 is required to the Corps for impacts to waters of the United States exceeding 0.1 acre for the NWP listed below.

   NWP 33 (Temporary Construction, Access, and Dewatering)

Regional Conditions Applicable to all NWPs within Indiana:

2. Notification in accordance with General Condition 32 is required to the Corps for all activities affecting Designated Salmonid Waters, Outstanding State Resource Waters, Exceptional Use Streams, and Critical Wetlands and Critical Special Aquatic Sites (See Attachments 1 and 2).

3. Notification in accordance with General Condition 32 is required to the Corps for all activities which would cause, alter, or affect diversion of water from the Great Lakes basin.

ATTACHMENT 1

Designated Salmonid Waters

1. Trail Creek & tributaries downstream to Lake Michigan, LaPorte County.
2. East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Waterway (Ditch), Porter, and LaPorte Counties.
3. The Indiana portion of the open waters of Lake Michigan.
4. Salt Creek above (upstream of) its confluence with the Little Calumet River, Porter County.
5. Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan, Porter County.
6. Galena River and its tributaries, LaPorte County
7. The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Indiana/Michigan state line, St. Joseph County.
8. The Indiana portion of the open waters of Lake Michigan.
9. Those waters designated by the Indiana Department of Natural Resources (IDNR) for put-and-take trout fishing.

Waterbodies which have been designated all or partially as Outstanding State Resource Waters:

1. The Blue River in Washington, Crawford, and Harrison counties from river mile 57.0 to river mile 11.5.
2. The North Fork of Wildcat Creek in Carroll and Tippecanoe counties, from river mile 43.11 to river mile 4.82.
3. The South Fork of Wildcat Creek in Tippecanoe County, from river mile 10.21 to river mile 0.00.
4. Cedar Creek in Allen and DeKalb Counties, from river mile 13.7 to its confluence with the St. Joseph River.
5. The Indiana portion of the open waters of Lake Michigan.
6. All waters incorporated in the Indiana Dunes National Lakeshore.

Streams which have been designated all or partially as Exceptional Use Waters:

1. Big Pine Creek in Warren County downstream of the State Road 55 bridge near the town of Pine Village to its confluence with the Wabash River.
2. Mud Pine Creek in Warren County from the bridge on the County Road between Brisco and Rainsville to its confluence with Big Pine Creek.
3. Fall Creek in Montgomery County from the old C.R. 119 bridge in the NW quarter of Section 21, Township 22N, Range 8W downstream to its confluence with Big Pine Creek.
4. Indian Creek in Montgomery County from the County Road 650 West bridge downstream to its confluence with Sugar Creek.
5. Clifty Creek in Montgomery County within the boundaries of Pine Hills Nature Preserve.
6. Bear Creek in Fountain County from the bridge on County Road 450 North to its confluence with the Wabash River.

7. Rattlesnake Creek in Fountain County from the bridge on County Road 450 North to its confluence with Bear Creek.
8. The small tributary to Bear Creek in Fountain County within the Portland Arch Nature Preserve which enters Bear Creek at the sharpest bend and has formed the small natural bridge called Portland Arch.
9. Blue River from the confluence of the West and Middle Forks of the Blue River in Washington County downstream to its confluence with the Ohio River.
10. The South Fork of the Blue River in Washington County from Horner's Chapel Road bridge downstream to its confluence with Blue River.
11. Lost River and all surface and underground tributaries upstream from the Orangeville Rise (T2N, R1W, Section 6) and the Rise of Lost River (T2N, R1W, Section 7) and the mainstem of the Lost River from the Orangeville Rise downstream to its confluence with the East Fork of White River.

ATTACHMENT 2

Critical Wetlands and Critical Special Aquatic Sites

1. Acid bogs
2. Acid seeps
3. Circumneutral bogs
4. Circumneutral seeps
5. Cypress Swamps
6. Dune and swales
7. Fens
8. Forested fens
9. Forested swamps
10. Marl beaches
11. Muck flats
12. Pannes
13. Sand flats
14. Sedge meadows
15. Shrub swamps
16. Sinkhole ponds
17. Sinkhole swamps
18. Wet floodplain forests
19. Wet prairies
20. Wet sand prairies

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov
Eric J. Holcomb, *Governor*
Brian C. Rockensuess, *Commissioner*

Section 401 Water Quality Certification

IDEM Number:	2022-448-72-JBT-A
USACE Number:	LRL-2021-85
INDOT DES Number:	1700135
Project Name:	I-65 Added Travel Lanes
Authority:	327 IAC 2. CWA Sections: 301, 302, 303, 306, 307, & 401
Date of Issuance:	June 28, 2022
Impacts must be completed by:	June 28, 2024

Approved:

Brian Wolff, Branch Chief
Surface Water and Operations
Office of Water Quality

Applicant / Permittee:

Indiana Department of Transportation
Attention: Jennifer Curry
100 North Senate Avenue, IGCN 758-ES
Indianapolis, IN 46204

Project Location:

Scott and Clark Counties

On Interstate 65.

From just north of Moonglo Road in Scottsburg (Latitude 38.710, Longitude -85.7962) to just south of Blue Lick Creek and Biggs Road in Memphis (Latitude 38.498, Longitude -85.771)

Project Description:

Cumulatively impact a total 2842.9 linear feet of stream channel on 23 different streams.

Cumulatively impact a total of 0.1801 acre of wetland on seven different wetlands.

Purchase from the Indiana Stream and Wetland Mitigation Program 232.9 linear feet of stream credit and 0.0736 acre of wetland credit in the Upper Ohio service area and 257 linear feet of stream credits and 0.1833 acre of wetland credits in the Whitewater-East Fork White service area.

The purpose of the project is to add travel lanes to Interstate 65.

Isolated wetland impacts associated with the project are being reviewed separately through the state regulated wetland permitting process, IC 13-18-22 and IAC 327 17.

Authorized Impacts

STREAM IMPACTS	**Length of Impact (linear feet)**		
Type of Impact:	**Ephemeral**	**Intermittent**	**Perennial**
Encapsulation	695	554	205
Pipe End Sections	32	7	8
Riprap	86	149	278.9
Concrete		582	382.9
Dredging			30
Earthen Fill	200	265	

WETLAND & OPEN WATER IMPACTS	**Area of Impact (acres)**			
Type of Impact:	**Open Water**	**Emergent**	**Scrub/Shrub**	**Forested**
Earthen Fill		0.0873	0.0029	0.0160
Pipe End Section		0.001		
Riprap		0.002		

Project Mitigation

STREAM MITIGATION	Linear Feet		
	Ephemeral	Intermittent	Perennial
In-Lieu Fee Credits Upper Ohio Service Area:	31	30	171.9
In-Lieu Fee Credits Whitewater – East Fork White:	125	52	80

WETLAND MITIGATION	Acres		
	Emergent	Scrub/Shrub	Forested
In-Lieu Fee Credits Upper Ohio Service Area	0.006		0.0676
In-Lieu Fee Credits Whitewater – East Fork White	0.1746	0.0087	

Application Signed: April 1, 2022

Application Received: April 1, 2022

Based on available information, it is the judgment of this office that the impacts from the proposed project as outlined by this Section 401 Water Quality Certification and described in your application will comply with the applicable provisions of 327 IAC 2, 40 CFR 121 (36 FR 22487, Nov. 25, 1971; redesignated at 37 FR 21441, Oct. 11, 1972; further redesignated at 44 FR 32899, June 7, 1979), and Sections 301, 302, 303, 306, and 307 of the Clean Water Act if you comply with the conditions set forth below. Therefore, subject to the following conditions, the Indiana Department of Environmental Management (IDEM) hereby grants Section 401 Water Quality Certification for the project described in your application. Any changes in project design or scope not detailed in the application described above or modified by this Section 401 Water Quality Certification are not authorized.

Failure to comply with the terms and conditions of this Section 401 Water Quality Certification may result in enforcement action against you. If an enforcement action is pursued, you could be assessed up to $25,000 per day in civil penalties. You may also be subject to criminal liability if it is determined that the Section 401 Water Quality Certification was violated willfully or negligently.

Conditions of the Section 401 Water Quality Certification

1.0 General

(a) Implement the project as depicted and described in the application for Section 401 Water Quality Certification as modified by the conditions of this certification.

(b) Per 33 CFR 325.6(c), the federal license shall be valid for no more than five years. Therefore, all approved discharges must be completed within the term of the valid federal permit.

(c) Per IC 13-14-2-2, the department may inspect public or private property to inspect for and investigate possible violations of environmental management laws. Therefore, the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials must be allowed:
   (1) to enter your property, including impact and mitigation site(s);
   (2) to have access to and copy at reasonable times any records that must be kept under the conditions of this certification;
   (3) to inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation wetland site;
   (4) to sample or monitor any discharge of pollutants or any mitigation site.

(d) The application referenced by this certification was not reviewed for the adequacy of the engineering design. All measures included in the application, as well as those referenced by this certification, should be evaluated as to their feasibility by a qualified individual with structural measures designed by a qualified engineer.

2.0 Mitigation

Per 327 IAC 2.1, the goal of Indiana's water quality standards is to restore and maintain the chemical, physical and biological integrity of the state's waters. Mitigation of dredge and fill impacts to Indiana's water resources is required to maintain water quality.

(a) Per 33 CFR 332.3 (f), the amount of mitigation required must be listed within the permit.

   (1) Provide to IDEM proof of the purchase of 232.9 linear feet of stream credit and 0.0736 acre of wetland credit in the Upper Ohio service area and 257 linear feet of stream credits and 0.1833 acre of wetland credits in the Whitewater-East Fork White service area from the Indiana Stream and Wetland Mitigation Program (IN SWMP):

      (A) Within one (1) year of the date of this authorization;
      (B) Before authorized impacts to waters of the State.

      Be aware credits may not be available at all times.

Failure to purchase credits by the required date may result in additional mitigation requirements to compensate for temporal loss.

3.0 Erosion and Sediment Control

Per 40 CFR 122.26, 327 IAC 15, the use of appropriate stormwater control measures and maintenance thereof will prevent any sediment laden water from migrating off site and entering waterways and wetlands, potentially impairing water quality. Therefore, the following erosion and sediment control steps must be completed.

(a) Implement erosion and sediment control measures on the construction site prior to land disturbance to minimize soil from leaving the site or entering a waterbody. Erosion and sediment control measures shall be implemented using an appropriate order of construction (sequencing) relative to the land-disturbing activities associated with the project. Appropriate measures include, but are not limited to, silt fence, diversions, and sediment traps.

(b) Monitor and maintain erosion control measures and devices regularly, especially after rain events, until all soils disturbed by construction activities have been permanently stabilized.

(c) Use run-off control measures, including but not limited to diversions and slope drains. These measures are effective for directing and managing run-off to sediment control measures and for preventing direct run-off into waterbodies.

(d) Install and make appropriate modifications to erosion and sediment control measures based on current site conditions as construction progresses on the site. The Indiana Storm Water Quality Manual or similar guidance documents are available to assist in the selection of measures that are applicable to individual project sites.

(e) Implement appropriate erosion and sediment control measures for all temporary run-arounds, cofferdams, temporary causeways, temporary crossings, or other such structures that are to be constructed within any waters of the state. Minimize disturbance to riparian areas when constructing these structures. Structures must be included in reviewed designs or approved by IDEM prior to use. Construct temporary run-arounds, temporary cofferdams, temporary causeways, temporary crossings, or other such structures of non-erodible materials. Temporary crossings and causeways must be completely removed upon completion of the project and the affected area restored to pre-construction contours, grades, and vegetative conditions.

(f) Install stream pump-around operations in accordance with the plans and ensure in-stream component is constructed of non-sediment producing materials. The discharge at the outlet shall not cause erosion of the stream bottom and banks.

(g) Direct cofferdam dewatering activities to an appropriate sediment control measure or a combination of measures prior to discharging into a water of the state to minimize the discharge of sediment-laden water.

(h) Ensure cut and fill slopes located adjacent to wetlands and streams (including encapsulated streams) or that directly discharge to these aquatic features are stabilized using rapid/incremental seeding or other appropriate stabilization measures.

(i) Stabilize and re-vegetate disturbed soils as final grades are achieved. Initiation of stabilization must occur immediately or, at a minimum, within the requirements of a construction site run-off permit after work is completed. Use a mixture of herbaceous species beneficial for wildlife or an emergent wetland seed mix wherever possible and appropriate. Tall fescue may only be planted in ditch bottoms and ditch side slopes and must be a low endophyte seed mix. Stabilize the channel before releasing stream flows into the channel.

(j) As work progresses, re-vegetate areas void of protective ground cover. Areas that are to be re-vegetated shall use seeding and anchored mulch. **If alternative methods are required to ensure stabilization, erosion control blankets may be used that are biodegradable, that use loose-woven/leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation).**

Anchor mulch. Anchoring shall be appropriate for the site characteristics such as slope, slope length, and concentrated flows**. Anchoring methods may not include loose netting over straw, but can range from crimping of straw, erosion control blankets as specified above that minimize wildlife entrapment, or net free blankets.** Tackifiers with mulch and hydro-mulch are acceptable and shall be applied to the manufacturer specifications.

4.0 Construction

Per 327 IAC 2-1-6(b)(4) the protection of existing uses for aquatic life is required and, per 327 IAC 2-1.3-2 (4) the utilization of best management practices helps ensure the protection of existing uses. Therefore, the following best management practices are required.

(a) Avoid in stream channel work during the fish spawning season (April 1 through June 30).

(b) Clearly mark wetlands and streams that are to remain undisturbed on the project site.

(c) Restrict channel work and vegetation clearing to the minimum necessary for the installation of any structures. Work from only one side of the stream, and, where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation.

(d) Ensure permanent in-stream structures, including but not limited to culverts and other stream encapsulations, are embedded and sized appropriately so as not to impede surface flows or create abnormal impediments to aquatic life.

(e) Deposit any dredged material in a contained upland (non-wetland) disposal area to prevent sediment run-off to any waterbody.

(f) Create temporary structures constructed in streams such that near normal stream flows are maintained. (327 IAC definitions Stream Design Flow)

(g) Install riprap and other bank stabilization materials so they are flush with the upstream and downstream bank and stream channel bed elevations and grades.

Other Applicable Permits

If the land disturbance for the overall project will disturb one (1) acre or more, a construction stormwater general permit is required for the project. Permit coverage must be obtained prior to the initiation of land-disturbing activities. Information related to obtaining permit coverage is available at www.in.gov/idem/stormwater or by contacting the IDEM, Stormwater Program at 317-233-1864 or via email at Stormwat@idem.IN.gov.

This certification does not relieve you of the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. You may wish to contact the Indiana Department of Natural Resources at 317-232-4160 (toll free at 877-928-3755) concerning the possible requirement of natural freshwater lake or floodway permits.

This certification does not:

(1) Authorize impacts or activities outside the scope of this certification;
(2) Authorize any injury to persons or private property or invasion of other private

rights, or any infringement of federal, state or local laws or regulations;
(3) Convey any property rights of any sort, or any exclusive privileges;
(4) Preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
(5) Authorize changes in the plan design detailed in the application.

Notice of Right to Administrative Review (Permits)

If you wish to challenge this permit, you must file a Petition for Administrative Review with the Office of Environmental Adjudication (OEA) and serve a copy of the petition upon IDEM. The requirements for filing a Petition for Administrative Review are found in IC 4-21.5-3-7, IC 13-15-6-1 and 315 IAC 1-3-2. A summary of the requirements of these laws is provided below.

A Petition for Administrative Review must be filed with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the issuance of this notice (eighteen (18) days if you received this notice by U.S. Mail), and a copy must be served upon IDEM. Addresses are:

Director	Commissioner
Office of Environmental Adjudication	Indiana Dept. of Environmental Management
Indiana Government Center North	Indiana Government Center North
100 North Senate Avenue, Room N103	100 North Senate Avenue, Room 1301
Indianapolis, Indiana 46204	Indianapolis, Indiana 46204

The petition must contain the following information:

(a) The name, address and telephone number of each petitioner.
(b) A description of each petitioner's interest in the permit.
(c) A statement of facts demonstrating that each petitioner is:
    (1) a person to whom the order is directed;
    (2) aggrieved or adversely affected by the permit; or
    (3) entitled to administrative review under any law.
(d) The reasons for the request for administrative review.
(e) The particular legal issues proposed for review.
(f) The alleged environmental concerns or technical deficiencies of the permit.
(g) The permit terms and conditions that the petitioner believes would be appropriate and would comply with the law.
(h) The identity of any persons represented by the petitioner.
(i) The identity of the person against whom administrative review is sought.
(j) A copy of the permit that is the basis of the petition.
(k) A statement identifying petitioner's attorney or other representative, if any.

Failure to meet the requirements of the law with respect to a Petition for Administrative Review may result in a waiver of your right to seek administrative review of the permit. Examples are:

(a) Failure to file a Petition by the applicable deadline;
(b) Failure to serve a copy of the Petition upon IDEM when it is filed; or
(c) Failure to include the information required by law.

If you seek to have a permit stayed during the administrative review, you may need to file a Petition for a Stay of Effectiveness. The specific requirements for such a Petition can be found in 315 IAC 1-3-2 and 315 IAC 1-3-2.1.

Pursuant to IC 4-21.5-3-17, OEA will provide all parties with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action. If you are entitled to notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above.

If you have procedural or scheduling questions regarding your Petition for Administrative Review, additional information on the review process is available at the website of the Office of Environmental Adjudication at http://www.in.gov/oea.

If you have any questions about this certification, please contact James Turner, Project Manager, by email at JTurner2@IDEM.IN.Gov or by telephone at 317-450-7054.

cc: Deborah Duda Snyder, USACE – Indianapolis
Indiana Stream and Wetland Mitigation Program

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

Construction Stormwater Permit Summary Report – Sufficiency Letter

July 5, 2022

Permit #: **INRA10017** **IN DOT I65 Added Turn Lanes - Des. 1700135** Clark County

SITE DETAILS:

Project Name: **IN DOT I65 Added Turn Lanes - Des. 1700135**
Physical Address: 14013 Memphis & Blue Lick Rd Memphis, IN 47143

Permit Status: **In Effect**
Permit Issued: **6/27/2022**
Latitude: 38.589722

Permit Expiration: **6/26/2027**
Longitude: -85.778611
MS4: INDOT MS4

Location Description: Reconstruction of I-65 to add additional lanes from Blue Lick Road to SR 56. NA IN NA

CONTACTS:

Project Site Owner (Permittee): Gary Kreutzjans, INDOT Phone: **855-463-6848**

Address: 185 Agrico Ln Seymour, IN, 47274 Email: CSGP@indot.in.gov

PROJECT DETAILS

Project Type: **Other**
Project County(s): Clark Clark,Scott
Site Ownership Type: **State Government**

Total Project Acreage: **370.9**

Proposed Land Disturbance (acres): **271.8**

Estimated Impervious Area (sq ft): **8608990**

Est Start Date: **7/1/2023**

Est End Date: **7/1/2025**

Discharge Type: **Surface Water**

Storm System:

Receiving Stream: **Blue Lick Creek, Henry Brook, Ville Run, Wolf Run, UNT 1 to Wolf Run, UNT 1 to Miller Fork, UNT 2 to Miller Fork, Miller Fork, Meal Run, W. Fork Silver Creek, Pigeon Roost Creek, Tree Creek, Sycamore Run, Nest Run**

Waterbody 2:

This notice is acceptable to be posted at the project site to verify NPDES permit coverage. If the project is regulated by a Municipal Separate Storm Sewer System (MS4), you are required to post additional information as required by the MS4 that has jurisdiction (i.e. MS4 Permit, etc). NPDES permit coverage does not supersede local requirements that may be required to conduct activities associated with this project.

If the project is regulated by an MS4, direct inquiries to the local MS4.
If this project is outside an MS4 or owned/operated by an MS4, inquiries may be directed to the IDEM Stormwater Program at Stormwat@idem.IN.gov.

Attachment 14-1

IDEM Watermark
INRA10017 v1.0
Approved
Issued On:06/27/2022
Expires On:06/26/2027

The Notice of Intent (NOI) submitted online is your certification that the project meets the requirements of the construction stormwater general permit (INRA00000). The NOI is submitted to obtain NPDES permit coverage for the proposed activities at the project site and does not constitute approval to conduct activities that are related to other local, state, or federal permits.

If information is not accurate it is the responsibility of the permittee to update the information. If it is determined that information is inaccurate or deficient you may be requested to address those items.

If the project is within a Municipal Separate Storm Sewer System (MS4) and regulated by the MS4, the Construction/Stormwater Pollution Prevention Plan (SWP3) review was completed by the MS4 or their representative and verification by the MS4 was part of the application submission. All MS4 stormwater approvals must be obtained prior to beginning land disturbance at the project site. Once construction begins, the MS4 has primary responsibility for compliance and enforcement of stormwater regulations within their local jurisdiction.

A National Pollutant Discharge Elimination System (NPDES) authorization number is assigned to each project for which an NOI has been submitted to obtain permit coverage. This number is used as a reference for the project and must be included with any future correspondence submitted to IDEM.

It is important that all activities associated with your project are in compliance with the requirements of the Construction Stormwater General Permit (CSGP) and where applicable all local MS4 ordinances/stormwater permits. In accordance with the CSGP, you are required, at a minimum to implement your SWP3, implement and maintain all stormwater management measures, monitor the effectiveness of the measures and take corrective actions until the project is complete and terminated. To maintain compliance, it may be necessary to modify the SWP3 as work progresses.

Upon completion of the project, you are required to terminate permit coverage. Criteria for termination eligibility can be found in Section 6.0 of the CSGP. If this project is permitted through an MS4, there may be local requirements/approvals that must be met prior to filing a notice of termination with IDEM. If an MS4 has adopted a requirement for termination, you are responsible to comply with all local provisions prior to submitting the Notice of Termination to IDEM. Failure to meet local MS4 requirements may constitute a violation of the local MS4 ordinance.

- **Construction Stormwater General Permit:** Accessed at http://www.idem.IN.gov/2331.htm
- **IDEM Regulatory ePortal:** Permittees are required to utilize this service to manage their IDEM Construction Stormwater General Permit activities (Renewals, Amendments, and Terminations. The service may be accessed at https://stormwater.idem.iN.gov .

Questions regarding this notification may be directed to the program email account at Stormwat@idem.IN.gov.

Notice of Right to Administrative Review

If you wish to challenge this authorization you must file a Petition for Administrative Review with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the issuance of this notice (eighteen (18) days if you received this notice by U.S. Mail), and a copy must be served upon IDEM and all persons to whom the authorization is directed. The requirements for filing a Petition for Administrative Review are found in IC 4-21.5-3-7, IC 13-15-6-1, IC 13-15-6-2 and 315 IAC 1-3-2. Addresses for OEA and IDEM are:

Director	Commissioner
Office of Environmental Adjudication	Indiana Department of Environmental Management
Indiana Government Center North	Indiana Government Center North
Room N103	Room 1301
100 North Senate Avenue	100 North Senate Avenue
Indianapolis, Indiana 46204	Indianapolis, Indiana 46204

If you are entitled to notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above.

More information on the review process is available at the OEA website at http://www.in.gov/oea and the IDEM website at https://www.in.gov/idem/legal/2329.htm.

Attachment 14-1

IDEM Watermark
INRA10017 v1.0
Approved
Issued On:06/27/2022
Expires On:06/26/2027

U.S. Army Corps of Engineers (USACE)

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 02-28-2022

The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)
First - Jennifer Middle - Last - Curry	First - Josh Middle - Last - Iddings
Company - Indiana Department of Transportation, Seymour District	Company - American Structurepoint, Inc.
E-mail Address - JCurry1@indot.IN.gov	E-mail Address - jiddings@structurepoint.com
6. APPLICANT'S ADDRESS:	**9. AGENT'S ADDRESS:**
Address- 100 North Senate Avenue, IGCN Rm 758-ES	Address- 9025 River Road, Suite 200
City - Indianapolis State - IN Zip - 46204 Country -	City - Indianapolis State - IN Zip - 46240 Country -
7. APPLICANT'S PHONE NOs. w/AREA CODE	**10. AGENTS PHONE NOs. w/AREA CODE**
a. Residence b. Business 317-503-8207 c. Fax	a. Residence b. Business 317-547-5580 c. Fax 317-543-0270

STATEMENT OF AUTHORIZATION

11. I hereby authorize, American Structurepoint, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ SIGNATURE OF APPLICANT _____ DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)
I-65 Added Travel Lanes Project Des. No. 1700135

13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable)
See Impact Summary Tables for specific resources to be impacted	Address N/A
15. LOCATION OF PROJECT	City - Scottsburg & Henryville State- IN Zip- N/A
Latitude: ◦N 38.604767 Longitude: ◦W -85.781478	

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

State Tax Parcel ID N/A Municipality N/A

Section - Please see Waters Report Township - 1N, 2N, 3N, 4N Range - 5E, 6E

Attachment 14-1

17. DIRECTIONS TO THE SITE

From Indianapolis, Indiana: Take I-65 S toward Lousville for 94.3 miles until you reach the beginning of the project area. The project limits begin 0.5 mile north of Blue Lick Road and continues north 12.8 miles before ending 0.5 mile south of SR 56.

18. Nature of Activity (Description of project, include all features)

DES 1700135 - INDOT intends to proceed with a roadway improvements project on I-65 which would consist of widening the roadway to consist of six travel lanes (three in each direction) along with other mobility improvements. Bridges and culverts would be modified or replaced to accommodate the wider roadway or based on their condition to maintain drainage.

A total of 109 wetlands (Wetlands 1, 2, 3.1, 3.2, 4-20, 21.1, 21.2, 22-40, 41.1, 41.2, 42-106) and 43 streams (for stream names, see the Aquatic Resources Summary: Streams Table in Appendix A of Waters Report) were identified within the investigated area. An Approved JD (LRL-2021-85-dds) was issued on January 18, 2022. Of these resources, 23 streams (see Additional Information Sheets for a summary of all impacted streams) and 7 Section 404 regulated wetlands (see Tables A and B for a summary of all impacted wetlands) will be impacted as a result of the roadway reconstruction project. An additional 64 isolated wetlands will be impacted. The remaining 20 streams and 38 wetlands will not be impacted by the proposed project.

Cumulative permanent impacts to stream and wetlands will total 2.1158 acres and 2,835.9 linear feet due to dredging and the placement of fill. Cumulative impacts include 0.5731 ac (2,835.9 lft) of Waters of the U.S. due to dredge and fill; and 1.5427 ac (0 lft) of Waters of the State due to dredge and fill. Permanent impacts to streams will total 0.3882 ac and 2,805.9 lft due to the placement of 712.62 cys of fill. A total of 0.0048 ac and 30 lft of streams will be impacted by the dredging of 12.8 cys of material. Permanent impacts to Section 404 regulated wetlands due to fill are 0.1101 ac due to the placement of 345.8 cys of fill. A total of 0.07 ac of Section 404 regulated wetlands will be impacted by the dredging of 90.1 cys of material. Permanent impacts to isolated wetlands due to fill are 1.2087 ac due to the placement of 3,698.7 cys of fill. A total of 0.334 ac of isolated wetlands will be impacted by the dredging of 889 cys of material. Temporary impacts to Waters of the U.S. due to dewatering measures and temporary crossings will result in 0.16988 ac and 592.1 lft due to the placement of 244.15 cys of fill. Temporary impacts to Waters of the State due to dewatering measures and temporary crossings will result in 0.022 ac due to the placement of 2.8 cys of fill. Temporary dewatering measures are anticipated to be in place for no more than two consecutive months per crossing. Please see the Additional Information Sheet, Plans, and agency coordination for more information regarding impacts to jurisdictional waters.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The purpose of this project is to improve the roadway pavement quality, reduce present and impending congestion and to address projected transportation demand over a 12.8-mile portion of the I-65 corridor. The need is due to current and future capacity deficiencies and deteriorating pavement conditions. The I-65 roadway has been identified as a Statewide Mobility Corridor meant to provide mobility across the state by providing safe, free flowing, high-speed connections between the metropolitan areas of the state and surrounding states. Additionally, the most recent bridge inspections along the project corridor revealed a combination of cracking and delamination in the approach pavements, bridge decks, barriers and substructure. The project will improve the design service life of the bridges and small structures within the project limits and provide a high quality, durable and maintainable roadway. Please see Project Purpose and Description Additional Information Sheet for additional information on the purpose and need of the project.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Discharge of fill material is necessary in the preferred alternative in order to meet the project's purpose and needs. Discharge is due to the additional added travel lane and full road reconstruction that will be included by widening toward the median. Additionally, waterway impacts related to the existing culvert and pipe structures will include full replacement of the deteriorated structures. The bridge rehabilitations will include widening of the superstructures and substructures (piers and end bents). Therefore, these improvements will result in permanent and temporary waterway impacts. Please see Project Purpose and Description Additional Information Sheet for additional information on the purpose and need of the project.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards: 404 Fill Only - See Impact Summary Tables for additional information

Type Clean Earthen Fill
Amount in Cubic Yards 377.81 cys

Type Riprap (various types)
Amount in Cubic Yards 268 cys

Type Other (concrete, pipe, pipe end sections)
Amount in Cubic Yards 412.61 cys

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions) See Impact Summary Tables for additional information

Acres 0.4983 ac
or
Linear Feet 2,805.9 lft

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Alternatives have been considered during the design process. As part of the Categorical Exclusion Level 4 completed for the project, 3 alternatives were considered, including a no build option. Only one alternative met the purpose and need of the project. Steps to minimize impacts to aquatic resources have been implemented. This includes widening to the median where there are fewer wetlands and streams are generally encapsulated which minimizes impacts. Widening to the median also results in the project requiring no new right of way. Additionally, the use of wingwalls and culvert end sections have been implemented to limit structure length and the amount of riprap scour protection. Mitigation is proposed for impacts to all waters of the United States. Please see the Alternatives Analysis Additional Information Sheet for additional information.

24. Is Any Portion of the Work Already Complete? ☐ Yes ☒ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- See Attached List

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
IDEM	IP Section 401 WQC				

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT | DATE | SIGNATURE OF AGENT | DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Attachment 14-1

APPLICATION FOR AUTHORIZATION TO DISCHARGE DREDGED OR FILL MATERIAL TO ISOLATED WETLANDS AND/OR WATERS OF THE STATE

State Form 51821 (R2 / 11-15)

Indiana Department of Environmental Management

INSTRUCTIONS: 1. Read the instruction sheet before filling out this form.

2. You must complete all applicable sections of this form

1. Applicant Information	2. Agent Information
Name of Applicant Indiana Department of Transportation, Seymour District	Name of Agent American Structurepoint, Inc.
Mailing address *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* 100 North Senate Avenue, IGCN Rm 758-ES Indianapolis, IN 46204	Mailing address *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* 9025 River Road, Suite 200 Indianapolis, IN 46240
Daytime Telephone Number 317-503-8207	Daytime Telephone Number 317-547-5580
Fax Number N/A	Fax Number 317-543-0270
E-mail address *(optional)* JCurry1@indot.IN.gov	E-mail address *(optional)* jiddings@structurepoint.com
Contact person *(required)* Jennifer Curry	Contact person Josh Iddings

3. Project / Tract Location

County Clark and Scott	Nearest city or town Scottsburg and Henryville
U.S.G.S. Quadrangle map name *(Topographic map)* Henryville, Scottsburg and Speed	Project street address *(if applicable)* N/A

Quarter	Section	Township	Range
N/A	See pg 2 of waters report	1N, 2N, 3N, 4N	5E, 6E

Type of aquatic resource(s) to be impacted *(Attach Worksheet One.)* Emergent, Forested, & Scrub-Shrub Wetlands/Perennial, Intermittent, & Ephemeral streams (See Impact Summary Tables for specific resources to be impacted).	Project name or title *(if applicable)* I-65 Added Travel Lanes Project Lead Des. No. 1700135

Other location descriptions or driving directions

From Indianapolis, Indiana: Take I-65 S toward Lousville for 94.3 miles until you reach the beginning of the project area. The project limits begin 0.5 mile north of Blue Lick Road and continues north 12.8 miles before ending 0.5 mile south of SR 56.

4. Project Purpose and Description (*Use additional sheet(s) if required.*)

Has any construction been started? ☐ Yes ☒ No	Anticipated start date *(month, day, year)* September 1, 2023

If yes, how much work is completed?

N/A

Purpose of project and overview of activities

DES 1700135 - INDOT intends to proceed with a roadway improvements project on I-65 which would consist of widening the roadway to consist of six travel lanes (three in each direction) along with other mobility improvements. Bridges and culverts would be modified or replaced to accommodate the wider roadway or based on their condition to maintain drainage.

A total of 109 wetlands (Wetlands 1, 2, 3.1, 3.2, 4-20, 21.1, 21.2, 22-40, 41.1, 41.2, 42-106) and 43 streams (for stream names, see the Aquatic Resources Summary: Streams Table in Appendix A of Waters Report) were identified within the investigated area. An Approved JD was issued on January 18, 2022. Of these resources, 23 streams (see Additional Information Sheets for a summary of all impacted streams) and 7 Section 404 regulated wetlands (see Tables A and B for a summary of all impacted wetlands) will be impacted as a result of the roadway reconstruction project. An additional 64 isolated wetlands will be impacted. The remaining 20 streams and 38 wetlands will not be impacted by the proposed project.

Cumulative permanent impacts to stream and wetlands will total 2.1158 acres and 2,835.9 linear feet due to dredging and the placement of fill. Cumulative impacts include 0.5731 ac (2,835.9 lft) of Waters of the U.S. due to dredge and fill; and 1.5427 ac (0 lft) of Waters of the State due to dredge and fill. Permanent impacts to streams will total 0.3882 ac and 2,805.9 lft due to the placement of 712.62 cys of fill. A total of 0.0048 ac and 30 lft of streams will be impacted by the dredging of 12.8 cys of material. Permanent impacts to Section 404 regulated wetlands due to fill are 0.1101 ac due to the placement of 345.8 cys of fill. A total of 0.07 ac of Section 404 regulated wetlands will be impacted by the dredging of 90.1 cys of material. Permanent impacts to isolated wetlands due to fill are 1.2087 ac due to the placement of 3,698.7 cys of fill. A total of 0.334 ac of isolated wetlands will be impacted by the dredging of 889 cys of material. Temporary impacts to Waters of the U.S. due to dewatering measures and temporary crossings will result in 0.16988 ac and 592.1 lft due to the placement of 244.15 cys of fill. Temporary impacts to Waters of the State due to dewatering measures and temporary crossings will result in 0.022 ac due to the placement of 2.8 cys of fill. Temporary dewatering measures are anticipated to be in place for no more than two consecutive months per crossing. Please see the Additional Information Sheet, Plans, and agency coordination for more information regarding impacts to jurisdictional waters.

5. Avoidance, Minimization, and Mitigation Information: Applicants must answer all of the following questions
(*Use additional sheet(s) if necessary - provide a detailed response to all applicable questions.*)

A. For projects with Class II isolated wetlands –

1. Is there a reasonable alternative to the proposed activity?

   No, all alternatives have been considered during the design process. As part of the Categorical Exclusion Level 4 completed for the project, 3 alternatives were considered, including a no build option. Only one alternative met the purpose and need of the project. The preferred alternative of widening to the median minimized impacts to wetlands, streams and requires no new right-of-way for the project. Please refer to the Additional Information Alternatives Analysis sheet for more information.

2. Is the proposed activity reasonably necessary or appropriate?

   Yes, the proposed activity for the preferred alternative meets the purpose and need of the project, while also minimizing impacts to Class II isolated wetlands. A total of 6 Class II regulated isolated wetlands are located within the project area, however; the preferred alternative minimized its impacts to place fill in only 3 of the wetlands.

B. For projects with Class III wetlands, adjacent wetlands, and/or streams, rivers, lakes or other water bodies –

1. Is there a practicable alternative to the proposed activity?

   There are no Class III wetlands onsite. Please see answer to A-1.

2. Have practicable and appropriate steps to minimize impacts to water resources been taken?

   Steps to minimize impacts to aquatic resources have been implemented. This includes widening to the median where there are fewer wetlands and streams which minimizes impacts. Widening to the median also results in the project require no new right of way. Additionally, the use of wingwalls and culvert end sections have been implemented to limit structure length and the amount of riprap scour protection. Please see the Alternatives Analysis Additional Information sheet for more information about minimization.

Describe all compensatory mitigation required for unavoidable impacts.

The Indiana Department of Transportation proposes to mitigate unavoidable impacts to the wetlands and streams detailed in this permit application through the purchase of Indiana Department of Natural Resources In-Lieu Fee credits. Waters of the U.S. wetlands will include a mitigation ratio of 2.4:1 for impacts resulting from the placement of fill to emergent wetlands, a ratio of 3.6:1 for impacts resulting from the placement of fill to scrub-shrub wetlands, and a ratio of 4.8:1 for impacts resulting from the placement of fill to forested wetlands. A mitigation ratio of 2:1 is proposed for impacts resulting from the placement of fill to Class II wetlands which are isolated waters. A mitigation ratio of 1.2:1 is proposed for impacts to jurisdictional streams as a result of the placement of fill and/or additional encapsulation.

The proposed project is located within the Upper Ohio and Whitewater-East Fork White Service Areas of the Indiana Stream and Wetland Mitigation Program. Proposed mitigation credits to be purchased for waters of the US within the Upper Ohio service area include 279.48 lft of stream credits and 0.0883 ac of wetland credits. Proposed mitigation credits to be purchased for waters of the US within the Whitewater-East Fork White service area include 308.4 lft of stream credits and 0.22 ac of wetland credits. Additionally, a total of 0.023 ac of wetland credits will be purchased within the Whitewater-East Fork White service area for isolated wetlands. Please see the Compensatory Mitigation Additional Information Sheet for more details.

6. Drawing / Plan Requirements *(Applicants must provide the following.)*

a. Top/aerial/overhead views of the project site showing existing conditions and proposed construction.
b. Cross sectional view of areas of fill or alterations to streams and other waters.
c. North arrow, scale, property boundaries.
d. Include wetland delineation boundary *(if applicable)*. Label all wetlands (jurisdictional, isolated and exempt) as I-1, I-2, I-3, etc. and the mitigation areas as M-1, M-2, etc.
e. Location of all surface waters, including wetlands, erosion control measures, existing and proposed structures, fill and excavation locations, disposal area for excavated material, including quantities, and wetland mitigation site *(if applicable)*.
f. Approximate water depths and bottom configurations *(if applicable)*.

7. Supplemental Application Materials *(Applicants must provide the following.)*

a. A wetland delineation of all wetlands on the project site *(for projects with wetland impacts)*.
b. At least three photographs of the project site. Indicate the photo locations on the project plans.
c. If isolated wetlands are present, a letter from the Corps of Engineers verifying this statement.
d. Wetland mitigation plan and monitoring report.
e. Classification of all isolated wetlands on the tract *(if isolated wetlands are present onsite)*.
f. Copies of all applicable local permits and/or resolutions pertaining to the project or tract.
g. Tract history *(see instructions)*.

8. Additional information that MAY be required *(IDEM will notify you if needed.)*

a. Erosion control and/or storm water management plans.
b. Sediment analysis.
c. Species surveys for fish, mussels, plants and threatened or endangered species.
d. Stream habitat assessment.
e. Any other information IDEM deems necessary to review the proposed project.

9. Permitting Requirements

a. Does this project require the issuance of a Department of the Army Section 404 Permit from the US Army Corps of Engineers? ☒ Yes ☐ No

If no, you do not need to answer Part b.

b. Have you applied for an Army Corps of Engineers Section 404 permit? ☒ Yes ☐ No

If yes, please supply the Corps of Engineers ID Number, the Corps of Engineers District, the project manager, and a copy of any correspondence with the Corps. **If no, contact** the Army Corps of Engineers regarding the possible need for a permit application.

Submitted Concurrently.

c. Have you applied for, received, or been denied a permit from the Department of Natural Resources for this project? ☐ Yes ☒ No

Please give the permit name, permit number, and date of application, issuance or denial.

N/A

d. Have you applied for, received, or been denied any other federal, state, or local permits, variances, licenses, or certifications for this project? ☐ Yes ☒ No

Please give the permit name, agency from which it was obtained, permit number, and date of issuance or denial.

N/A

10. Adjoining Property Owners and Addresses

List the names and addresses of landowners adjacent to the property on which your project is located and the names and addresses of other persons (or entities) potentially affected by your project. Use additional sheet(s) if required.

Name See Attached List. Address *(number and street)* City State ZIP Code	Name Address *(number and street)* City State ZIP Code
Name Address *(number and street)* City State ZIP Code	Name Address *(number and street)* City State ZIP Code
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Name Address *(number and street)* City State ZIP Code	Name Address *(number and street)* City State ZIP Code

11. Signature - Statement of Affirmation

I certify that I am familiar with the information contained in this application and, to the best of my knowledge and belief, such information is true and accurate. I certify that I have the authority to undertake and will undertake the activities as described in this application. I am aware that there are penalties for submitting false information. I understand that any changes in project design subsequent to IDEM's granting of authorization to discharge to a water of the state are not authorized and I may be subject to civil and criminal penalties for proceeding without proper authorization. I agree to allow representatives of the IDEM to enter and inspect the project site. I understand that the granting of other permits by local, state, or federal agencies does not release me from the requirement of obtaining the authorization requested herein before commencing the project.

Applicant's Signature: _____ Date: _____
(mm/dd/yyyy)

Print Name: Jennifer Curry Title: Team Lead

Worksheet – Summary of Onsite Water Resources and Project Impacts					
A. Jurisdictional Wetlands (Existing Conditions)		**Jurisdictional Wetlands (Proposed Impacts)**			
Wetland Type	**Size of wetland *(acreage)***	**To be Impacted?**	**Acreage**	**Fill quantity *(cys)***	**ATF**
☒ EM ☐ SS ☐ FO	Wetland 1 – 0.107-ac	☐ Yes ☒ No	N/A	N/A	No
☐ EM ☐ SS ☒ FO	Wetland 3.1 – 0.117-ac	☐ Yes ☒ No	N/A	N/A	No
☒ EM ☐ SS ☐ FO	Wetland 9 – 0.054 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ EM ☐ SS ☒ FO	Wetland 12 – 0.118 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ EM ☐ SS ☒ FO	Wetland 21.1 – 0.072 -ac	☒ Yes ☐ No	0.0159 -ac	10.4-cys	No
☒ EM ☐ SS ☐ FO	Wetland 34 – 0.024 -ac	☒ Yes ☐ No	0.0066 -ac	12 -cys	No
☒ EM ☐ SS ☐ FO	Wetland 36 – 0.431 -ac	☐ Yes ☒ No	N/A	N/A	No
☒ EM ☐ SS ☐ FO	Wetland 40 – 0.002 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ EM ☐ SS ☒ FO	Wetland 41.2 – 0.28 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ EM ☐ SS ☒ FO	Wetland 42 – 0.051 -ac	☐ Yes ☒ No	N/A	N/A	No
☒ EM ☐ SS ☐ FO	Wetland 63 – 0.218 -ac	☒ Yes ☐ No	* 0.073 -ac	3 -cys	No
☐ EM ☐ SS ☒ FO	Wetland 65 – 0.033 -ac	☐ Yes ☒ No	N/A	N/A	No
☒ EM ☐ SS ☐ FO	Wetland 69 – 0.048 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ EM ☐ SS ☒ FO	Wetland 76 – 0.023 -ac	☒ Yes ☐ No	0.001 -ac	0.1 -cys	No
☒ EM ☐ SS ☐ FO	Wetland 78 – 0.009 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ EM ☒ SS ☐ FO	Wetland 86 – 0.01 -ac	☒ Yes ☐ No	0.0029 -ac	11.9 -cys	No
☒ EM ☐ SS ☐ FO	Wetland 95 – 0.252 -ac	☒ Yes ☐ No	0.0807 -ac	308.4 -cys	No
☒ EM ☐ SS ☐ FO	Wetland 106 – 0.026 -ac	☐ Yes ☒ No	N/A	N/A	No

Describe the type and composition of fill material to be placed in wetlands on the project site:
Fill will consist of 345.8 cys (0.1101 ac) of clean earthen fill, riprap, and pipe end section depending on the location.

Describe the type and composition and quantity *(cubic yards)* of material proposed to be dredged or excavated from wetlands on the project site:
* Approximately 90.1 cys (0.07 ac) of material will be excavated from Wetland 63. The contractor is responsible for disposing of dredged material following INDOT standard specifications 203.06 and 203.08.

B. Isolated Wetlands (Existing Conditions)			Isolated Wetlands (Proposed Impacts)			
Wetland Class	**Type**	**Size of wetland *(acreage)***	**To be Impacted?**	**Acreage**	**Fill quantity *(cys)***	**ATF**
☐ 1 ☒ 2 ☐ 3	☒ NF ☐ F	Wetland 13 – 0.011 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ 1 ☒ 2 ☐ 3	☒ NF ☐ F	Wetland 27 – 0.004 -ac	☒ Yes ☐ No	0.0036 -ac	13.5 -cys	No
☐ 1 ☒ 2 ☐ 3	☒ NF ☐ F	Wetland 44 – 0.011 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ 1 ☒ 2 ☐ 3	☒ NF ☐ F	Wetland 77 – 0.003 -ac	☐ Yes ☒ No	N/A	N/A	No
☐ 1 ☒ 2 ☐ 3	☒ NF ☐ F	Wetland 96 – 0.05 -ac	☒ Yes ☐ No	0.0071 -ac	9.0 -cys	No
☐ 1 ☒ 2 ☐ 3	☒ NF ☐ F	Wetland 97 – 0.055 -ac	☒ Yes ☐ No	0.0008 -ac	2.0 -cys	No

Describe the type and composition of fill material to be placed in isolated wetlands on the project site:

Fill will consist of 24.5 cys (0.0115 ac) of clean earthen fill within regulated isolated wetlands. Additionally, a total of 3,674.2 cys of fill will be placed within 1.1972 ac of non-regulated isolated wetlands.

Describe the type and composition and quantity *(cubic yards)* of material proposed to be dredged or excavated from isolated wetlands on the project site:

Dredging will not occur within regulated isolated wetlands. Approximately 889 cys (0.334 ac) of material will be excavated from non-regulated isolated wetlands.

C1. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
Blue Lick Creek (Bridge No. I65-016-04220)

Description of impacts

Permanent Impacts – 66.4 lft (0.028 ac) of Blue Lick Creek will be permanently impacted by the placement of 176 cys of fill below the OHWM. Pier widening toward the median is planned for the structure over Blue Lick Creek and will include the placement of concrete piers and class 1 riprap along the northern and southern banks of Blue Lick Creek below the OHWM. A total of 66.4 lft (0.008 ac) of stream will be impacted by the placement of 61 cys of concrete (66.4 feet long by 5.5 feet wide by 4.5 feet deep) along the southern bank of Blue Lick Creek for the pier widening. Additionally, a total of 27 cys of class 1 riprap will be placed along the widened southern pier impacting an area below the OHWM approximately 66.4 feet long by 4 feet wide by 2.75 feet deep (0.006 ac). A total of 61 cys of concrete will be placed on the northern bank of Blue Lick Creek for the pier widening, impacting an area below the OHWM approximately 66.4 feet long by 5.5 feet wide by 4.5 feet deep (0.008 ac). Additionally, a total of 27 cys of class 1 riprap will be placed along the widened northern pier impacting an area below the OHWM approximately 66.4 feet long by 4 feet wide by 2.75 feet deep (0.006 ac). Please note, the placement of concrete for pier widening and class I riprap for scour protection along both banks will overlap and impact the same length of stream. Therefore, the total impact below the OHWM of Blue Lick Creek will be 66.4 lft (0.028 ac). Please refer to the bridge impact exhibits on pages 79, 80, 132 and 133 for a detailed illustration of the permanent impacts to Blue Lick Creek. Stream mitigation is proposed for 66.4 lft impacted by concrete piers and scour protection.

Temporary Impacts – A total of 177 lft (0.072 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams along the north and south banks and for temporary access to the piers for construction.

Two temporary sandbag cofferdams will impact 86.4 lft (0.048 ac) and will be placed along the north and south banks of Blue Lick Creek to dewater the channel for the widening of the piers and placement of riprap. The sandbag cofferdam along the south bank of Blue Lick Creek will temporarily impact 86.4 lft (0.024 ac) below the OHWM. The sandbag cofferdam will require the placement of 58 cys of sandbags in an 86.4 foot long by 6 foot wide by 3 foot deep area below the OHWM. The sandbag cofferdam along the north bank of Blue Lick Creek will temporarily impact 86.4 lft (0.024 ac) below the OHWM within the same length of stream. The sandbag cofferdam will require the placement of 58 cys of sandbags in an 86.4 foot long by 6 foot wide by 3 foot deep area below the OHWM.

A total of 90.6 lft (0.240 ac) of temporary impact below the OHWM will also occur in order to establish construction access to the bridge piers. Two access points will be established along each stream bank (one upstream and one downstream of the cofferdams) to complete pier construction. Each temporary access point will generally occupy an area 45.3 feet long by 6 feet wide (0.006) below the OHWM. The temporary access points will not require the placement of fill within Blue Lick Creek. Please refer to the bridge impact exhibits on pages 79, 80, 132 and 133 for Blue Lick Creek for a detailed illustration of the temporary impacts to Blue Lick Creek.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 33.2	Right side: 33.2

Length of downstream bank impacts:

Left side: 33.2	Right side: 33.2

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 2.65 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.028 ac

C2. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
Caney Fork (Bridge No. I65-017-04220 and Str. No. 173 A)

Description of impacts

Permanent Impacts – 69.5 lft (0.013 ac) of Caney Fork will be permanently impacted by the placement of 68.8 cys of fill below the OHWM. Pier widening toward the median is planned for the structure over Caney Fork and will include the installation of concrete piers and class 1 riprap along the southern bank of Caney Fork. Additionally, a pipe end section for St. No. 173A (12" CMP) will be placed along the northern bank of Caney Fork below the OHWM. A total of 61.5 lft (0.008 ac) of stream will be impacted by the placement of 47 cys of concrete (61.5 feet long by 3.75 feet wide by 5.5 feet deep) along the southern bank of Caney Fork for the pier widening. Following pier widening, a total of 20.5 cys of class 1 riprap will be placed within the same length of stream on the southern bank of Caney Fork impacting an area below the OHWM approximately 61.5 feet long by 3 feet wide by 3 feet deep (0.004 ac). Additionally, a total of 1.3 cys of pipe end section (8 feet long by 3 feet wide by 1.5 feet deep) will be placed within the northern bank of Caney Fork impacting 8 lft (0.001 ac) of stream. Please refer to the bridge impact exhibits on pages 83, 84, 130 and 131 for Caney Fork for a detailed illustration of the permanent impacts to Caney Fork. Stream mitigation is proposed for 69.5 lft impacted by concrete piers, scour protection and a pipe end section.

Temporary Impacts – A total of 161.1 lft (0.054 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams along the north and south banks and temporary access to the piers for construction.

Two temporary sandbag cofferdams will impact 81.5 lft (0.044 ac) and will be placed along the north and south banks of Caney Fork to dewater the channel for the widening of the existing piers. The sandbag cofferdam along the south bank of Caney Fork will temporarily impact 81.5 lft (0.022 ac) below the OHWM. The sandbag cofferdam will require the placement of 54.5 cys of sandbags in an 81.5 feet long by 6 feet wide by 3 feet deep area below the OHWM. The sandbag cofferdam along the north bank of Caney Fork will temporarily impact 81.5 lft (0.022 ac) below the OHWM within the same length of stream. The sandbag cofferdam will require the placement of 54.5 cys of sandbags in an 81.5 feet long by 6 feet wide by 3 feet deep area below the OHWM.

A total of 79.6 lft (0.010 ac) of temporary impact below the OHWM will also occur in order to establish construction access to the bridge pier along the southern bank. Two access points will be established (one upstream and one downstream of the cofferdam) to complete pier widening. Each temporary access point will generally occupy an area 39.8 feet long by 6 feet wide (0.005) below the OHWM. The temporary access points will not require the placement of fill within Blue Lick Creek. Please refer to the bridge impact exhibits on pages 83, 84, 130 and 131 for Caney Fork for a detailed illustration of the temporary impacts to Caney Fork.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 0 Right side: 30.75

Length of downstream bank impacts:

Left side: 8 Right side: 30.75

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.99 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.013 ac

C3. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
Pigeon Roost Creek (Bridge No. I65-024-04229)

Description of impacts

Permanent Impacts – 80 lft (0.009 ac) of Pigeon Roost Creek will be permanently impacted by the placement of 55 cys of fill below the OHWM. Class 2 riprap will be placed along the southern and northern banks below the OHWM. A total 16 lft (0.001 ac) of stream will be impacted by the placement of 4 cys of class 2 riprap (16 feet long by 2.5 feet wide by 4 feet deep) for scour protection along the southern bank of Pigeon Roost Creek. Additionally, a total of 64 lft (0.008 ac) of stream will be impacted by the placement of 51 cys of class 2 riprap (64 feet long by 6 feet wide by 4 feet deep) for scour protection along the northern bank of Pigeon Roost Creek. Please refer to the bridge impact exhibits on pages 113, 134 and 135 for Pigeon Roost Creek for a detailed illustration of the permanent impacts to Pigeon Roost Creek. Stream mitigation is proposed for 80 lft impacted for scour protection.

Temporary Impacts – A total of 4 lft (0.0017 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of the structure improvements.

Two temporary sandbag cofferdams will be placed upstream and downstream of the structure to dewater the channel for the placement of class 2 riprap. The sandbag cofferdam upstream will temporarily impact 2 lft (0.0007 ac) below the OHWM. The sandbag cofferdam will require the placement of 1 cys of sandbags in a 2 foot long by 16 foot wide by 0.67 foot deep area below the OHWM. The sandbag cofferdam downstream will temporarily impact 2 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 1 cys of sandbags in a 2 foot long by 22 foot wide by 0.67 foot deep area below the OHWM. Please refer to the bridge impact exhibits on pages 113, 134 and 135 for Pigeon Roost Creek for a detailed illustration of the temporary impacts to Pigeon Roost Creek.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 0 Right side: 16

Length of downstream bank impacts:

Left side: 64 Right side: 0

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.69 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.009 ac

C4. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
UNT to Blue Lick Creek (St. No. 41)

Description of impacts

Permanent Impacts – 224 lft (0.021 ac) of UNT to Blue Lick Creek will be permanently impacted by the placement of 15.5 cys of fill including scour protection (class 1 riprap), new pipe, and two pipe end sections below the OHWM. UNT to Blue Lick Creek flows southeast for 233 lft within the construction limits. Of this, 193 lft of stream is currently encapsulated within a 24" HDPE and the remaining 40 lft exists as open channel. The existing 193-foot long 24" HDPE pipe will be replaced with a new 183-foot long 36" CMP. A total of 183 lft (0.016 ac) of UNT to Blue Lick Creek will be impacted by the installation of the new 183-foot long 36" CMP in an area 183 feet long by 3 feet wide by 0.45 feet deep (9.2 cys). Due to the shortened structure length, 10 lft of stream will be daylighted. Additionally, a total of 17 lft (0.003 ac) will be impacted below the OHWM due to the installation of two pipe end sections (0.9 cys) at the inlet and outlet of the new structure. Each pipe end section will impact an area 8.5 feet long by 3 feet wide by 0.45 feet deep below the OHWM. Class 1 riprap will be placed at the culvert inlet and outlet for scour protection purposes. A total of 2.7 cys of class 1 riprap will be placed upstream of the culvert impacting 12 lft (0.001 ac) of stream in an area below the OHWM approximately 12 feet long by 3 feet wide by 2 feet deep. Additionally, a total of 2.7 cys of class 1 riprap will be placed downstream of the culvert impacting 12 lft (0.001 ac) of stream in an area below the OHWM approximately 12 feet long by 3 feet wide by 2 feet deep. Please refer to the plans on pages 79 and 112 for a detailed illustration of the permanent impacts to UNT to Blue Lick Creek. Stream mitigation is proposed for a total of 31 lft of impacts (7 lft installation of pipe end sections/24 lft scour protection placed in existing open channel). No mitigation is proposed for the remaining 10 lft of stream impacts associated with the installation of pipe end sections as this segment of UNT to Blue Lick Creek was previously impacted by the existing encapsulation and will be restored to open channel as part of the proposed project.

Temporary Impacts – A total of 11 lft (0.0023 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of the structure installation and for temporary access for the placement of fill.

Two temporary sandbag cofferdams will be placed upstream and downstream of UNT to Blue Lick Creek to dewater the channel for the placement of riprap and the structure installation. The sandbag cofferdam upstream of UNT to Blue Lick Creek will temporarily impact 3 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.7 cys of sandbags in a 3 foot long by 3 foot wide by 2 foot deep area below the OHWM. The sandbag cofferdam downstream of UNT to Blue Lick Creek will temporarily impact 3 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.7 cys of sandbags in a 3 foot long by 3 foot wide by 2 foot deep area below the OHWM.

A total of 5 lft (0.0003 ac) of temporary impact below the OHWM will also occur in order to establish construction access. One access point will be established at the culvert outlet. The access point will temporarily impact an area 5 feet long by 3 feet wide (0.0003 ac) below the OHWM. The temporary access point will not require the placement of fill within UNT to Blue Lick Creek. Please refer to the plans on pages 79 and 112 for a detailed illustration of the temporary impacts to UNT to Blue Lick Creek.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 112 Right side: 112

Length of downstream bank impacts:

Left side: 112 Right side: 112

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.07 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.021 ac

C5. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
Henry Brook (St. No. 44, 45, 214 and 229)

Description of impacts

Permanent Impacts – 242 lft (0.036 ac) of Henry Brook will be permanently impacted by the placement of 47.1 cys of fill including scour protection (class 1 riprap, revetment riprap), clean earthen fill and new pipe below the OHWM. Henry Brook flows southwest for 215 lft within the construction limits. Of this, 189 lft of stream is currently encapsulated within a 66" CMP and the remaining 26 lft exists as open channel. A total of 153 lft (0.021 ac) of Henry Brook will be impacted due to the installation of the new 153-foot long 66" CMP impacting an area 185 feet long by 6 feet wide by 0.5 feet deep (17 cys). Due to the shortened structure length, 36 lft of stream will be daylighted. A total of 35 lft (0.006 ac) of stream will be impacted due to the placement of 4.5 cys of clean earthen fill for ditch grading upstream of St. No. 45, within an area below the OHWM 35 feet long by 7 feet wide by 0.5 feet deep. Additionally, a total of 24 lft (0.004 ac) of Henry Brook will be impacted due to the placement of 12.4 cys of class 1 riprap downstream of St. No. 45 in an area below the OHWM approximately 24 feet long by 7 feet wide by 2 feet deep. Scour protection will also be placed at the outlets of St. No. 229, 214, and 44. A total of 10 lft (0.002 ac) of Henry Brook will be impacted due to the placement of 3.9 cys of revetment riprap downstream of St. No. 229 in an area below the OHWM approximately 10 feet long by 7 feet wide by 1.5 feet deep. An additional 12 lft (0.002 ac) of Henry Brook will be impacted due to the placement of 6.2 cys of class 1 riprap downstream of St. No. 44 in an area below the OHWM approximately 12 feet long by 7 feet wide by 2 feet deep. Lastly, a total of 8 lft (0.001 ac) of Henry Brook will be impacted due to the placement of 3.1 cys of revetment riprap downstream of St. No. 214 in an area below the OHWM approximately 8 feet long by 7 feet wide by 1.5 feet deep. Please refer to the plans on pages 87 and 149 for a detailed illustration of the permanent impacts to Henry Brook. Stream mitigation is proposed for a total of 18 lft of impacts (18 lft revetment riprap). No mitigation is proposed for the 36 lft of stream impacts associated with the placement of class 1 riprap, as 36 lft of Henry Brook was previously impacted by the existing encapsulation and will be restored to open channel as part of the proposed project.

Temporary Impacts – A total of 32 lft (0.0058 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 229 and St. No. 45 and upstream and downstream of St. No. 44 and St. No. 214., as well as for temporary access for the placement of fill.

Two temporary sandbag cofferdams will be placed upstream of St. No. 229 and downstream of St. No. 45 to dewater the channel for the placement of riprap and the replacement of St. No. 45. The sandbag cofferdam upstream of St. No. 229 will temporarily impact 3 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.4 cys of sandbags in a 3 foot long by 7 foot wide by 0.5 foot deep area below the OHWM. The sandbag cofferdam downstream of St. No. 45 will temporarily impact 3 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.4 cys of sandbags in a 3 foot long by 7 foot wide by 0.5 foot deep area below the OHWM. Additionally, one temporary sandbag cofferdam will dewater the area around the outlets of St. No. 44 and St. No. 214. This cofferdam will temporarily impact 6 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.8 cys of sandbags in a 6 foot long by 7 foot wide by 0.5 foot deep area below the OHWM.

A total of 5 lft (0.0008 ac) of temporary impact below the OHWM will also occur near the outlet of St. No. 45 in order to establish construction access. The access point at St. No. 45 will temporarily impact an area 5 feet long by 7 feet wide below the OHWM. Additionally, a total of 15 lft (0.002 ac) of temporary impact below the OHWM will also occur near the outlets of St. No. 44 and St. No. 214 to establish construction access. The access point will temporarily impact an area 15 feet long by 7 feet wide below the OHWM. The temporary access points will not require the placement of fill within Henry Brook. Please refer to the plans on pages 87 and 149 for a detailed illustration of the temporary impacts to Henry Brook.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 111 Right side: 111

Length of downstream bank impacts:

Left side: 131 Right side: 131

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.19 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.036 ac

C6. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
Wolf Run (St. No. 50)

Description of impacts

Permanent Impacts – 240 lft (0.04 ac) of Wolf Run will be permanently impacted by the placement of 111.5 cys of fill including scour protection (class 2 riprap) and a new box culvert below the OHWM. Wolf Run flows southeast for 270 lft within the construction limits. Currently the entire 270 lft of stream is encapsulated within a 102" CMP. The existing 270-foot long 102" CMP will be replaced with a new 205-foot long, 9-foot wide by 9-foot tall reinforced concrete (RC) box culvert. A total of 205 lft (0.034 ac) of Wolf Run will be impacted due to the installation of the new 205-foot long RC box culvert impacting an area 205 feet long by 7.2 feet wide by 1.6 feet deep (87.5 cys). Due to the shortened structure length, 65 lft of stream will be daylighted. A total of 35 lft (0.006 ac) of stream will be impacted due to the placement of 24 cys of class 2 riprap downstream of St. No. 50 impacting an area below the OHWM approximately 35 feet long by 7.2 feet wide by 2.5 feet deep. No mitigation is proposed for the 35 lft of stream impacts associated with the placement of riprap, as 65 lft of Wolf Run was previously impacted by the existing encapsulation and will be restored to open channel as part of the proposed project.

Additionally, a total of 30 lft (0.0048 ac) of stream will be impacted by the removal of 12.8 cys of dredge for channel grading upstream and downstream of St. No. 50. A total of 5 lft (0.0008 ac) of dredging will occur downstream of St. No. 50 in an area 5 feet long by 7.2 feet wide by 1.6 feet deep (2.1 cys). Additionally, 25 lft (0.004 ac) of dredging will occur upstream of St. No. 50 in an area 25 feet long by 7.2 feet wide by 1.6 feet deep (10.7 cys). Please refer to the plans on pages 93 and 181 for a detailed illustration of the permanent impacts to Wolf Run.

Temporary Impacts – A total of 6 lft (0.002 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 50.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 50 to dewater the channel for the placement of riprap and the replacement of St. No. 50. The sandbag cofferdam upstream of St. No. 50 will temporarily impact 3 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 1.3 cys of sandbags in a 3 foot long by 7.2 foot wide by 1.6 foot deep area below the OHWM. The sandbag cofferdam downstream of St. No. 50 will temporarily impact 3 lft (0.001 ac) below the OHWM. The sandbag cofferdam will require the placement of 1.3 cys of sandbags in a 3 foot long by 7.2 foot wide by 1.6 foot deep area below the OHWM. Please refer to the plans on pages 93 and 181 for a detailed illustration of the temporary impacts to Wolf Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 127.5 Right side: 127.5

Length of downstream bank impacts:

Left side: 143.5 Right side: 143.5

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.46 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.04 ac

C7. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
Wheel Run (St. No. 71)

Description of impacts

Permanent Impacts – 268 lft (0.025 ac) of Wheel Run will be permanently impacted by the placement of 26.1 cys of fill including clean earthen fill and a new pipe below the OHWM. Wheel Run flows southeast for 268 lft within the construction limits. Of this, 236 lft of stream is currently encapsulated within a 42" CMP and the remaining 32 lft exists as open channel. The existing 236-foot long 42" CMP will be replaced with a new 236-foot long 42" CMP. A total of 236 lft (0.019 ac) of Wheel Run will be impacted due to the installation of the new 236-foot long CMP in an area 236 feet long by 3.5 feet wide by 0.67 feet deep (20.5 cys) below the OHWM. A total of 16 lft (0.003 ac) of stream will be impacted by the placement of 2.8 cys (16 feet long by 7 feet wide by 0.67 feet deep) of clean earthen fill upstream of St. No. 71 due to the pipe end section removal. Additionally, a total of 16 lft (0.003 ac) of stream will be impacted by the placement of 2.8 cys (16 feet long by 7 feet wide by 0.67 feet deep) of clean earthen fill downstream of St. No. 71 due to the pipe end section removal. No stream mitigation is proposed for these impacts. Please refer to the plans on pages 104 and 211 for a detailed illustration of the permanent impacts to Wheel Run.

Temporary Impacts – A total of 28 lft (0.0042 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 71 and for temporary site access.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 71 to dewater the channel for replacement of the pipe and removal of end sections. The sandbag cofferdam upstream of St. No. 71 will temporarily impact 4 lft (0.0006 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.6 cys of sandbags in a 4 foot long by 6 foot wide by 0.67 foot deep area below the OHWM. The sandbag cofferdam downstream of St. No. 71 will temporarily impact 4 lft (0.0006 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.6 cys of sandbags in a 4 foot long by 6 foot wide by 0.67 foot deep area below the OHWM.

Temporary access will be required in order to complete the structure replacement. The access point downstream will temporarily impact an area 20 feet long by 6 feet wide (0.003 ac) below the OHWM. The access will not require the placement of fill within Wheel Run. Please refer to the plans on pages 104 and 211 for a detailed illustration of the temporary impacts to Wheel Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 134 Right side: 134

Length of downstream bank impacts:

Left side: 134 Right side: 134

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.1 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.025 ac

C8. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
West Fork Silver Creek (St. No. 72)

Description of impacts
Permanent Impacts – 291 lft (0.04 ac) of West Fork Silver Creek will be permanently impacted by the placement of 39.1 cys of fill including scour protection (class 1 riprap) and concrete below the OHWM. West Fork Silver Creek flows northeast for 291 lft within the construction limits. Of this, 255 lft of stream is currently encapsulated within a 72" CMP and the remaining 36 lft exists as open channel. The existing 255-foot long 72" CMP will be abandoned and a new 255-foot long 72" CMP will be installed approximately 10 feet south of the current pipe. A total of 255 lft (0.035 ac) of West Fork Silver Creek will be impacted due to backfilling the existing pipe, impacting an area 255 feet long by 6 feet wide by 0.4 feet deep (22.6 cys of concrete). No additional stream encapsulation will occur. Scour protection is proposed upstream and downstream of the new CMP which will impact the existing channel of West Fork Silver Creek. A total of 14 lft (0.002 ac) of West Fork Silver Creek will be impacted by the placement of 6.5 cys of class 1 riprap downstream in an area approximately 14 feet long by 6 feet wide by 2 feet deep. Additionally, a total of 22 lft (0.003 ac) of West Fork Silver Creek will be impacted by the placement of 10 cys of class 1 riprap upstream of St. No. 72 in an area approximately 22 feet long by 6 feet wide by 2 feet deep. Stream mitigation is proposed for a total of 36 lft of impacts (36 lft class 1 riprap). Please see E1 for details on the stream relocation and refer to the plans on pages 106 and 222 for a detailed illustration of the permanent impacts to West Fork Silver Creek.

Temporary Impacts – A total of 55 lft (0.0068 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 72 and for temporary site access.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 72 to dewater the channel for the installation of the new structure. The sandbag cofferdam upstream of St. No. 72 will temporarily impact 3 lft (0.0004 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.3 cys of sandbags in a 3 foot long by 6 foot wide by 0.4 foot deep area below the OHWM. The sandbag cofferdam downstream of St. No. 72 will temporarily impact 3 lft (0.0004 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.3 cys of sandbags in a 3 foot long by 6 foot wide by 0.4 foot deep area below the OHWM.

Temporary access will be required in order to complete the structure installation. The access point downstream will temporarily impact an area 31 feet long by 6 feet wide (0.004 ac) below the OHWM. The access point upstream will temporarily impact an area 18 feet long by 6 feet wide (0.002 ac) below the OHWM The temporary access points will not require the placement of fill within West Fork Silver Creek. Please refer to the plans on pages 106 and 222 for a detailed illustration of the temporary impacts to West Fork Silver Creek.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:
Left side: 149.5 Right side: 149.5

Length of downstream bank impacts:
Left side: 141.5 Right side: 141.5

Bank protection fill placed below the Ordinary High Water Mark:
Volume per running foot: 0.13 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:
Area of coverage: 0.04 ac

C9. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name
UNT to Underwood Run (St. No. 78)

Description of impacts

Permanent Impacts – 245 lft (0.028 ac) of UNT to Underwood Run will be permanently impacted by the placement of 23.01 cys of fill including scour protection (class 1 riprap), clean earthen fill, and concrete below the OHWM. UNT to Underwood Run flows east for 245 lft within the construction limits. Of this, 186 lft of stream is currently encapsulated within a 60" CMP and the remaining length of stream includes 18 lft of inlet end section, 20 lft of outlet end section and 21 lft of open channel. The existing 186-foot long 60" CMP will be abandoned and a new 192-foot long 60" CMP will be installed approximately 9 feet south of the existing pipe. An additional 6 lft of stream will be encapsulated due to the longer structure length. A total of 186 lft (0.021 ac) of UNT to Underwood Run will be impacted due to backfilling the existing pipe, impacting an area 186 feet long by 5 feet wide by 0.33 feet deep (12 cys of concrete). A total of 15 lft (0.002 ac) upstream of St. No. 78 will be impacted due to channel grading which will place 1.1 cys of clean earthen fill within an area approximately 15 feet long by 6 feet wide by 0.33 feet deep. A total of 18 lft (0.002 ac) of clean earthen fill to be placed upstream of St. No. 78 due to the pipe end section removal, impacting an area below the OHWM approximately 18 feet long by 6 feet wide by 0.33 feet deep (1.32 cys). Additionally, a total of 18 lft (0.001 ac) of clean earthen fill will be placed downstream of St. No. 78 due to the pipe end section removal, impacting an area below the OHWM approximately 18 feet long by 2.7 feet wide by 0.33 feet deep (0.59 cys). Scour protection is also proposed downstream of St. No. 78. A total of 20 lft (0.002 ac) of class 1 riprap will impact an area 20 feet long by 5.2 feet wide by 2 feet deep (8 cys). Please note, the placement of clean earthen fill and class 1 riprap downstream of St. No. 78 overlap within the same 12 lft of stream. Therefore, total stream impacts from removal of the end section and placement of riprap at the outlet of St. No. 78 will be 26 lft (0.003 ac). Stream mitigation is proposed for a total of 26 lft of impacts (20 lft class 1 riprap/6 lft additional stream encapsulation). Please see E2 for details on the stream relocation and refer to the plans on pages 114 and 262 for a detailed illustration of the permanent impacts to UNT to Underwood Run.

Temporary Impacts – A total of 6 lft (0.0008 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 78.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 78 to dewater the channel for the installation of the new structure. The sandbag cofferdam upstream of St. No. 78 will temporarily impact 3 lft (0.0004 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.22 cys of sandbags in a 3 foot long by 6 foot wide by 0.33 foot deep area below the OHWM. The sandbag cofferdam downstream of St. No. 78 will temporarily impact 3 lft (0.0004 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.22 cys of sandbags in a 3 foot long by 6 foot wide by 0.33 foot deep area below the OHWM. Please refer to the plans on pages 114 and 262 for a detailed illustration of the temporary impacts to UNT to Underwood Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 126 Right side: 126

Length of downstream bank impacts:

Left side: 119 Right side: 119

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.1 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.028 ac

C10. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if*

Stream name
UNT to Tree Creek (St. No. 79)

Description of impacts
Permanent Impacts – 238 lft (0.0337 ac) of UNT to Tree Creek will be permanently impacted by the placement of 31.85 cys of fill including scour protection (class 1 riprap), clean earthen fill, and concrete below the OHWM. UNT to Tree Creek flows east for 236 lft within the construction limits. Of this, 172 lft is currently encapsulated within a 48" RCP and the remaining length of stream includes 32 lft of end sections and 34 lft of open channel. The existing 172-foot long 48" RCP will be abandoned and a new 172-foot long 48" RCP will be installed approximately 10 feet south of the existing pipe. A total of 172 lft (0.022 ac) of UNT to Tree Creek will be impacted due to backfilling the existing pipe, impacting an area 172 feet long by 4 feet wide by 0.5 feet deep (18.1 cys of concrete). Impacts upstream and downstream of St. No. 79 include channel grading, scour protection and the removal of existing end sections. A total of 16 lft (0.003 ac) of clean earthen fill will be placed upstream of St. No. 79 due to the pipe end section removal, impacting an area below the OHWM approximately 16 feet long by 7 feet wide by 0.5 feet deep (2.1 cys). Additionally, a total of 18 lft (0.003 ac) upstream of St. No. 79 will be impacted due to channel grading which will place 2.3 cys of clean earthen fill within an area approximately 18 feet long by 7 feet wide by 0.5 feet deep. Additionally, a total of 10 lft (0.0003 ac) of class 1 riprap will be placed upstream of St. No. 79 in an area 10 feet long by 1.1 feet wide by 2 feet deep (0.8 cys). Please note, the placement of class I riprap will overlap and impact the same length of stream as the channel grading and end section removal. Therefore, total length of stream impact associated with removal of the pipe end section, channel grading and scour protection at the inlet of the abandoned pipe is 34 lft (0.0063 ac). A total of 16 lft (0.003 ac) of clean earthen fill will also be placed downstream of St. No. 79 due to the pipe end section removal, impacting an area below the OHWM approximately 16 feet long by 7 feet wide by 0.5 feet deep (2.1 cys). Scour protection is also proposed downstream of St. No. 79 and will impact 16 lft (0.002 ac) due to the placement of 6.1 cys of class 1 riprap in an area 16 feet long by 5.4 feet wide by 2 feet deep. Additionally, a total of 6 lft (0.0004 ac) of stream will be impacted due to channel grading which will place 0.35 cys of clean earthen fill within an area approximately 6 feet long by 3.2 feet wide by 0.5 feet deep. Please note, the placement of clean earthen fill for channel grading will overlap and impact the same length of stream as the placement of class 1 riprap downstream of St. No. 79. Therefore, total length of stream impact associated with removal of the pipe end section, channel grading and scour protection at the outlet of the abandoned pipe is 32 lft (0.0054 ac). Stream mitigation is proposed for a total of 26 lft of impacts (26 lft class 1 riprap). Please see E3 for details on the stream relocation and refer to the plans on pages 116 and 267 for a detailed illustration of the permanent impacts to UNT to Tree Creek.

Temporary Impacts – A total of 6 lft (0.001 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 79.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 79 to dewater the channel for the installation of the new structure. The sandbag cofferdam upstream of St. No. 79 will temporarily impact 3 lft (0.0005 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.39 cys of sandbags in a 3 foot long by 7 foot wide by 0.5 foot deep area below the OHWM. The sandbag cofferdam downstream of St. No. 79 will temporarily impact 3 lft (0.0005 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.39 cys of sandbags in a 3 foot long by 7 foot wide by 0.5 foot deep area below the OHWM. Please refer to the plans on pages 116 and 267 for a detailed illustration of the temporary impacts to UNT to Tree Creek.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:
Left side: 119 Right side: 119

Length of downstream bank impacts:
Left side: 117 Right side: 117

Bank protection fill placed below the Ordinary High Water Mark:
Volume per running foot: 0.13 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:
Area of coverage: 0.0337 ac

C11. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if*

Stream name
Sycamore Run (St. No. 81)

Description of impacts
Permanent Impacts – 271 lft (0.038 ac) of Sycamore Run will be permanently impacted by the placement of 43.6 cys of fill including scour protection (class 1 riprap), clean earthen fill, and concrete below the OHWM. Sycamore Run flows east for 278 lft within the construction limits. Of this, 259 lft is currently encapsulated within two 72" CMPs. The remaining 19 lft currently exists as open channel (2 lft concrete lined channel located between the two CMPs and 17 lft of riprap lined channel downstream of the structures). No work is proposed for the upstream CMP. The existing 254-foot long 72" CMP will be abandoned and a new 221-foot long 72" CMP will be installed approximately 11 feet south of the existing pipe. Due to the shortened structure length, 33 lft of stream will be daylighted. A total of 10 lft (0.001 ac) of impacts will occur at the culvert inlet due to the removal of the existing culvert and placement of 4 cys of clean earthen fill for grading in an area 10 feet long by 6 feet wide by 0.5 feet deep. A total of 20 lft (0.003 ac) of impacts will occur at the culvert outlet due to the removal of 20 lft of the existing 72" pipe and placing 11.1 cys of class 1 riprap in an area approximately 20 feet long by 6 feet wide by 0.5 feet deep. The remaining 224 lft of 72" CMP will be backfilled with 23.1 cys of concrete impacting 224 lft (0.032 ac) of Sycamore Run in an area 224 feet long by 6 feet wide by 0.5 feet deep. Additionally, a total of 17 lft (0.002 ac) of the existing riprap at the culvert outlet will be supplemented below the OHWM with the placement of 5.4 cys of class 1 riprap in an area approximately 17 feet long by 4.3 feet wide by 2 feet deep. No mitigation is proposed for the 37 lft of stream impacts associated with placement of riprap, as the 20 lft of new riprap is being placed in an area previously impacted by encapsulation and the remaining 17 lft of riprap will be placed in an area already impacted by existing riprap. Please see E4 for details on the stream relocation and plans on pages 117 and 269 for a detailed illustration of the permanent impacts to Sycamore Run.

Temporary Impacts – A total of 6 lft (0.0006 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 81.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 81 to dewater the channel for the installation of the new structure. The sandbag cofferdam downstream of St. No. 81 will temporarily impact 3 lft (0.0002 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.33 cys of sandbags in a 3 foot long by 3.5 foot wide by 0.5 foot deep area below the OHWM. The sandbag cofferdam upstream of St. No. 81 will temporarily impact 3 lft (0.0004 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.9 cys of sandbags in a 3 foot long by 6 foot wide by 0.5 foot deep area below the OHWM. Please refer to the plans on pages 117 and 269 for a detailed illustration of the temporary impacts to Sycamore Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:
Left side: 127 Right side: 127

Length of downstream bank impacts:
Left side: 144 Right side: 144

Bank protection fill placed below the Ordinary High Water Mark:
Volume per running foot: 0.16 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:
Area of coverage: 0.038 ac

C12. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if*

Stream name
UNT 1 to Sycamore Run (St. No. 82)

Description of impacts
Permanent Impacts – 198 lft (0.0146 ac) of UNT 1 to Sycamore Run will be permanently impacted by the placement of 8.38 cys of fill including a new pipe and end section below the OHWM. UNT 1 to Sycamore Run flows southeast for 198 lft within the construction limits. Of this, 183 lft of stream is currently encapsulated within an 18" RCP and the remaining 15 lft exists as open channel. The existing 183-foot long 18" RCP will be replaced with a new 183-foot long 36" Type 1 pipe. A total of 183 lft (0.0126 ac) of UNT 1 to Sycamore Run will be impacted due to the installation of the new 183-foot long Type 1 pipe impacting an area 183 feet long by 3 feet wide by 0.25 feet deep (5.08 cys). Additionally, a total of 15 lft (0.002 ac) upstream of St. No. 82 will be impacted below the OHWM due to the replacement of one pipe end section in an area 15 feet long by 4 feet wide by 1.5 feet deep (3.3 cys). Stream mitigation is proposed for a total of 15 lft of impacts (15 lft pipe end section). Please refer to the plans on pages 118 and 296 for a detailed illustration of the permanent impacts to UNT 1 to Sycamore Run.

Temporary Impacts – A total of 17 lft (0.0006 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 82 and for temporary site access.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 82 to dewater the channel for the installation of the new structure. The sandbag cofferdam downstream of St. No. 82 will temporarily impact 3 lft (0.0001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.1 cys of sandbags in a 3 foot long by 1.5 foot wide by 0.25 foot deep area below the OHWM. The sandbag cofferdam upstream of St. No. 82 will temporarily impact 3 lft (0.0001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.15 cys of sandbags in a 3 foot long by 1.5 foot wide by 0.25 foot deep area below the OHWM.

Temporary access will be required in order to complete the structure installation. The access point downstream will temporarily impact an area 3 feet long by 1.5 feet wide (0.0001 ac) below the OHWM. The access point upstream will temporarily impact an area 8 feet long by 1.5 feet wide (0.0003 ac) below the OHWM The temporary access points will not require the placement of fill within UNT 1 to Sycamore Run. Please refer to the plans on pages 118 and 296 for a detailed illustration of the temporary impacts to UNT 1 to Sycamore Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:
Left side: 106.5 Right side: 106.5

Length of downstream bank impacts:
Left side: 91.5 Right side: 91.5

Bank protection fill placed below the Ordinary High Water Mark:
Volume per running foot: 0.04 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:
Area of coverage: 0.0146 ac

C13. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if*

Stream name
UNT 2 to Sycamore Run (St. No. 83)

Description of impacts
Permanent Impacts – 190 lft (0.0145 ac) of UNT 2 to Sycamore Run will be permanently impacted by the placement of 8.63 cys of fill including scour protection (revetment riprap), clean earthen fill and a new pipe below the OHWM. UNT 2 to Sycamore Run flows east for 190 lft within the construction limits. Of this, 163 lft of stream is currently encapsulated within a 24" RCP and the remaining 27 lft exists as open channel. The existing 163-foot long 24" RCP will be replaced with a new 163-foot long 36" Type 1 pipe. A total of 163 lft (0.011 ac) of UNT 2 to Sycamore Run will be impacted due to the replacement of the new 163-foot long Type 1 pipe impacting an area 163 feet long by 3 feet wide by 0.8 feet deep (4.53 cys). A total of 15 lft (0.0005 ac) will be impacted at the culvert inlet below the OHWM due to channel grading, including the placement of 3.1 cys of clean earthen fill in an area 15 feet long by 1.5 feet wide by 0.8 feet deep. Additionally, a total of 12 lft (0.003 ac) of the existing riprap at the culvert outlet will be supplemented with the placement of 1 cys of revetment riprap in an area approximately 12 feet long by 1.5 feet wide by 1.5 feet deep. No mitigation is proposed for the 12 lft of stream impacts due to the placement of riprap, as this length of stream was previously impacted by existing riprap which will be supplemented with new riprap. Please refer to the plans on pages 119 and 271 for a detailed illustration of the permanent impacts to UNT 2 to Sycamore Run.

Temporary Impacts – A total of 6 lft (0.0002 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 83.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 83 to dewater the channel for the installation of the new structure. The sandbag cofferdam downstream of St. No. 83 will temporarily impact 3 lft (0.0001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.1 cys of sandbags in a 3 foot long by 1.5 foot wide by 0.8 foot deep area below the OHWM. The sandbag cofferdam upstream of St. No. 83 will temporarily impact 3 lft (0.0001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.1 cys of sandbags in a 3 foot long by 1.5 foot wide by 0.5 foot deep area below the OHWM. Please refer to the plans on pages 119 and 271 for a detailed illustration of the temporary impacts to UNT 2 to Sycamore Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:
Left side: 96.5 Right side: 96.5

Length of downstream bank impacts:
Left side: 93.5 Right side: 93.5

Bank protection fill placed below the Ordinary High Water Mark:
Volume per running foot: 0.05 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:
Area of coverage: 0.0145 ac

C14. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if*

Stream name
Elm Branch (St. No. 86)

Description of impacts

Permanent Impacts –426 lft (0.0172 ac) of Elm Branch will be permanently impacted by the placement of 14.25 cys of fill below the OHWM. Elm Branch flows east and south for 282 lft within the construction limits. The stream is currently encapsulated through two 30" pipes. The first pipe conveys Elm Branch east for 165 lft beneath I65 and directly connects to the second pipe which conveys the stream south for 70 lft. The remaining 47 lft of Elm Branch currently exists as open channel. The existing 165-foot 30" pipe will be removed and replaced with a new 175 foot long 36" pipe. A total of 165 lft (0.0121 ac) of Elm Branch will be impacted below the OHWM due to the installation of 9.72 cys (165 feet long by 3 feet wide by 0.5 feet deep) of new pipe. The new pipe will extend approximately 10 feet beyond the inlet of the second 30" pipe and will outlet to an existing "V" ditch which will direct flow south to reconnect with the existing stream channel. The second 70 foot long 30" pipe will be removed and backfilled with 3.25 cys (70 feet long by 2.5 feet wide by 0.5 feet deep) of clean earth fill impacting 70 lft (0.004 ac) of stream. An additional 7 lft (0.001 ac) of impact will occur upstream of the first pipe due to the installation of 1.2 cys (7 feet long by 3 feet wide by 1.5 feet deep) of pipe end section below the OHWM. An additional 4 lft (0.0001 ac) of impact will also occur at the outlet of the second existing pipe due to the placement 0.08 cys (4 feet long by 1 foot wide by 0.5 feet deep) to grade the relocated channel. As a result of the relocation, Elm Branch will flow for a total of 283 lft within the construction limits (175 lft encapsulation and 108 lft open channel). The relocation will increase the total stream length by 1 lft and will convert 50 lft of existing encapsulation to open channel. Since the relocation will increase the overall stream length and restore 50 lft of existing encapsulation to open channel, no mitigation is being proposed for the 7 lft of impact associated with the installation of the pipe end section. Please see E5 for details on the stream relocation and plans on pages 123, 124 and 298 for a detailed illustration of the permanent impacts to Elm Branch.

Temporary Impacts – A total of 36 lft (0.0034 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 86 and for temporary site access.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 86 to dewater the channel for the installation of the new structure and removal of the old structures. The sandbag cofferdam downstream of St. No. 86 will temporarily impact 3 lft (0.0007 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.7 cys of sandbags in a 3 foot long by 3 foot wide by 2 foot deep area below the OHWM. The sandbag cofferdam upstream of St. No. 86 will temporarily impact 3 lft (0.0001 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.7 cys of sandbags in a 3 foot long by 3 foot wide by 2 foot deep area below the OHWM.

Temporary access will be required in order to complete the structure installation. The access point upstream will temporarily impact an area 30 feet long by 1 feet wide (0.0007 ac) below the OHWM. The access point will not require the placement of fill within Elm Branch. Please refer to the plans on pages 123, 124 and 298 for a detailed illustration of the temporary impacts to Elm Branch.

Temporary impacts will be in place for approximately 2 months. Once complete the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 89.5 Right side: 89.5

Length of downstream bank impacts:

Left side: 156.5 Right side: 156.5

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.06 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.0172 ac

C15. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if*

Stream name
UNT 1 to Elm Branch (St. No. 87)

Description of impacts

Permanent Impacts – 178 lft (0.0144 ac) of UNT 1 to Elm Branch will be permanently impacted by the placement of 15.38 cys of fill including scour protection (revetment riprap) and a new pipe below the OHWM. UNT 1 to Elm Branch flows east for 178 lft within the construction limits. Of this, 166 lft of stream is currently encapsulated within a 36" CMP and the remaining 12 lft exists as open channel. The existing 166-foot long 36" CMP will be replaced with a new 166-foot long 36" Type 1 pipe. A total of 166 lft (0.0114 ac) of UNT 1 to Elm Branch will be impacted due to the replacement of the new 166-foot long Type 1 pipe impacting an area 166 feet long by 3 feet wide by 0.4 feet deep (7.38 cys). Additionally, a total of 12 lft (0.003 ac) of stream at the culvert outlet will be impacted by the placement of 8 cys of revetment riprap for scour protection purposes in an area approximately 12 feet long by 12 feet wide by 1.5 feet deep. Stream mitigation is proposed for a total of 12 lft of impacts (12 lft revetment riprap). Please refer to the plans on pages 125 and 298 for a detailed illustration of the permanent impacts to UNT 1 to Elm Branch.

Temporary Impacts – A total of 14 lft (0.0034 ac) of channel will be temporarily impacted due to the placement of sandbag cofferdams upstream and downstream of St. No. 87 and for temporary site access.

Two temporary sandbag cofferdams will be placed upstream and downstream of St. No. 87 to dewater the channel for the installation of the new structure. The sandbag cofferdam downstream of St. No. 87 will temporarily impact 3 lft (0.0002 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.1 cys of sandbags in a 3 foot long by 1.2 foot wide by 0.4 foot deep area below the OHWM. The sandbag cofferdam upstream of St. No. 87 will temporarily impact 3 lft (0.0002 ac) below the OHWM. The sandbag cofferdam will require the placement of 0.1 cys of sandbags in a 3 foot long by 1.2 foot wide by 0.4 foot deep area below the OHWM.

Temporary access will be required in order to complete the structure replacement. The access point downstream of St. No. 87 will temporarily impact an area 8 feet long by 1.2 feet wide (0.003 ac) below the OHWM. The temporary access point will not require the placement of fill within UNT 1 to Elm Branch. Please refer to the plans on pages 125 and 298 for a detailed illustration of the temporary impacts to UNT 1 to Elm Branch.

Temporary impacts will be in place for approximately 2 months. Once complete the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of upstream bank impacts:

Left side: 83 Right side: 83

Length of downstream bank impacts:

Left side: 95 Right side: 95

Bank protection fill placed below the Ordinary High Water Mark:

Volume per running foot: 0.09 cys/lft

Bank protection fill placed below the Ordinary High Water Mark:

Area of coverage: 0.0144 ac

D1. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)

Water body name
UNT 1 to Miller Fork (St. No. 54)

Description of impacts
Permanent Impacts – 12 lft (0.001 ac) will be permanently impacted by the placement of 3.1 cys of class 1 riprap below the OHWM for scour protection at the outlet of St. No. 54 in an area 12 feet long by 3.5 feet wide by 2 feet deep. Stream mitigation is proposed for 12 lft impacted by scour protection. Please refer to the plans on pages 97 and 189 for a detailed illustration of the permanent impacts to UNT 1 to Miller Fork.

Temporary Impacts – A total of 6 lft (0.001 ac) of channel will be temporarily impacted due to the placement of a sandbag cofferdam downstream of St. No. 54 for the culvert installation. The sandbag cofferdam will require the placement of 0.4 cys of sandbags in a 6 foot long by 3.5 foot wide by 0.5 foot deep area below the OHWM. Please refer to the plans on pages 97 and 189 for a detailed illustration of the temporary impacts to UNT 1 to Miller Fork.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdam will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of shoreline or bank protection
12 lft

Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
0.26 cys/lft

Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark
0.001 ac

D2. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)

Water body name
UNT to Pigeon Roost Creek

Description of impacts
Permanent Impacts – 60 lft (0.0028 ac) will be permanently impacted by the placement of 2.22 cys of clean earthen fill below the OHWM for roadside grading at the outlet of St. No. 548 in an area 60 feet long by 2 feet wide by 0.5 feet deep. Source water for UNT to Pigeon Roost Creek is currently derived from roadside drainage within the median of I-65 and conveyed to the stream via an existing stormwater trunkline. As a result of this project, the existing stormwater inlet will be removed and replaced within the median approximately 163 feet south. A new stormwater trunkline will be installed and drainage will outlet to UNT to Pigeon Roost Creek via St No 548. Therefore, the existing channel of UNT to Pigeon Roost Creek will be backfilled as its function will be replaced by the new stormwater trunkline. Stream mitigation is proposed for 60 lft impacted by the filling of UNT to Pigeon Roost Creek. Please refer to the plans on pages 112 and 249 for a detailed illustration of the permanent impact to UNT to Pigeon Roost Creek.

Temporary Impacts – A total of 3 lft (0.0002 ac) of channel will be temporarily impacted due to the placement of a sandbag cofferdam downstream of the location of clean earthen fill. The sandbag cofferdam will require the placement of 0.2 cys of sandbags in a 3 foot long by 2 foot wide by 0.5 foot deep area below the OHWM. Please refer to the plans on pages 112 and 249 for a detailed illustration of the temporary impacts to UNT to Pigeon Roost Creek.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdam will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of shoreline or bank protection
60 lft

Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
0.037 cys/lft

Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark
0.0028 ac

D3. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)

Water body name
UNT 1 to Nest Run (St. No. 84)

Description of impacts
Permanent Impacts – 12 lft (0.003 ac) will be permanently impacted by the placement of 8 cys of revetment riprap below the OHWM for scour protection at the outlet of St. No. 84 in an area 12 feet long by 12 feet wide by 1.5 feet deep. Stream mitigation is proposed for 12 lft impacted by scour protection. Please refer to the plans on pages 120 and 296 for a detailed illustration of the permanent impacts to UNT 1 to Nest Run.

Temporary Impacts – A total of 3 lft (0.0008 ac) of channel will be temporarily impacted due to the placement of a sandbag cofferdam downstream of St. No. 84 for the placement of revetment riprap. The sandbag cofferdam will require the placement of 2 cys of sandbags in a 3 foot long by 12 foot wide by 1.5 foot deep area below the OHWM. Please refer to the plans on pages 120 and 296 for a detailed illustration of the temporary impacts to UNT 1 to Nest Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdam will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of shoreline or bank protection
12 lft

Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
0.67 cys/lft

Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark
0.003 ac

D4. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)

Water body name
UNT 3 to Nest Run (St. No. 691)

Description of impacts
Permanent Impacts – 125 lft (0.003 ac) will be permanently impacted by the placement of 1.1 cys of clean earthen fill below the OHWM for regrading of the roadside ditch near St. No. 692 in an area 125 feet long by 1.2 feet wide by 0.2 feet deep. No stream mitigation is proposed for these impacts, as the function of UNT 3 to Nest Run will be maintained within the regraded roadside ditch. Please refer to the plans on pages 120 and 297 for a detailed illustration of the permanent impacts to UNT 3 to Nest Run.

Temporary Impacts – A total of 3 lft (0.00008 ac) of channel will be temporarily impacted due to the placement of a sandbag cofferdam downstream of St. No. 691 for the placement of clean earthen fill. The sandbag cofferdam will require the placement of 0.1 cys of sandbags in a 3 foot long by 1.2 foot wide by 0.2 foot deep area below the OHWM. Please refer to the plans on pages 120 and 297 for a detailed illustration of the temporary impacts to UNT 3 to Nest Run.

Temporary impacts will be in place for approximately 2 months. Once complete the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of shoreline or bank protection
125 lft

Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
0.0088 cys/lft

Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark
0.003 ac

D5. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)

Water body name
UNT 4 to Nest Run –

Description of impacts
Permanent Impacts – 7 lft (0.001 ac) will be permanently impacted by the placement of 1.3 cys of clean earthen fill below the OHWM for channel grading at the outlet of the existing culvert in an area 7 feet long by 2.5 feet wide by 0.5 feet deep. No stream mitigation is proposed for these impacts. Please refer to the plans on pages 122 and 298 for a detailed illustration of the permanent impacts to UNT 4 to Nest Run.

Temporary Impacts – A total of 6 lft (0.0004 ac) of channel will be temporarily impacted due to the placement of a sandbag cofferdams upstream and downstream of the proposed channel grading at the outlet of the existing culvert. The sandbag cofferdam directly at the culvert outlet will require the placement of 0.1 cys of sandbags in a 3 foot long by 2.5 foot wide by 0.5 foot deep area below the OHWM. The sandbag cofferdam located further downstream will require the placement of 0.1 cys of sandbags in a 3 foot long by 2.5 foot wide by 0.5 foot deep area below the OHWM. Please refer to the plans on pages 122 and 298 for a detailed illustration of the temporary impacts to UNT 4 to Nest Run.

Temporary impacts will be in place for approximately 2 months. Once complete the sandbag cofferdam will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of shoreline or bank protection
7 lft

Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
0.19 cys/lft

Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark
0.001 ac

D6. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)

Water body name
UNT 1 to Honey Run (St. No. 88)

Description of impacts
Permanent Impacts – 12 lft (0.003 ac) will be permanently impacted by the placement of 8 cys of revetment riprap below the OHWM for scour protection at the outlet of St. No. 88 in an area 12 feet long by 12 feet wide by 1.5 feet deep. Stream mitigation is proposed for 12 lft impacted by scour protection. Please refer to the plans on pages 127 and 299 for a detailed illustration of the permanent impacts to UNT 1 to Honey Run.

Temporary Impacts – A total of 3 lft (0.0002 ac) of channel will be temporarily impacted due to the placement of a sandbag cofferdam downstream of St. No. 88 for the placement of revetment riprap. The sandbag cofferdam will require the placement of 0.1 cys of sandbags in a 3 foot long by 1.8 foot wide by 0.6 foot deep area below the OHWM. Please refer to the plans on pages 127 and 299 for a detailed illustration of the temporary impacts to UNT 1 to Honey Run.

Temporary impacts will be in place for approximately 2 months. Once complete, the sandbag cofferdam will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of shoreline or bank protection
12 lft

Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
0.67 cys/lft

Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark
0.003 ac

D7. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)

Water body name
UNT 2 to Honey Run (St. No. 828)

Description of impacts
Permanent Impacts – 14 lft (0.002 ac) will be permanently impacted by the placement of 4.7 cys of revetment riprap below the OHWM for scour protection at the outlet of St. No. 828 in an area 14 feet long by 6 feet wide by 1.5 feet deep. Stream mitigation is proposed for 14 lft impacted by scour protection. Please refer to the plans on pages 129 and 319 for a detailed illustration of the permanent impacts to UNT 2 to Honey Run.

Temporary Impacts – A total of 3 lft (0.0001 ac) of channel will be temporarily impacted due to the placement of a sandbag cofferdam downstream of St. No. 828 for the placement of revetment riprap. The sandbag cofferdam will require the placement of 2.25 cys of sandbags in a 3 foot long by 7.5 foot wide by 2.7 foot deep area below the OHWM. Please refer to the plans on pages 129 and 319 for a detailed illustration of the temporary impacts to UNT 2 to Honey Run.

Temporary impacts will be in place for approximately 2 months. Once complete the sandbag cofferdams will be removed and the stream channel returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

Length of shoreline or bank protection
14 lft

Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
0.34 cys/lft

Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark
0.002 ac

E1. Stream Relocation

Water body name
Please see C8 West Fork Silver Creek (St. No. 72)

Description of impacts
West Fork Silver Creek flows southeast for 291 lft within the construction limits for the project. Of this, 255 lft of the stream is currently encapsulated within a 72" CMP (St. No. 72) and the remaining 36 lft exists as open channel. The existing CMP will be abandoned and the stream will be relocated to flow through a new 255-foot long, 72" CMP installed approximately 10 feet south of the abandoned culvert. Upon exiting the new culvert, the relocated portion of the stream will reconnect with the existing stream channel. As a result, the relocated stream will flow for approximately 298 lft (255 lft encapsulation, 43 lft open channel) within the construction limits for the project resulting in an additional 7 lft of open stream channel. No additional encapsulation will occur. Following relocation of the stream, scour protection will be installed upstream and downstream of the new culvert.

The abandoned 72" CMP will be filled with a total of 22.6 cys of concrete in an area 255 feet long by 6 feet wide by 0.4 feet deep (0.0.035 ac). Additionally, 36 lft (0.005 ac) of the existing channel will be impacted by the placement of 16.5 cys of class1 riprap at the inlet and outlet of the new culvert. These impacts have been accounted for in C8. Please refer to the plans on pages 106 and 222 for a detailed illustration of the relocation impacts to West Fork Silver Creek.

Length of existing channel to be relocated *(linear feet)*
291 lft

Length of new channel to be constructed *(linear feet)*
298 lft

Existing channel to be backfilled?
☒ Yes ☐ No

Type of relocation
☒Piping ☒Open ☐Channel ☐Other:__

Type of fill and volume *(cubic yards)*
22.6 cys concrete and 16.5 cys class 1 riprap (all impacts accounted for in C8)

E2. Stream Relocation

Water body name
Please see C9 UNT to Underwood Run (St. No. 78)

Description of impacts
UNT to Underwood Run flows south for 245 lft within the construction limits for the project. Of this, 186 lft of stream is currently encapsulated within a 60" CMP (St. No. 78) and the remaining length of stream includes 18 lft of inlet end section, 20 lft of outlet end section and 21 lft of open channel. The existing CMP will be abandoned and the stream will be relocated to flow through a new 192-foot long, 60" CMP installed approximately 9 feet south of the abandoned culvert. Upon exiting the new culvert, the relocated portion of the stream will reconnect with the existing stream channel. As a result, the relocated stream will flow for approximately 251 lft (192 lft encapsulation, 59 lft of open channel) within the construction limits for the project resulting in an additional 6 lft of open stream channel. An additional 6 lft of stream will be encapsulated due to the longer structure length. Following relocation of the stream, scour protection will be installed downstream of the new culvert.

The abandoned 60" CMP will be filled with a total of 12 cys of concrete in an area 186 feet long by 5 feet wide by 0.33 feet deep (0.021 ac). Additionally, 15 lft (0.002 ac) of the existing channel will be impacted by the placement of 1.1 cys of clean earthen fill upstream of St. No. 78 for channel grading. A total of 44 lft (0.005 ac) of the existing channel will also be impacted by the placement of 8 cys of class 1 riprap and 1.91 cys of clean earthen fill for the removal of the existing end sections upstream and downstream of St. No. 78. These impacts have been accounted for in C9. Please refer to the plans on pages 114 and 262 for a detailed illustration of the relocation impacts to UNT to Underwood Run.

Length of existing channel to be relocated *(linear feet)*
245 lft

Length of new channel to be constructed *(linear feet)*
251 lft

Existing channel to be backfilled?
☒ Yes ☐ No

Type of relocation
☒Piping ☒Open ☐Channel ☐Other:__

Type of fill and volume *(cubic yards)*
12 cys Concrete, 8 cys class 1 riprap and 3.01 cys clean earthen fill (all impacts accounted for in C9)

E3. Stream Relocation

Water body name
Please see C10 UNT to Tree Creek (St. No. 79)

Description of impacts
UNT to Tree Creek flows east for 238 lft within the construction limits for the project. Of this, 172 lft is currently encapsulated within a 48" RCP (St. No. 79) and the remaining length of stream includes 32 lft of end sections and 34 lft of open channel. The existing RCP will be abandoned and the stream will be relocated to flow through a new 172-foot long, 48" RCP installed approximately 10 feet south of the abandoned culvert. Upon exiting the new culvert, the relocated portion of the stream will reconnect with the existing stream channel. As a result, the relocated stream will flow for approximately 245 lft (172 lft encapsulation, 32 lft end sections, and 41 lft class 1 riprap) within the construction limits for the project resulting in an additional 7 lft of open stream channel. No additional encapsulation will occur. Following the relocation of the stream, scour protection will be installed upstream and downstream of the new culvert.

The abandoned 48" RCP will be filled with a total of 18.1 cys of concrete in an area 172 feet long by 4 feet wide by 0.5 feet deep (0.022 ac). Additionally, 34 lft (0.009 ac) of the existing channel upstream of St. No. 79 will be impacted by the placement of 4.4 cys of clean earthen fill for channel grading and the removal of the existing end section, and the placement of 0.8 cys of class 1 riprap. A total of 32 lft (0.0054 ac) of the existing channel downstream of St. No. 79 will be impacted by the placement of 2.45 cys of clean earthen fill for channel grading and the removal of the existing end section, and the placement of 6.1 cys of class 1 riprap. These impacts have been accounted for in C10. Please refer to the plans on pages 116 and 267 for a detailed illustration of the relocation impacts to UNT to Tree Creek.

Length of existing channel to be relocated *(linear feet)*
238 lft

Length of new channel to be constructed *(linear feet)*
245 lft

Existing channel to be backfilled?	Type of relocation
☒ Yes ☐ No	☒Piping ☒Open ☐Channel ☐Other:__

Type of fill and volume *(cubic yards)*
18.1 cys Concrete, 6.9 cys class 1 riprap and 6.85 cys of clean earthen fill (all impacts accounted for in C10)

E4. Stream Relocation

Water body name
Please see C11 Sycamore Run (St. No. 81)

Description of impacts
Sycamore Run flows east for 278 lft within the construction limits for the project. Of this, 259 lft is currently encapsulated within two 72" CMPs. The remaining 19 lft currently exists as open channel (2 lft concrete lined channel located between the two CMPs and 17 lft of riprap lined channel downstream of the structures). No work is proposed for the upstream CMP. The existing downstream RCP will be abandoned and the stream will be relocated to flow through a new 221-foot long, 72" CMP installed approximately 11 feet south of the existing pipe. The stream will be rerouted at the inlet to create 20 lft of new open channel. Upon exiting the new culvert, the relocated portion of the stream will reconnect with the existing stream channel through the new 25 lft of stream within riprap at the outlet. As a result, the relocated stream will flow for approximately 283 lft (221 lft encapsulation, 42 lft riprap at outlet, 20 lft open channel at inlet) within the construction limits for the project. The relocation will increase the total stream length by 5 lft and will daylight an additional 33 lft of stream due to the shortened structure length. Following relocation of the stream, scour protection will be installed and supplemented downstream of the new culvert.

The abandoned 72" CMP will be filled with a total of 23.1 cys of concrete in an area 224 feet long by 6 feet wide by 0.5 feet deep (0.032 ac). A total of 10 lft (0.001 ac) of the existing culvert will be removed at the inlet and graded by the placement of 4 cys of clean earthen fill. Additionally, a total of 25 lft (0.003 ac) of the existing culvert will be removed at the outlet and replaced with 11.1 cys of class 1 riprap, as well as 17 lft (0.002 ac) will be supplemented with 5.4 cys of class 1 riprap. These impacts have been accounted for in C11. Please refer to the plans on pages 117 and 269 for a detailed illustration of the relocation impacts to Sycamore Run.

Length of existing channel to be relocated *(linear feet)*
278 lft

Length of new channel to be constructed *(linear feet)*
283 lft

Existing channel to be backfilled?	Type of relocation
☒ Yes ☐ No	☒Piping ☒Open ☐Channel ☐Other:__

Type of fill and volume *(cubic yards)*
23.1 cys concrete,16.5 cys class 1 riprap and 4 cys clean earthen fill (impacts accounted for in C11)

E5. Stream Relocation

Water body name
Please see C14 Elm Branch (St. No. 86)

Description of impacts
Elm Branch flows east and south for 282 lft within the construction limits for the project. The stream is currently encapsulated through two 30" pipes. The first pipe conveys Elm Branch east for 165 lft beneath I65 and directly connects to the second pipe which conveys the stream south for 70 lft. The remaining 47 lft of Elm Branch currently exists as open channel (40 lft upstream and 7 lft downstream of existing CMPs). The existing 165-foot 30" pipe will be removed and replaced with a new 175-foot 36" pipe. The new pipe will extend approximately 10 feet beyond the inlet of the second 30" pipe and will outlet to an existing "V" ditch which will direct flow south to reconnect with the existing stream channel. The relocated stream section will now include 10 lft of encapsulation, 12 lft of class 1 riprap, and 56 lft of open channel. As a result of the relocation, Elm Branch will flow for a total of 283 lft within the construction limits (175 lft encapsulation and 108 lft open channel). The relocation will increase the total stream length by 1 lft and will convert 50 lft of existing encapsulation to open channel. No additional encapsulation will occur. Following relocation of the stream, scour protection will be installed downstream of the new culvert.

The structure replacement will include the placement of 9.72 cys of Type 1 pipe in an area 165 feet long by 3 feet wide by 0.5 feet deep (0.0121 ac) and the structure removal will include the placement of 3.25 cys of clean earthen fill in an area 70 feet long by 2.5 feet wide by 0.5 feet deep (0.004 ac). Additionally, 7 lft (0.001 ac) of the existing channel will be impacted by the placement of 1.2 cys of pipe end section at the new culvert inlet, and 4 lft (0.0001 ac) of the existing channel will be impacted by the placement of 0.08 cys of clean earthen fill at the existing culvert outlet. These impacts have been accounted for in C14. Please refer to the plans on pages 123, 124 and 298 for a detailed illustration of the relocation impacts to Elm Branch.

Length of existing channel to be relocated *(linear feet)*
77 lft

Length of new channel to be constructed *(linear feet)*
78 lft

Existing channel to be backfilled?
☒ Yes ☐ No

Type of relocation
☐Piping ☒Open ☐Channel ☐Other:__

Type of fill and volume *(cubic yards)*
9.72 cys pipe, 1.2 cys pipe end section and 3.33 cys clean earthen fill (all impacts accounted for in C14)

F. Open Water Fill

Water body name
N/A

Description of impacts
N/A

Area of water body to be filled (acres)
N/A

Type of fill and volume (cubic yards)
N/A

Project Purpose and Description

Des. No. 1700135: The existing I-65 northbound and southbound cross sections have a paved width that is approximately 38 feet that consists of two 12-foot-wide travel lanes (two northbound lanes and two southbound lanes) divided by a 60-foot-wide depressed median (52 feet of grass). Paved 10-foot-wide shoulders are provided along the outside travel lanes with guardrail. Paved 4-foot-wide shoulders are located adjacent to the inside travel lanes.

The proposed project limits start 0.5 miles north of I-65 Blue Lick Road Interchange, and extend 12.8 miles north to a point 0.5 miles south of the I-65/SR 56 Interchange. An additional added travel lane will be included to a portion of the northbound and southbound lanes of I-65 by widening toward the median. The added travel lane cross section will start from 0.5 mile north of the I-65 Blue Lick Road Interchange, where the current six lane section ends, and will extend north 11.06 miles, ending approximately 2.24 miles south of the I-65/SR 56 Interchange. The proposed I-65 northbound and southbound cross-sections will have a paved width that is approximately 62-feet and will consist of three 12-foot-wide travel lanes, separated by a two-foot six-inch wide concrete median barrier. Paved 12-foot shoulders are provided along the outside travel lanes and paved 14-foot-wide shoulders are located adjacent to the inside travel lanes. From 2.24 miles south of SR 56 to 0.5 mile south of SR 56, the proposed project will consist of reconstruction of the existing 4 lane section, as well as widening of shoulders. The proposed I-65 NB and SB cross-section from 2.24 miles south of SR 56 to 0.5 mile south of SR 56 will have a paved width approximately 44 feet that consists of two 12-foot-wide travel lanes separated by a 60-foot depressed median and 4-foot paved shoulder. Paved 12-foot shoulders are provided along the outside travel lanes and paved 8-foot shoulders are located adjacent to the inside travel lanes. This typical section is 6 feet wider than existing. Work at the SR 160/ I-65 interchange will include shoulder replacement and resurfacing of access ramps. Additionally, work at the Henryville Rest Area located on I-65 approximately 1.3 miles south of CR 600 South will include milling and resurfacing of the exit and entry ramps. As part of the improvement efforts, six sets of twin bridges carrying I-65 over three waterways (Blue Lick Creek, Pigeon Roost Creek, and Caney Fork), will be rehabilitated and widened. Additionally, there are 25 existing pipe culverts that will be replaced.

Compensatory Mitigation

A total of 489.9 lft of stream, 0.0903 ac of emergent wetland, 0.0029 ac of scrub-shrub wetland, and 0.0169 ac of forested wetland (cumulative total of 0.1101 ac of wetlands) regulated by the Army Corps of Engineers shall be mitigated through the purchase of 587.88 lft of stream and 0.3083 ac of wetland credits. Of the 1.2087 ac of IDEM regulated wetlands impacted by fill, 1.1972 ac are exempted from regulation per 327 IAC 17-13-3 (7). Please see the Impact Summary Tables, the Approved JD and Waters of the State Coordination for more information on exemptions. The remaining 0.0115 ac of Class II non-forested wetland impacts shall be mitigated through purchase of 0.023 ac of emergent wetland credits. Therefore, to mitigate for impacts, a total of 0.3313 credits of wetland mitigation and 587.88 lft of stream mitigation credits will be purchased. Wetland credits will consist of 0.0811 forested, 0.0104 scrub/shrub, and 0.2398 emergent credits. Stream credits shall be intermittent. The proposed project is located within the Upper Ohio and Whitewater-East Fork White Service Areas of the Indiana Stream and Wetland Mitigation Program. Therefore, 0.0883 credits of wetland mitigation (0.0072 emergent and 0.0811 forested) and 279.48 lft of stream mitigation credits will be purchased through the Upper Ohio Service Area and 0.243 credits of wetland mitigation (0.2325 emergent, 0.0104 scrub/shrub) and 308.4 lft of stream mitigation credits will be purchased through the Whitewater-East Fork White Service Area.

One Section 404 regulated emergent wetland will have 0.07 ac of impact due to dredging of 90.1 cys of material and will be restored on-site through the restoration of roadside ditch along the roadway. All of the restored ditches will be reseeded using the restoration seed mix approved by INDOT. Additionally, 30 lft (0.0048 ac) of Wolf Run will be daylighted and regraded removing 12.8-cys of dredge to provide positive drainage. This includes 25-lft of channel at the upstream (west) end of the new structure and 5-lft at the downstream end. The open channel will be regraded to transition the generally 7.2-ft wide channel into the new 9'x9' reinforced concrete box (RCB). The banks will be stabilized and reseeded using the restoration seed mix approved by INDOT.

Alternatives Analysis

The purpose of this project is to improve roadway pavement quality, reduce present and or impending congestion and to address projected transportation demand over a 12.8-mile portion of the I-65 corridor. An alternatives analysis was completed to determine the least environmentally damaging practicable alternative that also met the purpose and needs of the project.

1. Roadway Reconstruction with Widening to Median
This alternative would consist of full mainline roadway replacement for the entire project limits. Additionally, an additional added travel lane would be included to a portion of northbound and southbound I65 by widening toward the median. The added travel lane cross-section would start from 0.5 mile north of the I-65 Blue Lick Creek Interchange and extend north 11.06 miles ending approximately 2.24 miles south of the I-65/SR 56 Interchange. From 2.24 miles south of SR 56 to 0.5 mile south of SR 56, the proposed project would consist of reconstruction of the existing 4 lane section as well as widening of shoulders.

2. Roadway Reconstruction Without Widening
This alternative would rehabilitate the pavement along the I-65 corridor without widening the shoulder on bridges or additional travel lanes. Deteriorated drainage structures and culverts would be replaced to maintain drainage. This alternative would address the overall deteriorated features of the roadway and bridges throughout the project corridor but would not improve mobility or meet the INDOT goal to continue expanding segments of I-65 from four to six lanes along the project corridor, as documented in the INDOT 2018-2045 Long Range Transportation Plan. For these reasons, this alternative was dismissed from further consideration.

3. The "Do Nothing" Alternative
The "Do Nothing" alternative was considered for the proposed project. The "Do Nothing" alternative would not address the overall purpose and need of the project which is to address the deteriorated features of the roadway and bridges throughout the project corridor and improve mobility, reduce potential delays and improve safety along the project corridor. For the stated reasons, the "Do Nothing" alternative was not considered further.

Least Environmentally Damaging Practicable Alternative

Alternative 1 (Roadway Reconstruction with Widening to Median) has been determined to meet all required project criteria, while also being the least environmentally damaging. Widening to the median would minimize impacts to streams, as 18 of the 23 impacted streams for Alternative 1 are currently encapsulated throughout the median. Additionally, wetlands located in the median are primarily low quality. All 16 wetlands that will be impacted within the median for Alternative 1 are non-regulated isolated wetlands.

Complete avoidance and minimization of wetland and stream impacts is not possible due to their close proximity to the project area. All work will occur within existing right-of-way on waterways which have been previously disturbed during the construction of the interstate and supporting infrastructure. Mitigation will occur for impacts that cannot be avoided. However, Alternative 1 includes minimization measures for the complete avoidance of 2 regulated isolated wetlands and 6 Section 404 waters within the alternative limits. Additionally, the alternative limits were adjusted so that a total of 5 Section 404 waters and 1 regulated isolated wetland were outside of the alternative limits. Impacts to 5 streams that are not encapsulated throughout the median were minimized and will include the placement of riprap for scour protection and clean earthen fill for drainage improvements within the stream and surrounding areas. Additionally, no additional encapsulation will occur to 13 of the 15 structures, as they will be replaced with structures that are shorter or equal in length.

Permanent Wetland Impacts

All proposed riprap detailed in the impact summaries below will be placed flush with the existing ground surface. The contractor is responsible for disposing of dredged material following INDOT standard specifications 203.06 and 203.08. Please see the included plan sheets, cross sections, and detail sheets included in Attachment 2 for more information.

*=wetlands determined to be non-regulated Class II Isolated Wetlands.

***Wetland 2 –** A cumulative total of 0.019 ac of Wetland 2 will be permanently impacted by the placement of fill and dredging material. Wetland 2 will be permanently impacted by the placement of 3.4 cys (0.001 ac) of revetment riprap (60.7 sq ft x 1.5') at the outlet of the proposed Structure 130 for scour protection purposes and 0.7 cys (0.001 ac) of pipe end section (18.8 sq ft x 1.0') will be placed for the proposed structure. Wetland 2 will also be permanently impacted by the placement of 1.0 cys (0.001 ac) of revetment riprap (17.6 sq ft x 1.5') at the outlet of the proposed Structure 141 for scour protection purposes. Additionally, 0.002 ac of Wetland 2 will be permanently impacted by the dredging of 3.1 cys of material (13' x 4.3' x 1.5') near Structure 141 and 0.014 ac will also be impacted by the dredging of 34.1 cys of material (84' x 7.3' x 1.5') in order to regrade the side slopes along the roadway. Temporary impacts for dewatering for Structure 41 are detailed below. Please see a plan view on pg. 79 and 81, and cross sections on pg. 113, 114, and 117 for additional details regarding impacts to Wetland 2.

***Wetland 5 –** A cumulative total of 0.044 ac of Wetland 5 will be permanently impacted by the placement of fill and dredging material. Wetland 5 will be permanently impacted by the placement of 1.2 cys (0.001 ac) of clean earthen fill (50' x 1.25' x 0.5') in order to regrade the side slopes along the roadway at roadway station 514+00. Additionally, 0.043 ac of Wetland 5 will be permanently impacted by the dredging of 68.6 cys of material (475' x 3.9' x 1.0') in order to regrade the side slopes along the roadway at roadway station 508+00 and incorporate a roadway ditch. Please see a plan view on pg. 88 and cross sections on pg. 151-155 and 158 for additional details regarding impacts to Wetland 5.

***Wetland 6 –** A total of 0.122 ac of Wetland 6 will be permanently impacted by the dredging of 396.3 cys of material (723' x 7.4' x 2.0') in order to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 89 and cross sections on pg. 162-167 for additional details regarding impacts to Wetland 6.

***Wetland 7 –** A cumulative total of 0.0025 ac of Wetland 7 will be permanently impacted by fill for the proposed Structure 47 (24" CMP). A total of 0.5 cys (0.0005 ac) of clean earthen fill (2' x 3' x1.5') will be placed to complete minor grading near the outlet of the proposed Structure 47. Additionally, a total of 6.0 cys (0.002 ac) of revetment riprap (108 sq ft x 1.5') will be placed at the outlet of the proposed Structure 47 for scour protection purposes. Please see a plan view on pg. 90 and cross sections on pg. 169 for additional details regarding impacts to Wetland 7.

***Wetland 8 –** A cumulative total of 0.099 ac of Wetland 8 will be permanently impacted by the placement of fill and dredging material. A total of 0.095 ac of Wetland 8 will be impacted by the dredging of 308.5 cys of material (490' x 8.5' 2.0') in order to regrade the side slopes along the roadway and incorporate a roadway ditch. A total of 4 proposed structures will impact Wetland 8. Structure 271 (18" RCP) will impact 0.0005 ac of Wetland 8 due to the placement of 3.8 cys of revetment riprap (22.9

sq ft x 1.5'). Structure 48 (36" RCP) will impact 0.002 ac of Wetland 8 due to the placement of 4.5 cys of revetment riprap (80.7 sq ft x 1.5'). Structure 274 (18" CMP) will impact 0.0005 ac of Wetland 8 due to the placement of 0.9 cys of revetment riprap (16.4 sq ft x 1.5'), and 0.2 cys (0.00025 ac) of pipe end section (7.1 sq ft x 0.6') will be placed for the proposed structure. Structure 275 (18" CMP) will impact 0.0005 ac of Wetland 8 due to the placement of 0.3 cys of revetment riprap (4.5 sq ft x 1.5'), and 0.1 cys (0.00025 ac) of pipe end section (6.0 sq ft x 0.5') will be placed for the proposed structure. All riprap is being placed at the outlet of proposed drainage structures for scour protection. Please see a plan view on pg. 90 and cross sections on pg. 170-175 for additional details regarding impacts to Wetland 8.

***Wetland 10 –** A total of 0.001 ac of Wetland 10 will be permanently impacted due to the placement of 2.4 cys of pipe end section (44 sq ft x 1.5') for the proposed Structure 53. Please see a plan view on pg. 95 and cross sections on pg. 184 for additional details regarding impacts to Wetland 10.

***Wetland 11 –** A total of 0.014 ac of Wetland 11 will be permanently impacted by the dredging of 6.9 cys of material (119' x 5.2' x 0.3') in order to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 95 and cross sections on pg. 185 for additional details regarding impacts to Wetland 11.

***Wetland 16 –** A total of 0.001 ac of Wetland 16 will be permanently impacted due to the placement of 1.2 cys of pipe end section (21.5 sq ft x 1.5') for the proposed Structure 56 (24" RCP). Please see a plan view on pg. 99 and cross sections on pg. 201 for additional details regarding impacts to Wetland 16.

***Wetland 17 –** A total of 0.0023 ac of Wetland 17 will be permanently impacted by the placement of 10.2 cys of clean earthen fill (23' x 6' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 103 and cross sections on pg. 208 for additional details regarding impacts to Wetland 17.

***Wetland 19 –** A total of 0.0896 ac of Wetland 19 will be permanently impacted by the placement of 353.2 cys of clean earthen fill (596' x 8' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 105 and cross sections on pg. 213-216 for additional details regarding impacts to Wetland 19.

***Wetland 20 –** A total of 0.0067 ac of Wetland 20 will be permanently impacted by the placement of 20.7 cys of clean earthen fill (70' x 4' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 106 and cross sections on pg. 220 for additional details regarding impacts to Wetland 20.

Wetland 21.1 – A total of 0.0159 ac of Wetland 21.1 will be permanently impacted by the placement of 10.4 cys of clean earthen fill (94' x 72' x 6'). The placement of clean earthen fill within the wetland will be necessary to complete minor grading near the outlet of an existing 72" CMP. Please see a plan view on pg. 106 and cross sections on pg. 222 for additional details regarding impacts to Wetland 21.1.

***Wetland 21.2 –** A total of 0.0007 ac of Wetland 21.2 will be permanently impacted by the placement of 0.6 cys of clean earthen fill (8' x 4' x 6'). The placement of clean earthen fill within the wetland will be

necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 106 and cross sections on pg. 295 for additional details regarding impacts to Wetland 21.2.

***Wetland 22 –** A total of 0.0139 ac of Wetland 22 will be permanently impacted by the placement of 45 cys of clean earthen fill (19' x 32' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 106 and cross sections on pg. 226 for additional details regarding impacts to Wetland 22.

***Wetland 23 –** A cumulative total of 0.0084 ac of Wetland 23 will be permanently impacted by the placement of 32.3 cys of fill within 3 locations. A total of 0.003 ac of Wetland 23 will be permanently impacted by the placement of 10.1 cys of clean earthen fill (17' x 8' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and to complete minor grading near the outlet of proposed Structure 74 (36" Type 1 Pipe). A total of 0.002 ac of wetland in a second location will be impacted by the placement of 7.6 cys of clean earthen fill (8.5' x 12' x 2') in order to regrade the side slopes along the roadway. Additionally, a total of 0.0034 ac of wetland in a third location will be impacted by the placement of 14.6 cys of clean earthen fill (33' x 6' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and to complete minor grading near the outlet of proposed Structure 479 (30" Pipe). Please see a plan view on pg. 107 and cross sections on pg. 227, 228 and 230 for additional details regarding impacts to Wetland 23.

***Wetland 24 –** A total of 0.002 ac of Wetland 24 will be permanently impacted by the placement of 6.7 cys of clean earthen fill (13' x 7' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 107 and cross sections on pg. 231 for additional details regarding impacts to Wetland 24.

***Wetland 25 –** A total of 0.037 ac of Wetland 25 will be permanently impacted by the placement of 135.2 cys of clean earthen fill (365' x 5' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 108 and cross sections on pg. 232-234 for additional details regarding impacts to Wetland 25.

***Wetland 26 –** A cumulative total of 0.0536 ac of Wetland 26 will be permanently impacted by the placement of 222.9 cys of fill in two locations. A total of 0.0446 ac of wetland will be impacted by the placement of 191.9 cys of clean earthen fill (470' x 5.5' x 2'). Additionally, a total of 0.006 ac of wetland will be impacted in a second location by the placement of 20 cys of clean earthen fill (47' x 5.5' x 2'). The placement of fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Additionally, a total of 0.003 ac of wetland will be impacted by the placement of 11 cys of class 2 riprap (30.5' x 3.75' x 2.5') for scour protection around the southern end bent of the proposed structure over Pigeon Roost Creek. Please see a plan view on pg. 113 as well as structure details on pg. 134 and 134 (Pigeon Roost Creek Bridge), and cross sections on pg. 250-252, 255 and 256 for additional details regarding impacts to Wetland 26.

Wetland 27 – A total of 0.0036 ac of Wetland 27 will be permanently impacted by the placement of 13.5 cys of clean earthen fill (7' x 26' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway, incorporate a roadway ditch and to complete minor grading near the inlet of the proposed Structure 76 (36" Type 1 Pipe). Please see a plan view on pg. 114 and cross sections on pg. 258 for additional details regarding impacts to Wetland 27.

***Wetland 29 –** A total of 0.0007 ac of Wetland 29 will be permanently impacted by the placement of 2.7 cys of clean earthen fill (12' x 3' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 116 and cross sections on pg. 266 and 295 for additional details regarding impacts to Wetland 29.

***Wetland 30 –** A total of 0.0587 ac of Wetland 30 will be permanently impacted by the placement of 248 cys of clean earthen fill (837' x 4' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 121 and 122 and cross sections on pg. 279-286 for additional details regarding impacts to Wetland 30.

***Wetland 31 –** A total of 0.0077 ac of Wetland 31 will be permanently impacted by the placement of 20.7 cys of clean earthen fill in two locations. A total of 0.002 ac will be impacted in one location due to the placement of 5.7 cys of clean earthen fill (15' x 5' x 2'). Additionally, a total of 0.0057 ac will be impacted in a second location due to the placement of 15 cys of clean earthen fill (41' x 5' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway, incorporate a roadway ditch and to complete minor grading near the inlet of the existing Structure 85 (60" Type 1 pipe). Please see a plan view on pg. 122 and 123 and cross sections on pg. 290 and 293 for additional details regarding impacts to Wetland 31.

***Wetland 32 –** A total of 0.0002 ac of Wetland 32 will be permanently impacted by the placement of 0.4 cys of pipe end section (2.5' x 3' x 1.5') for the proposed Structure 86 (30" CMP). Please see a plan view on pg. 123 and cross sections on pg. 294 for additional details regarding impacts to Wetland 32.

***Wetland 33 –** A total of 0.013 ac of Wetland 33 will be permanently impacted by the placement of 75 cys of clean earthen fill (50' x 10' x 4'). The placement of clean earthen fill within the wetland will be necessary to complete minor grading near the outlet of the proposed Structure 819 (15" Type 2 Pipe) and Structure 818 (36" Type 2 Pipe). Please see a plan view on pg. 127 and cross sections on pg. 310 for additional details regarding impacts to Wetland 33.

Wetland 34 – A cumulative total of 0.0066 ac of Wetland 34 will be permanently impacted in two locations by the placement of 12 cys of fill. A total of 0.0048 ac of Wetland 34 will be permanently impacted by the placement of 7 cys of clean earthen fill (30' x 6' x 1'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Additionally, a total of 0.0018 ac of Wetland 34 will be permanently impacted by the placement of 5 cys of clean earthen fill (20' x 6' 1'). The placement of clean earthen fill within the wetland will be necessary to complete minor grading near the outlet of the proposed Structure 824 (15" Type 2 Pipe). Please see a plan view on pg. 128 and cross sections on pg. 212 and 213 for additional details regarding impacts to Wetland 34.

***Wetland 47 –** A total of 0.024 ac of Wetland 47 will be permanently impacted by the placement of 85 cys of clean earthen fill (190' x 6' x 2'). The placement of clean earthen fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 128 and cross sections on pg. 311 and 312 for additional details regarding impacts to Wetland 47.

***Wetland 48 –** A total of 0.021 ac of Wetland 48 will be permanently impacted by the placement of 32 cys of clean earthen fill (140' x 6' x 1'). The placement of clean earthen fill within the wetland will be

necessary due to widening of the roadway to the median. Please see a plan view on pg. 126 and cross sections on pg. 308 and 309 for additional details regarding impacts to Wetland 48.

***Wetland 49 –** A total of 0.018 ac of Wetland 49 will be permanently impacted by the placement of 45.3 cys of clean earthen fill (68' x 9' x 2'). The placement of clean earthen fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 119 and cross sections on pg. 272 for additional details regarding impacts to Wetland 49.

***Wetland 50 –** A total of 0.019 ac of Wetland 50 will be permanently impacted by the placement of 91.1 cys of clean earthen fill (246' x 5' x 2'). The placement of clean earthen fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 117 and 118 and cross sections on pg. 268-270 for additional details regarding impacts to Wetland 50.

***Wetland 51 –** A total of 0.012 ac of Wetland 51 will be permanently impacted by the placement of 57 cys of clean earthen fill (110' x 7' x 2'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 116 and cross sections on pg. 264 and 265 for additional details regarding impacts to Wetland 51.

***Wetland 52 –** A total of 0.03 ac of Wetland 52 will be permanently impacted by the placement of 109.6 cys of clean earthen fill (148' x 10' x 2'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 106 and cross sections on pg. 223, 224 and 295 for additional details regarding impacts to Wetland 52.

***Wetland 53 –** A total of 0.02 ac of Wetland 53 will be permanently impacted by the placement of 66.7 cys of clean earthen fill (150' x 6' x 2'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 106 and cross sections on pg. 219 and 220 for additional details regarding impacts to Wetland 53.

***Wetland 54 –** A total of 0.034 ac of Wetland 54 will be permanently impacted by the placement of 154.9 cys of clean earthen fill (123' x 17' x 2'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 105 and cross sections on pg. 213 and 214 for additional details regarding impacts to Wetland 54.

***Wetland 55 –** A total of 0.042 ac of Wetland 55 will be permanently impacted by the placement of 141 cys of clean earthen fill (136' x 14' x 2'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 104 and cross sections on pg. 210 and 211 for additional details regarding impacts to Wetland 55.

***Wetland 56 –** A cumulative total of 0.042 ac of Wetland 56 will be permanently impacted by the placement of 185.6 cys of clean earthen fill in two locations. A total of 0.021 ac of wetland will be impacted by the placement of 88.5 cys of clean earthen fill (140' x 6.5' x 2.6'). The placement of clean earthen fill within the wetland will be necessary due to widening of the roadway to the median. Additionally, a total of 0.021 ac of wetland will be impacted in a second location due to the placement of 97.1 cys of clean earthen fill (150' x 6.1' x 2.8'). The placement of clean earthen fill in the second location is necessary due to widening of the roadway to the median. Please see a plan view on pg. 103 and cross sections on pg. 204-206 for additional details regarding impacts to Wetland 56.

***Wetland 57 –** A total of 0.021 ac of Wetland 57 will be permanently impacted by the placement of 68 cys of clean earthen fill (108' x 8.5' x 2.0'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 101 and cross sections on pg. 202 and 203 for additional details regarding impacts to Wetland 57.

***Wetland 58 –** A total of 0.020 ac of Wetland 58 will be permanently impacted by the placement of 57.8 cys of clean earthen fill (102' x 8.5' x 1.8'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 97 and cross sections on pg. 188 and 189 for additional details regarding impacts to Wetland 58.

***Wetland 59 –** A total of 0.020 ac of Wetland 59 will be permanently impacted by the placement of 42.1 cys of clean earthen fill (141' x 6.2' x 1.3'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 95 and cross sections on pg. 186 and 187 for additional details regarding impacts to Wetland 59.

***Wetland 60 –** A total of 0.041 ac of Wetland 60 will be permanently impacted by the placement of 100.8 cys of clean earthen fill (189' x 9.6' x 1.5'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 93 and cross sections on pg. 180-182 for additional details regarding impacts to Wetland 60.

***Wetland 61 –** A total of 0.033 ac of Wetland 61 will be permanently impacted by the placement of 73.7 cys of clean earthen fill (128' x 11.1' x 1.4'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 91 and cross sections on pg. 176 for additional details regarding impacts to Wetland 61.

***Wetland 62 –** A total of 0.030 ac of Wetland 62 will be permanently impacted by the placement of 95.9 cys of clean earthen fill (156' x 8.3' x 2.0'). The placement of fill within the wetland will be necessary due to widening of the roadway to the median. Please see a plan view on pg. 89 and cross sections on pg. 167 for additional details regarding impacts to Wetland 62.

Wetland 63 – A cumulative total of 0.073 ac of Wetland 63 will be permanently impacted by the placement of 3 cys of fill and 90.1 cys of dredging material. Wetland 63 will be permanently impacted by the placement of 1.4 cys (0.001 ac) of revetment riprap (25 sq ft x 1.5') at the outlet of the proposed Structure 101 (18" Type 1 pipe) for scour protection purposes, and 0.2 cys (0.001 ac) of pipe end section (10 sq ft x 0.6') will be placed for the proposed structure. Wetland 63 will also be permanently impacted by the placement of 1.4 cys (0.001 ac) of revetment riprap (25 sq ft x 1.5') at the outlet of the proposed Structure 102 (18" Type 1 pipe) for scour protection purposes. Additionally, 0.070 ac of Wetland 63 will be permanently impacted by the dredging of 90.1 cys of material (307' x 9.9' x 0.8') in order to regrade the side slopes along the roadway and incorporate a roadway ditch. Impacts due to dredging will be restored on-site and will be reseeded using a restoration seed mix approved by INDOT. Please see a plan view on pg. 78 and cross sections on pg. 109-111 for additional details regarding impacts to Wetland 63.

***Wetland 66 –** A total of 0.029 ac of Wetland 66 will be permanently impacted by the placement of 13.9 cys of clean earthen fill (378' x 3.3' x 0.3'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 83 and cross sections on pg. 123-125 for additional details regarding impacts to Wetland 66.

***Wetland 67 –** A cumulative total of 0.075 ac of Wetland 67 will be permanently impacted by the placement of 119.3 cys of clean earthen fill in two locations. A total of 0.002 ac of Wetland 67 will be impacted by the placement of 2.5 cys of clean earthen fill (26' x 2.6' x 1.0') in order to complete minor grading work near the outlet of a stormwater trunk line. A total of 0.046 ac of another section of Wetland 67 will be impacted by the placement of 72.9 cys of clean earthen fill (615'x 3.2' x 1.0') in order to regrade the side slopes along the roadway and a stormwater trunk line. Additionally, a total of 0.027 ac will be impacted by the placement of 43.9 cys of clean earthen fill (228' x 5.2' x 1.0') in order to regrade the side slopes along the roadway and Structure 200. Please see a plan view on pg. 85 and 86 and cross sections on pg. 131-137 for additional details regarding impacts to Wetland 67.

***Wetland 68 –** A cumulative total 0.013 ac of Wetland 68 will be permanently impacted by the placement of 9.5 cys of clean earthen fill in two locations. A total of 0.001 ac of Wetland 68 will be impacted by the placement of 4.0 cys of clean earthen fill (12' x 6' x 1.5'). The placement of clean earthen fill within the wetland will be necessary to complete minor grading near the inlet of the proposed Structure 44 (36" CMP). Additionally, a total of 0.012 ac of another section of Wetland 68 will be impacted by the placement of 5.5 cys of clean earthen fill (192' x 2.6' x 0.3') in order to regrade the side slopes along the roadway. Temporary impacts for dewatering for Structure 44 are detailed below. Please see a plan view on pg. 87 and cross sections on pg. 148 and 149 for additional details regarding impacts to Wetland 68.

***Wetland 70 –** A cumulative total of 0.005 ac of Wetland 70 will be permanently impacted by the placement of fill in two locations. A total of 0.002 ac of Wetland 70 will be impacted by the placement of 0.9 cys of clean earthen fill (4' x 4.2' x 1.5') in order to complete minor grading near the outlet of the proposed Structure 46 (36" CMP). Additionally, a total of 0.001 ac will be impacted by the placement of 5.3 cys of revetment riprap (49.7 sq ft x 1.5') at the outlet of the proposed Structure 46 for scour protection purposes. Impacts will also occur within a second location in Wetland 70. Wetland 70 will be permanently impacted by the placement of 1.7 cys (0.001 ac) of clean earthen fill (13' x 3.6' x 1.0') in order to complete minor grading near the outlet of proposed Structure 244, and 0.4 cys (0.001 ac) of pipe end section (11.6 sq ft x 1.0') will be placed for the proposed structure. Please see a plan view on pg. 89 and cross sections on pg. 160 and 161 for additional details regarding impacts to Wetland 70.

***Wetland 71–** A total of 0.044 ac of Wetland 71 will be permanently impacted by the dredging of 71.5 cys of material (230' x 8.4' x 1.0') in order to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 90 and cross sections on pg. 172-175 for additional details regarding impacts to Wetland 71.

***Wetland 73 –** A total of 0.002 ac of Wetland 73 will be permanently impacted by the placement of 1.2 cys of clean earthen fill (20' x 3.3' x 0.5'). The placement of clean earthen fill within the wetland will be necessary to complete minor grading near Structure 299 associated with a storm water trunk line. Please see a plan view on pg. 92 and cross sections on pg. 179 for additional details regarding impacts to Wetland 73.

***Wetland 75 –** A total of 0.022 ac of Wetland 75 will be permanently impacted by the placement of 7.1 cys of clean earthen fill (259' x 3.7' x 0.2'). The placement of clean earthen fill within the wetland will be necessary to complete minor grading near structure 388 associated with a stormwater trunk line and to regrade the side slopes along the roadway. Please see a plan view on pg. 98 and cross sections on pg. 192-194 for additional details regarding impacts to Wetland 75.

Wetland 76 – A total of 0.001 ac of Wetland 76 will be permanently impacted by the placement of 0.1 cys of clean earthen fill (2’ x 1’ x 1.5’). The placement of clean earthen fill within the wetland will be necessary to complete minor grading near the existing 12” CMP structure which will be removed as part of the undertaking. Please see a plan view on pg. 98 and cross sections on pg. 196 for additional details regarding impacts to Wetland 76.

***Wetland 79 –** A total of 0.009 ac of Wetland 79 will be permanently impacted by the placement of 89.8 cys of clean earthen fill (97’ x 5’ x 5’). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 105 and cross sections on pg. 217 and 218 for additional details regarding impacts to Wetland 19.

***Wetland 80 –** A total of 0.0019 ac of Wetland 80 will be permanently impacted by the placement of 8.3 cys of clean earthen fill (14’ x 8’ x 2’). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 106 and cross sections on pg. 295 for additional details regarding impacts to Wetland 80.

***Wetland 81 –** A total of 0.0044 ac of Wetland 81 will be permanently impacted by the placement of 16.3 cys of clean earthen fill (22’ x 10’ x 2’). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 107 and cross sections on pg. 295 for additional details regarding impacts to Wetland 81.

***Wetland 82 –** A total of 0.0312 ac of Wetland 82 will be permanently impacted by the placement of 156.7 cys of clean earthen fill (423’ x 5’ x 2’). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 109 and cross sections on pg. 235-238 for additional details regarding impacts to Wetland 82.

***Wetland 83 –** A total of 0.0024 ac of Wetland 83 will be permanently impacted by the placement of 8.2 cys of clean earthen fill (22’ x 5’ x 2’). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 110 and cross sections on pg. 239 and 240 for additional details regarding impacts to Wetland 83.

***Wetland 84 –** A total of 0.02 ac of Wetland 84 will be permanently impacted by the placement of 59.9 cys of clean earthen fill (202’ x 4’ x 2’). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Please see a plan view on pg. 110 and cross sections on pg. 241 and 242 for additional details regarding impacts to Wetland 84.

***Wetland 85 –** A total of 0.0079 ac of Wetland 85 will be permanently impacted by the placement of 27 cys of clean earthen fill in two locations and 1.2 cys of pipe end section. A total of 0.0023 ac will be impacted due to the placement of 7.4 cys of clean earthen fill (20’ x 5’ x 2’). A total of 0.005 ac will be impacted due to the placement of 19.6 cys of clean earthen fill (49’ x 5’ x 2’) in a second location near Structure 527. The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and incorporate a roadway ditch. Additionally, a total of 0.0006 ac will be impacted due to the placement of 1.2 cys of pipe end section (7’ x 4’ x 1’). The placement of pipe end

section within the wetland is necessary for the installation of Structure 527. Please see a plan view on pg. 111 and cross sections on pg. 242 and 244 for additional details regarding impacts to Wetland 85.

Wetland 86 – A total of 0.0029 ac of Wetland 86 will be permanently impacted by the placement of 11.9 cys of clean earthen fill (23' x 7' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 111 and cross sections on pg. 245 for additional details regarding impacts to Wetland 86.

***Wetland 87 –** A total of 0.0123 ac of Wetland 87 will be permanently impacted by the placement of 44 cys of clean earthen fill (66' x 9' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 111 and cross sections on pg. 246 for additional details regarding impacts to Wetland 87.

***Wetland 88 –** A total of 0.0215 ac of Wetland 88 will be permanently impacted by the placement of 59.3 cys of clean earthen fill in two locations. A total of 0.0205 ac will be impacted by the placement of 55.6 cys of clean earthen fill (150' x 5' x 2'). Additionally, a total of 0.001 ac will be impacted by the placement of 3.7 cys of clean earthen fill (10' x 5' x 2') in a second location. The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 112 and cross sections on pg. 247-249 for additional details regarding impacts to Wetland 88.

***Wetland 89 –** A total of 0.0091 ac of Wetland 89 will be permanently impacted in two locations by the placement of 42 cys of clean earthen fill and 0.7 cys of pipe end section. A total of 0.007 ac will be impacted due to the placement of 23 cys of clean earthen fill (80' x 4' x 2'). A total of 0.0017 ac will be impacted due to the placement of 19 cys of clean earthen fill (60' x 4' x 2') in a second location near Structure 568. The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Additionally, a total of 0.0004 ac will be impacted due to the placement of 0.7 cys of pipe end section (4' x 4' x 1'). The placement of pipe end section within the wetland is necessary for the installation of Structure 568. Please see a plan view on pg. 113 and cross sections on pg. 251, 252 and 254 for additional details regarding impacts to Wetland 89.

***Wetland 90 –** A total of 0.015 ac of Wetland 90 will be permanently impacted by the placement of 53.3 cys of clean earthen fill (80' x 9' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway, incorporate a roadway ditch and to complete minor grading near the outlet of the proposed Structure 76 (36" Type 1 Pipe). Please see a plan view on pg. 114 and cross sections on pg. 257 for additional details regarding impacts to Wetland 90.

***Wetland 91 –** A total of 0.0309 ac of Wetland 91 will be permanently impacted by the placement of 42.4 cys of clean earthen fill (143' x 4' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and to complete minor grading near the outlet of the proposed Structure 591 (24" Pipe). Please see a plan view on pg. 114 and cross sections on pg. 259-261 for additional details regarding impacts to Wetland 91.

***Wetland 92 –** A total of 0.0022 ac of Wetland 92 will be permanently impacted by the placement of 8.9 cys of clean earthen fill (40' x 3' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 119 and cross sections on pg. 276 for additional details regarding impacts to Wetland 92.

***Wetland 93 –** A total of 0.0114 ac of Wetland 93 will be permanently impacted by the placement of 53.3 cys of clean earthen fill in two locations. A total of 0.0054 ac will be impacted by the placement of 35.5 cys of clean earthen fill in one location (80' x 6' x 2'). Additionally, a total of 0.006 ac will be impacted by the placement of 17.8 cys of clean earthen fill in a second location. The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 120 and cross sections on pg. 277 and 278 for additional details regarding impacts to Wetland 93.

***Wetland 94 –** A total of 0.018 ac of Wetland 94 will be permanently impacted by the placement of 59.3 cys of clean earthen fill (100' x 8' x 2'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and to complete minor grading at the outlet of the existing 12" RCP which is being removed. Please see a plan view on pg. 121 and cross sections on pg. 279 for additional details regarding impacts to Wetland 94.

Wetland 95 – A total of 0.0807 ac of Wetland 95 will be permanently impacted in two locations by the placement of 308.4 cys of clean earthen fill. A total of 0.01 ac will be impacted by the placement of 31.4 cys of clean earthen fill (35' x 12' x 2'). Additionally, a total of 0.0707 ac will be impacted by the placement of 277 cys of clean earthen fill (312' x 12' x 2') in a second location. The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway and to complete minor grading near the outlet of proposed Structure 708 (18" Pipe). Please see a plan view on pg. 122 and 123 and cross sections on pg. 290 and 291 for additional details regarding impacts to Wetland 95.

Wetland 96 – A total of 0.0071 ac of Wetland 96 will be permanently impacted by the placement of 9 cys of clean earthen fill (162' x 3' x 0.5'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 124 and cross sections on pg. 300 and 301 for additional details regarding impacts to Wetland 96.

Wetland 97 – A total of 0.0008 ac of Wetland 97 will be permanently impacted by the placement of 2 cys of clean earthen fill (35' x 3' x 0.5'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 124 and cross sections on pg. 302 for additional details regarding impacts to Wetland 97.

***Wetland 98 –** A total of 0.12 ac of Wetland 98 will be permanently impacted by the placement of 178 cys of clean earthen fill (800' x 6' x 1'). The placement of clean earthen fill within the wetland will be necessary to regrade the side slopes along the roadway. Please see a plan view on pg. 126 and cross sections on pg. 303-309 for additional details regarding impacts to Wetland 98.

Temporary Wetland Impacts

Construction is anticipated to begin on September 1, 2023 and be completed by November 2024. During construction, temporary impacts will be in place at each location for a maximum of 2 months over the construction time frame. Once complete the sandbag cofferdams will be removed and the wetlands will be returned to original contours and grades in accordance with the Standard Specifications. A native restoration seed mix will be utilized to restore any disturbed soils.

***Wetland 2 –** Approximately 0.001 ac of Wetland 2 will be temporarily impacted by the placement of 2.0 cys of sandbags (12’ x 3’ x 1.5’). A sandbag cofferdam will be in place around the perimeter of the proposed riprap pad at the inlet of Structure 41 for dewatering purposes. Please see a plan view on pg. 79 and 81.

***Wetland 68 –** Approximately 0.001 ac of Wetland 68 will be temporarily impacted by the placement of 0.8 cys of sandbags (6’ x 7’ x 0.5’). A sandbag cofferdam will be in place around the perimeter of the proposed riprap pad at the inlet of Structure 44 for dewatering purposes. Please see a plan view on pg. 87.

Wetland 78 – Approximately 0.009 ac (29’ x 19’ x 2’) of Wetland 78 will be impacted by temporary access in order to supplement the existing riprap at the outlet of proposed Structure 71 (42” Type 1 Pipe). No new riprap or other fill or dredge material will be placed within the wetland. Please see a plan view on pg. 104.

Site Access

No additional impacts are anticipated to any identified regulated water resources as a result of establishing site access. It is the responsibility of the contractor to notify INDOT Ecology and Waterway Permitting Office (EWPO) if additional wetland impacts will occur as a result of any temporary access activities that are not already discussed in this permit application and approved under the permits issued by the regulatory agencies.

Adjoining Property Owners and Addresses

First Name	Last Name	Mailing Address	City	State	Zip Code
State of Indiana		19901 N HIGHWAY 31	HENRYVILLE	IN	47126
Marjorie	Guthrie	1323 Allentown Rd	Sellersburg	IN	47172
Joey & Patricia L	Murphy	1081 S Finley Firehouse Road	Scottsburg	IN	47170
Cora D	Dickson	910 HOWSER ROAD	HENRYVILLE	IN	47126
Richard and Cathleen	Graf	812 HOWSER ROAD	HENRYVILLE	IN	47126
Kevin and Debra	Guernsey	707 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Jerry and Marie	Mosteller	2715 Tupelo Dr	Charlestown	IN	47111
Mount Zion Cemetery Assoc Inc		P.o. Box 181	HENRYVILLE	IN	47126
Charles and Emily	Owens	514 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Indiana State Highway		601 State Office Bldg	Indianapolis	IN	46204
Thomas	White	P.o. Box 404	HENRYVILLE	IN	47126
Joey and Patricia	Murphy	114 COUNTY LINE ROAD, WEST	UNDERWOOD	IN	47177
Kenneth and Fredia	Melton	206 COUNTY LINE ROAD W	UNDERWOOD	IN	47177
Thomas	Cartwright	212 COUNTY LINE ROAD W	UNDERWOOD	IN	47177
Daniel and Carolyn	Smith	4634 S Us 31	Scottsburg	IN	47170
Joey and Patricia	Murphy	406 COUNTY LINE ROAD	UNDERWOOD	IN	47177
Robert and Judith	Whobrey	408 COUNTY LINE ROAD WEST	UNDERWOOD	IN	47177
Michael and Barbara	Taylor	510 COUNTY LINE ROAD	UNDERWOOD	IN	47177
Maria and James	Daniels	1811 COUNTRY LAKE RD	UNDERWOOD	IN	47177
Bobby	Dismang	1607 COUNTY LAKE ROAD	UNDERWOOD	IN	47177
Charles and Emily	Carlson	1317 COUNTRY LAKE ROAD	HENRYVILLE	IN	47126
Connie	Stringer	1311 COUNTRY LAKE ROAD	UNDERWOOD	IN	47177
Phillip	Smallwood	511 HENRETTY ROAD	UNDERWOOD	IN	47177
Steveson A Tomes Irrevocable Trust		1308 COUNTRY LAKE ROAD	UNDERWOOD	IN	47177
Refa	Rose	407 Country Lake Road	UNDERWOOD	IN	47177
Bethany	Vaughn	512 COUNTRY LAKE ROAD	UNDERWOOD	IN	47177
Tessa	Guthrie	610 COUNTRY LAKE ROAD	UNDERWOOD	IN	47177
Tina	Goode	720 COUNTRY LAKE	UNDERWOOD	IN	47177
Country Lake Inc		P O Box 1072	New Albany	IN	47151
Graf Properties LLC		7515 Old Highway 11	Memphis	IN	47143
Paul and Stephanie	Chapman	3107 Wolf View Ct	New Albany	IN	47150
James	Willinger	510 HOWSER ROAD	HENRYVILLE	IN	47126
Kenneth and Cynthia	Barnes	424 HOWSER ROAD	HENRYVILLE	IN	47126
Marie	Wells	505 MOUNT ZION ROAD	HENRYVILLE	IN	47126
John and Deborah	Biesel	605 MOUNT ZION ROAD	HENRYVILLE	IN	47126
William and Constance	Henderzahs	607 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Kevin and Debra	Guernsey	707 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Raymond	Nasby	801 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Richard and Cathleen	Graf	1119 Biggs Rd	Memphis	IN	47143
Larry	Brooks	810 SHELTER RD	HENRYVILLE	IN	47126
Travis and Lisa	Joiner	814 SHELTER RD	HENRYVILLE	IN	47126
Charles and Sara	Tomes	818 SHELTER ROAD	HENRYVILLE	IN	47126
John and Kathleen	Tomes	816 SHELTER ROAD	HENRYVILLE	IN	47126
Jeffrey	Meyer	15115 Mcclellan Rd	Memphis	IN	47143
Andrew and Embrey	Albatys	1120 Shelter Rd	HENRYVILLE	IN	47126
Valen	Provenza	1204 SHELTER RD	HENRYVILLE	IN	47126
Ronald	Connon	1206 Shelter Rd	HENRYVILLE	IN	47126
Thomas	White	10015 BROWNSTOWN ROAD	HENRYVILLE	IN	

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Calvin and Kimberly	Brishaber	10121 BROWNSTOWN ROAD	HENRYVILLE	IN	47126
Charles and Debra	Walker	10119 BROWNSTOWN ROAD	HENRYVILLE	IN	47126
Eugene and Dana	Ramey	10012 BROWNSTOWN ROAD	HENRYVILLE	IN	47126
Devin and Kalah	Hester	206 COUNTRY LAKE RD	UNDERWOOD	IN	47177
Brenda	Smallwood	306 Pennsylvania St	HENRYVILLE	IN	47126
Hoosier Engery Rural Electric Cooperative Inc		301 HENRETTY ROAD	UNDERWOOD	IN	47177
Brian and Megan	Griffin	511 HENRETTY RD.	UNDERWOOD	IN	47177
Joseph	Shulthise	1421 Henryville Blue Lick Rd	HENRYVILLE	IN	47126
Lora	Waterfill	1112 SHELTER RD.	HENRYVILLE	IN	47126
Andrew and Embrey	Albatys	1120 SHELTER ROAD	HENRYVILLE	IN	47126
Lyle	Roach	1319 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Anita	Guthrie	1219 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Marjorie	Guthrie	1323 Allentown Rd.	Sellersburg	IN	47172
Ronald	Connon	1206 SHELTER ROAD	HENRYVILLE	IN	47126
Tiffany	Shelton	1215 SHELTER ROAD	HENRYVILLE	IN	47126
Rebecca	Bott	804 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Joey	Murphy	1081 S Finley Firehouse Road	Scottsburg	IN	47170
Paula	Forehand	1318 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Joey	Murphy	1314 MOUNT ZION RD	HENRYVILLE	IN	47126
Jeremy	Fain	1226/1228 MT ZION ROAD	HENRYVILLE	IN	47126
Joey	Murphy	1314 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Joe and Patricia	Carr	1421 Henryville Blue Lick Road	HENRYVILLE	IN	47126
Summer	Guthrie	607 FRANKE ROAD	HENRYVILLE	IN	47126
John and Kimberley	Ragusa	330 FRANKE ROAD, N	HENRYVILLE	IN	47126
Guy	Guernsey	6014 Zollman Rd	Otisco	IN	47163
Albert and Marilyn	Alsup	606 FRANKE ROAD NORTH	HENRYVILLE	IN	47126
Laura	Hattabaugh	336 N FRANCKE RD	HENRYVILLE	IN	47126
Joe and Patricia	Carr	1419 HENRYVILLE BLUE LICK RD	HENRYVILLE	IN	47126
Adam and Casey	Campbell	1421 HENRYVILLE-BLUE LICK ROAD	HENRYVILLE	IN	47126
Kevin and Debra	Guernsey	307 FRANKE RD	HENRYVILLE	IN	47126
Bruce and Sue	Canfield	315 FRANKE ROAD NORTH	HENRYVILLE	IN	47126
Karen	King	4913 Watson Sellersburg Rd	Sellersburg	IN	47172
Robert and Sheila	Vaughn	1415 FRONTAGE ROAD	HENRYVILLE	IN	47126
Hoyt	Hardee	1726 FRONTAGE ROAD	HENRYVILLE	IN	47126
Joe and Patricia	Carr	629 FRANCKE ROAD	HENRYVILLE	IN	47126
Terry and Ann	Brishaber	627 FRANCKE ROAD, NORTH	HENRYVILLE	IN	47126
Betty	Hughbanks	608 NORTH FRANCKE ROAD	HENRYVILLE	IN	47126
James	Bruce	612 NORTH FRANKE ROAD	HENRYVILLE	IN	47126
Clint	Guthrie	4905 Prell Hill Rd	HENRYVILLE	IN	47126
Beth	Lumpkins	311 FRANKE ROAD NORTH	HENRYVILLE	IN	47126
Graf Farms LLC		1119 Biggs Road	Memphis	IN	47143
Michael and Patricia	Herron	418 HOWSER ROAD	HENRYVILLE	IN	47126
Don	Guthrie	214 ROBYN AVE	HENRYVILLE	IN	47126
Orrin	Weber	1817 FORESTRY ROAD	HENRYVILLE	IN	47126
James	Pedigo	739 N Shea Rd	Scottsburg	IN	47170
Linda	Ostertag	722 HENRETTY ROAD	UNDERWOOD	IN	47177
Gary	Silletto	510 FRANKE ROAD NORTH	HENRYVILLE	IN	47126
Nancy and Michael	Hemphill	512 N FRANKE ROAD	HENRYVILLE	IN	47126
Zachary and Amanda	Beedy	937 Twin Oaks Dr	HENRYVILLE	IN	47126

Carla	Gutknecht	941 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Danny	McDonough	801 Twin Oaks Dr	HENRYVILLE	IN	47126
Terry and Ann	Chism	942 Twin Oaks Dr	HENRYVILLE	IN	47126
Cassandra	Warren	918 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Tiffany	Green	938 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Ronald and Eva	Hathaway	934 Twin Oaks Drive	HENRYVILLE	IN	47126
Terry and Ann	Dupree	930 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Steven	Cole	932 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Caven	Stickels	940 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Rovert	Hunt	800 Twin Oaks Drive	Sellersburg	IN	47172
Timothy and Shawna	Lewis	802 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Patricia	Holder	804 TWIN OAKS DRIVE	HENRYVILLE	IN	47126
Phillip	Smallwood	24368 Treasure Island Blvd	Punta Gorda	FL	33955
William and Jeannie	Bagby	1407 COUNTRY LAKE ROAD	HENRYVILLE	IN	47126
Brian and Megan	Griffin	511 Henretty Road	UNDERWOOD	IN	47177
James	Willinger	510 Howser Rd	HENRYVILLE	IN	47126
Rhonda	Manley	1703 FRONTAGE ROAD	HENRYVILLE	IN	47126
Mark	Guthrie	309 FRANKE ROAD, NORTH	HENRYVILLE	IN	47126
J & M Adams Inc		P O Box 131	HENRYVILLE	IN	47126
David Schuler Revocable Living Trust		6051 Jonathans Bay Circle #202	Fort Myers	FL	33908
Reina and Karen	Medina	341 N Frank Rd	HENRYVILLE	IN	47126
Michael and Karen	Schneider	1316 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Phillip	Grebe	1940 E Dugan Hollow Rd	Madison	IN	47250
Arland and Cherrie	Caffee	301 FRANKE ROAD, NORTH	HENRYVILLE	IN	47126
Henryville Mini Storage LLC		235-237 FRANKE ROAD NORTH	HENRYVILLE	IN	47126
John and Deborah	Biesel	607 MOUNT ZION ROAD	HENRYVILLE	IN	47126
R.L. Graff LLC		7515 Old Highway 111	Memphis	IN	47143
Anthony and Sandra	Kapso	217 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Daniel and Angela	Csizmadia	221 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Richard and Cathleen	Graf	1119 BIGGS ROAD	MEMPHIS	IN	47143
George and Jessica	Carpenter	313 HOWSER ROAD	HENRYVILLE	IN	47126
Gregory	Alexander	15615 HIGHWAY 31	MEMPHIS	IN	47143
Michael	Staggs	215 HOWSER ROAD	HENRYVILLE	IN	47126
Heather	Colvin	307 HOWSER ROAD	HENRYVILLE	IN	47126
Harmony Woods LLC		4206 Charlestown Rd	New Albany	IN	47150
Patricia	Harrison	5010 South Skyline Dr	Floyd Knobs	IN	47119
William and Rebecca	Havens	413 MOUNT ZION ROAD	HENRYVILLE	IN	47126
Carl and Caroline	Smith	413 MOUNT ZION ROAD	HENRYVILLE	IN	47126
William and Rebecca	Havens	6823 Minnow Dr	Indianapolis	IN	46237
Jerry and Marie	Mosteller	2715 Tupelo Dr	Charlestown	IN	47111
Vincent	Hoffer	1106 SHELTER ROAD	HENRYVILLE	IN	47126
Arland and Cherrie	Caffee	P O Box 607	HENRYVILLE	IN	47126
Mac's Convenience Stores LLC		414 HIGHWAY 160 WEST	HENRYVILLE	IN	47126
CITY OF SCOTTSBURG		2 E MCCLAIN AVE	SCOTTSBURG	IN	47170
K & L SERVICE MANAGEMENT INC		519 BEATRICE AVE	SCOTTSBURG	IN	47170
CHURCH UNITED METHODIST		615 S Honeyrun PKY	Scottsburg	IN	47170
CHURCH UNITED METHODIST CHURCH TRUSTEES		715 S HONEYRUN PKWY	SCOTTSBURG	IN	47170
CHURCH SCOTTSBURG KINGDOM HALL OF JEHOVAHS WITNESS INC		1270 WESTWOOD DR	SCOTTSBURG	IN	47170
MARJORIE LUCAS LLC		2257 N Wooster ST	SCOTTSBURG	IN	47170

Joyce	Vaught	1265 S WESTWOOD DR	SCOTTSBURG	IN	47170
Lisa	Hounshell	1275 Westwood DR	Scottsburg	IN	47170
CHURCH FIRST CHRISTIAN CHURCH INC OF SCOTTSBURG		750 S GARDNER ST	SCOTTSBURG	IN	47170
CHURCH FIRST CHRISTIAN CHURCH INC		255 W MCCLAIN AVE	SCOTTSBURG	IN	47170
Mark	Thomas	991 S LAKE RD	SCOTTSBURG	IN	47170
Glenn	Derossett	1067 S LAKE S RD	SCOTTSBURG	IN	47170
Ronald and Kim	Johnson	11701 E OLD STATE RD 56	SCOTTSBURG	IN	47170
Delmar and Janice	Gross	1352 S Phillips LN	Scottsburg	IN	47170
Rodney and Cindy	Phillips	1478 S PHILLIPS LN	SCOTTSBURG	IN	47170
Jeffrey	Gibson	1466 S Phillips LN	Scottsburg	IN	47170
Bradley and Rhonda	Walker	562 W LAKE RD	SCOTTSBURG	IN	47170
Marsha	Howser	1435 S MERANDA RD	SCOTTSBURG	IN	47170
SCOTTSBURG DEPT OF WATERWORKS		631 W LAKE RD	SCOTTSBURG	IN	47170
Linda	Hughes	1560 S MERANDA RD	SCOTTSBURG	IN	47170
Michael	Berggren	1610 S MERANDA RD	SCOTTSBURG	IN	47170
Shawn	Campbell	1622 S MERANDA LN	SCOTTSBURG	IN	47170
Anna	Smith	1656 S Meranda LN	Scottsburg	IN	47170
Tony	Riehle	1668 S Meranda LN	Scottsburg	IN	47170
Jack and Debra	Owens	875 W Lake RD	Scottsburg	IN	47170
Mark and Paul	Thomas	P O BOX 189	SCOTTSBURG	IN	47170
Sprague Rentals Inc		770 W FAIRGROUND RD	SCOTTSBURG	IN	47170
KDG PROPERTIES LLC		854 W LAKE W RD	SCOTTSBURG	IN	47170
Lee Anne	Hahn	1236 W Woodstone CT	Scottsburg	IN	47170
Randall and Patricia	Edwards	1246 W Woodstone CT	Scottsburg	IN	47170
Dallas	Lucas	1115 S Honey Run PKY	Scottsburg	IN	47170
Stephanie and Michael	Atha	1245 W WOODSTONE COURT	SCOTTSBURG	IN	47170
Alex	Noble	1211 W DOGWOOD DR	SCOTTSBURG	IN	47170
Timothy and Carla	Hall	1221 W Dogwood DR	Scottsburg	IN	47170
Stella	Amick	1212 W Dogwood DR	Scottsburg	IN	47170
Anthony and Melissa	Campbell	1220 W DOGWOOD DR	SCOTTSBURG	IN	47170
Jessica	Leturgez	1738 S MERANDA LN	SCOTTSBURG	IN	47170
INDIANA AVIATION PARTNERS LLC		2527 S Lake RD	Scottsburg	IN	47170
Susan and Mary	Jamison	2572 S US #31 HWY	SCOTTSBURG	IN	47170
Susan and Mary	Jamison	2572 S US #31 HWY	SCOTTSBURG	IN	47170
Christopher	Hancock	546 W LEOTA RD	SCOTTSBURG	IN	47170
Jordan	Combs	374 W LEOTA RD	SCOTTSBURG	IN	47170
Morris Donald Lee Living Trust		P O BOX 906	SCOTTSBURG	IN	47170
Jessie	Prather	3074 S FROANTAGE RD	SCOTTSBURG	IN	47170
Michael	Reed	3112 S Frontage RD	Scottsburg	IN	47170
Brian	Gaffney	3177 S Frontage RD	Scottsburg	IN	47170
Christopher	Darlage	4949 E COUNTY ROAD 540	S Crothersville	IN	47229
Christopher	Hancock	546 W LEOTA RD	SCOTTSBURG	IN	47170
George and Janet	Lucas	2257 N WOOSTER RD	SCOTTSBURG	IN	47170
Joey and Patricia	Murphy	1081 S FINLEY FIREHOUSE RD	SCOTTSBURG	IN	47170
Charisse	Page	344 W Leota RD	Scottsburg	IN	47170
Paul	Campbell	330 W Leota RD	Scottsburg	IN	47170
Kevin and Debra	Vernon	1856 S Meranda LN	Scottsburg	IN	47170
State of Indiana		100 N SENATE AV RM N730	Indianapolis	IN	46204
CARTERS PHARMACY INC		815 W LAKE RD	SCOTTSBURG	IN	47170
Billy	Mullins	3756 S US #31 HWY	SCOTTSBURG	IN	47170
Joseph	Higdon	305 W CRAIG RD	SCOTTSBURG	IN	47170

Louella	Sims	2941 E CUTSHALL RD	Austin	IN	47102
Scott	Bowling	516 W Sycamore DR	Scottsburg	IN	47170
Tracy	Bowling	575 W SYCAMORE DR	SCOTTSBURG	IN	47170
Tracy	Bowling	3578 S Frontage RD	Scottsburg	IN	47170
Normanda	Clark	357 W EVERITT LN	SCOTTSBURG	IN	47170
Everitt	Cemetery	2980 S 600 E	Franklin	IN	46131
CRAIG DONNA D TRUSTEE ETAL		3993 S LAKE RD	SCOTTSBURG	IN	47170
Freddie	Taylor	3834 S Frontage RD	Scottsburg	IN	47170
Christopher	Darlage	3586 S FRONTAGE RD	SCOTTSBURG	IN	47170
Korbin	Roth	3790 S FRONTAGE RD	SCOTTSBURG	IN	47170
Billy	Mullins	S HWY #31	SCOTTSBURG	IN	47170
Normanda	Clark	357 W EVERITT LN	SCOTTSBURG	IN	47170
Christopher	Sage	519 W Craig RD	Scottsburg	IN	47170
Christopher	Adams	557 W Craig RD	Scottsburg	IN	47170
Brett	Smith	391 W Craig RD	Scottsburg	IN	47170
Michael	Schmittler	392 W CRAIG RD	SCOTTSBURG	IN	47170
Michael	Schmittler	404 W Craig RD	Scottsburg	IN	47170
Robbie	Gray	428 W CRAIG RD	SCOTTSBURG	IN	47170
Brian	Tyree	482 W Berna DR	Scottsburg	IN	47170
Charles	Combs	432 W Berna DR	Scottsburg	IN	47170
Anna	Furey	410 W BERNA DR	SCOTTSBURG	IN	47170
Danny	Blakley	368 BERNA DR	SCOTTSBURG	IN	47170
Meta Lynn	Clark	357 W EVERITT LN	SCOTTSBURG	IN	47170
Rachel	Vannarsdall	3586 S Frontage RD	Scottsburg	IN	47170
Douglas	Morris	392 W Berna DR	Scottsburg	IN	47170
State of Indiana		402 W WASHINGTON ST W296	Indianapolis	IN	46204
George	Clark	P O BOX 1483	Boyd	TX	76023
Carlisle	Belcher	278 W ERDMAN RD	SCOTTSBURG	IN	47170
Joseph	Higdon	5157 S LAKE ROAD SOUTH	SCOTTSBURG	IN	47170
GUERNSEY ENTERPRISES INC		278 W COUNTY LINE RD	UNDERWOOD	IN	47177
Amanda	Westmoreland	5800 S US #31 HWY	SCOTTSBURG	IN	47170
Kristyn	Morrison	5742 S US HWY #31	SCOTTSBURG	IN	47170
Betty	Nichols	262 W County Line RD	Underwood	IN	47177
Louis	Ater	210 W COUNTY LINE RD	UNDERWOOD	IN	47177
Timothy	King	281 W ERDMAN RD	SCOTTSBURG	IN	47170
Jerry and Joy	Stidam	293 W ERDMAN RD	SCOTTSBURG	IN	47170
Kenneth	Haven	4995 S LAKE S RD	SCOTTSBURG	IN	47170
Elvin	Rose	580 W Collins RD	Scottsburg	IN	47170
Kenneth	Haven	4995 S LAKE S RD	SCOTTSBURG	IN	47170
Daniel	Brunner	555 W COLLINS RD	SCOTTSBURG	IN	47170
Amanda	Patton	391 W Collins RD	SCOTTSBURG	IN	47170
Robert and Judy	Whobrey	389 W COLLINS RD	UNDERWOOD	IN	47177
NANCE ROMILDA J REVOCABLE TRUST ETAL		217 HENRETTY RD	UNDERWOOD	IN	47177
Robert and Judy	Whobrey	408 W COUNTY LINE RD	UNDERWOOD	IN	47177
John and Monica	Jenkins	446 W COUNTY LINE RD	UNDERWOOD	IN	47177
Katherine	Couch	269 W Collins RD	Scottsburg	IN	47170
William and Doreen	Doyle	301 W Erdman RD	Scottsburg	IN	47170
Elvin and Sandra	Rose	580 W COLLINS RD	SCOTTSBURG	IN	47170

Stream Impact Summary Table

Stream ID	Page No.	Stream Type^	Stream Crossing			Impacts from Fill				Stream Relocation				Total Impacts			Mitigation				Temporary Impacts		
			Existing Structure Length (lft)	Proposed Structure Length (lft)	Net Change (lft)	Type of Fill	Total linear feet (lft)	Acres below OHWM (ac)	Volume below OHWM (cys)	Existing Stream Length (lft)	Proposed New Length (lft)	Net Change (lft)	Fill below OHWM (cys)	Total Length (lft)	Total Area below OHWM (ac)	Fill below OHWM (cys)	Service Area	Total Mitigable Impacts (lft)	Mitigation Required (lft)	Mitigation Ratio	Type*	Total Impacts (lft and ac)	Total Fill below OHWM (cys)
Blue Lick Creek	79, 80, 132, 133	PER	40	40	0	Class 1 Riprap	66.4**	0.012	54	N/A	N/A	N/A	N/A	66.4	0.028	176	Upper Ohio	66.4	79.68	1.2:1	CD	86.4 lft (0.048 ac)	116
						Concrete	66.4**	0.016	122												X	90.6 lft (0.024 ac)	0
UNT to Blue Lick Creek	79, 112	EPH	193	183	-10	Pipe	183	0.016	9.2	N/A	N/A	N/A	N/A	224	0.021	15.5	Upper Ohio	31	37.2	1.2:1	CD	6 lft (0.002 ac)	1.4
						Pipe End Section	17	0.003	0.9												X	5 lft (0.0003 ac)	0
						Class 1 Riprap	24	0.002	5.4														
Caney Fork	83, 84, 130, 131	PER	45	45	0	Concrete	61.5**	0.008	47	N/A	N/A	N/A	N/A	69.5	0.013	68.8	Upper Ohio	69.5	83.4	1.2:1	CD	81.5 lft (0.044 ac)	109
						Class 1 Riprap	61.5**	0.004	20.5												X	79.6 lft (0.010 ac)	0
						Pipe End Section	8	0.001	1.3														
Henry Brook	87, 149	INT	189	153	-36	Class 1 Riprap	36	0.006	18.6	N/A	N/A	N/A	N/A	242	0.036	47.1	Upper Ohio	18	21.6	1.2:1	CD	12 lft (0.003 ac)	1.6
						Revetment Riprap	18	0.003	7												X	20 lft (0.0028 ac)	0
						Clean Earthen Fill	35	0.006	4.5														
						Pipe	153	0.021	17														
Wolf Run	93, 181	PER	270	205	-65	RC Box	205	0.034	87.5	N/A	N/A	N/A	N/A	240	0.04	111.5	Upper Ohio	0	0	1.2:1	CD	6 lft (0.002 ac)	2.6
						Class 2 Riprap	35	0.006	24														
UNT 1 to Miller Fork	97, 189	INT	N/A	N/A	N/A	Class 1 Riprap	12	0.001	3.1	N/A	N/A	N/A	N/A	12	0.001	3.1	Upper Ohio	12	14.4	1.2:1	CD	6 lft (0.001 ac)	0.4
Wheel Run	104, 211	INT	236	236	0	Pipe	236	0.019	20.5	N/A	N/A	N/A	N/A	268	0.025	26.1	Upper Ohio	0	0	1.2:1	CD	8 lft (0.0012 ac)	1.2
						Clean Earthen Fill	32	0.006	5.6												X	20 lft (0.003)	0
West Fork Silver Creek	106, 222	PER	255	255	0	Class 1 Riprap	36	0.005	16.5	291	298	7	39.1	291	0.04	39.1	Upper Ohio	36	43.2	1.2:1	CD	6 lft (0.0008 ac)	0.6
						Concrete	255	0.035	22.6												X	49 lft (0.006 ac)	0
UNT to Pigeon Roost Creek	112, 249	EPH	N/A	N/A	N/A	Clean Earthen Fill	60	0.0028	2.22	N/A	N/A	N/A	N/A	60	0.0028	2.22	Whitewater-East Fork White	60	72	1.2:1	CD	3 lft (0.0002 ac)	0.2
Pigeon Roost Creek	113, 134, 135	PER	32	32	0	Class 2 Riprap	80	0.009	55	N/A	N/A	N/A	N/A	80	0.009	55	Whitewater-East Fork White	80	96	1.2:1	CD	4 lft (0.0017 ac)	2
UNT to Underwood Run	114, 262	INT	186	192	6	Clean Earthen Fill	51**	0.005	3.01	245	251	6	23.01	245^^	0.028	23.01	Whitewater-East Fork White	26	31.2	1.2:1	CD	6 lft (0.0008 ac)	0.44
						Class 1 Riprap	20**	0.002	8														
						Concrete	186	0.021	12														
UNT to Tree Creek	116, 267	INT	172	172	0	Concrete	172	0.022	18.1	238	245	7	31.85	238^^	0.0337	31.85	Whitewater-East Fork White	26	31.2	1.2:1	CD	6 lft (0.001 ac)	0.78
						Clean Earthen Fill	56**	0.0094	6.85														
						Class 1 Riprap	26**	0.0023	6.9														
Sycamore Run	117, 269	INT	254	221	33	Class 1 Riprap	37	0.005	16.5	278	283	5	43.6	271	0.038	43.6	Whitewater-East Fork White	0	0	1.2:1	CD	6 lft (0.0006 ac)	1.23
						Clean Earthen Fill	10	0.001	4														
						Concrete	224	0.032	23.1														
UNT 1 to Sycamore Run	118, 296	EPH	183	183	0	Pipe	183	0.0126	5.08	N/A	N/A	N/A	N/A	198	0.0146	8.38	Whitewater-East Fork White	15	18	1.2:1	CD	6 lft (0.0002 ac)	0.25
						Pipe End Section	15	0.002	3.3												X	11 lft (0.0004 ac)	0
UNT 2 to Sycamore Run	119, 271	EPH	163	163	0	Revetment Riprap	12	0.003	1	N/A	N/A	N/A	N/A	190	0.0145	8.63	Whitewater-East Fork White	0	0	1.2:1	CD	6 lft (0.0002 ac)	0.2
						Clean Earthen Fill	15	0.0005	3.1														
						Pipe	163	0.011	4.53														
UNT 1 to Nest Run	120, 296	EPH	N/A	N/A	N/A	Revetment Riprap	12	0.003	8	N/A	N/A	N/A	N/A	12	0.003	8	Whitewater-East Fork White	12	14.4	1.2:1	CD	3 lft (0.0008 ac)	2
UNT 3 to Nest Run	120, 297	EPH	N/A	N/A	N/A	Clean Earthen Fill	125	0.003	1.1	N/A	N/A	N/A	N/A	125	0.003	1.1	Whitewater-East Fork White	0	0	1.2:1	CD	3 lft (0.00008 ac)	0.1
UNT 4 to Nest Run	122, 298	INT	N/A	N/A	N/A	Clean Earthen Fill	7	0.001	1.3	N/A	N/A	N/A	N/A	7	0.001	1.3	Whitewater-East Fork White	0	0	1.2:1	CD	6 lft (0.0004 ac)	0.2
Elm Branch	123, 124, 298	INT	235	175	-60	Pipe	165	0.0121	9.72	282	283	1	14.25	246	0.0172	14.25	Whitewater-East Fork White	0	0	1.2:1	CD	6 lft (0.002 ac)	1.4
						Pipe End Section	7	0.001	1.2												X	30 lft (0.0007 ac)	0
						Clean Earthen Fill	74	0.0041	3.33														
UNT 1 to Elm Branch	125, 298	EPH	166	166	0	Revetment Riprap	12	0.003	8	N/A	N/A	N/A	N/A	178	0.0144	15.38	Whitewater-East Fork White	12	14.4	1.2:1	CD	6 lft (0.0004 ac)	0.2
						Pipe	166	0.0114	7.38												X	8 lft (0.003 ac)	0
UNT 1 to Honey Run	127, 299	EPH	N/A	N/A	N/A	Revetment Riprap	12	0.003	8	N/A	N/A	N/A	N/A	12	0.003	8	Whitewater-East Fork White	12	14.4	1.2:1	CD	3 lft (0.0002 ac)	0.1
UNT 2 to Honey Run	129, 319	INT	N/A	N/A	N/A	Revetment Riprap	14	0.002	4.7	N/A	N/A	N/A	N/A	14	0.002	4.7	Whitewater-East Fork White	14	16.8	1.2:1	CD	3 lft (0.0001 ac)	2.25

	Total Length (lft)	Total Area below OHWM (ac)	Fill below OHWM (cys)
Total	2805.9	0.3882	712.62

Service Area	Total Mitigable Impacts (lft)	Mitigation Required (lft)
Upper Ohio	232.9	279.48
Whitewater-East Fork White	257	308.4
Combined Service Areas	489.9	587.88

Total Impacts (lft and ac)	Total Fill below OHWM (cys)
592.1 (0.16088)	244.15

Permanent Impacts			Mitigation			Temporary Impacts	
Total Length (lft)	Total Area below OHWM (ac)	Fill below OHWM (cys)	Service Area	Total Mitigable Impacts (lft)	Mitigation Required (lft)	Total Impacts (lft and ac)	Total Fill below OHWM (cys)

^PER=Perennial; INT=Intermittent; EPH=Ephemeral

* P=Pump Around Practice; X = Stream Crossing; CD=Sandbag Cofferdam; CW=Causeway

**Impacts occupy the same space along the stream bank

^^UNT to Underwood Run: 12 lft of Class 1 Riprap placement overlaps with Clean Earthen Fill placement.

^^ UNT to Tree Creek: 6 lft of Clean Earthen Fill placement and 10 lft of Class 1 Riprap placement overlap.

Notes: No Impacts will occur to the following jurisdicitonal "waters of the U.S."; Honey Run, UNT 3 through 9 to Honey Run, Nest Run, UNT 2 to Nest Run, Tree Creek, UNT to Caney Fork, UNT to West Fork Silver Creek, Meal Run, UNT 1 to Meal Run, Miller Fork, UNT 2 through 4 to Miller Fork, and UNT 1 and 2 to Wolf Run.

No impacts will occur to non-jurisdictional streams.

Temporary dewatering measures and stream crossings are anticipated to be in place for no more than 2 consecutive months per crossing. Post-construction all temporarily disturbed areas will be reseeded with a native restoration seed mix.

Summary of Impacts Table Equations:

Proposed Structure Length = Length of culvert measured along flowline of stream in lft

Amount of Additional Encapsulation = Proposed Structure Length - Existing Structure Length

Existing Stream Length = Measurement of existing stream length along flowline from point enters construction limits to point exits construction limits

Proposed New Length = Measurement of proposed stream length along flowline from point enters construction limits to point exits construction limits

Net Change = Existing stream length - proposed stream length as measured along flowlines

Impacts from Riprap and Wingwalls = Length of Riprap + Length of Wingwalls as measured along flowline of stream (excluding structure)

Total Impact Length = Existing Stream Length - Proposed New Length

Total Mitiatable Impacts = Net Change in Stream Length (Additional Encapsulation + Loss) + Length of Riprap and Wingwalls

Attachment 14-1

Dredge Streams Impact Summary Table					
				Permanent Impacts	
Stream ID	Page No.	Stream Type^	WOTUS	Length (lft) and Area (ac) of Proposed Dredge	Volume of Proposed Dredge (cys)
Wolf Run	93, 181	PER	Y	30 lft (0.0048 ac)	12.8

Notes:
Temporary dewatering measures and stream crossings are anticipated to be in place for no more than 2 consecutive months per crossing. Post-construction all temporarily disturbed areas will be reseeded with a native restoration seed mix.

Wetland Impact Summary Table: Waters of the U.S.												
				Permanent Impacts			Mitigation			Temporary Impacts		
Wetland ID	Page No.	Wetland Type^	Existing Wetland (ac)	Fill Type	Area of proposed Fill (ac)	Volume of Fill (cys)	Mitigation Ratio	Mitigation Needed	Service Area	Type*	Area of Impacts (ac)	Volume of Fill (cys)
Wetland 21.1	106, 222	FO	0.072	Clean Earthen Fill	0.0159	10.4	4.8:1	0.0763	Upper Ohio	N/A	0	0
Wetland 34	128, 212, 213	EM	0.024	Clean Earthen Fill	0.0066	12	2.4:1	0.0158	Whitewater-East Fork White	N/A	0	0
Wetland 63	78, 109-111	EM	0.218	Revetment Riprap	0.002	2.8	2.4:1	0.0072	Upper Ohio	N/A	0	0
				Pipe End Section	0.001	0.2						
Wetland 76	98, 196	FO	0.023	Clean Earthen Fill	0.001	0.1	4.8:1	0.0048	Upper Ohio	N/A	0	0
Wetland 78	104, 212	EM	0.009	N/A	N/A	N/A	2.4:1	0	Upper Ohio	Temporary Access	0.009	0
Wetland 86	111, 245	SS	0.01	Clean Earthen Fill	0.0029	11.9	3.6:1	0.0104	Whitewater-East Fork White	N/A	0	0
Wetland 95	122, 123, 290, 291	EM	0.252	Clean Earthen Fill	0.0807	308.4	2.4:1	0.1937	Whitewater-East Fork White	N/A	0	0
								0.0883	**Upper Ohio**			
		Total	**0.608**		**0.1101**	**345.8**		**0.2200**	**Whitewater-East Fork White**		**0.009**	**0**
								0.3083	**Combined Service Areas**			
			Existing Wetland (ac)		**Area of proposed Fill (ac)**	**Volume of Fill (cys)**		**Mitigation Needed (ac)**	**Service Area**		**Area of Impacts (ac)**	**Volume of Fill (cys)**
					Permanent			**Mitigation**			**Temporary**	

^EM=Emergent; SS=Scrub-shrub; FO=Forested

* P=Pump Around Practice; X = Crossing; CD=Sandbag Cofferdam

Notes:

No impacts are anticipated to the following Waters of the U.S. wetlands as a result of the proposed project: Wetlands 1, 3.1, 9, 12, 65 and 69.

Waters of the U.S. Wetlands 36, 40, 41.2, 42, and 106 are located north of the end of the project outside of construction limits and will not be disturbed. Therefore, they do not appear on the impact exhibits.

Temporary impacts are anticipated to be in place for no more than 2 consecutive months. Post-construction all temporarily disturbed areas will be reseeded with a native restoration seed mix.

Wetland Impact Summary Table: Isolated Wetlands												
Wetland ID	Page No.	Wetland Class^	Existing Wetland (ac)	Permanent Impacts			Mitigation			Temporary Impacts		
				Fill Type	Area of proposed Fill (ac)	Volume of Fill (cys)	Mitigation Ratio	Mitigation Needed	Service Area	Type*	Area of Impacts (ac)	Volume of Fill (cys)
Wetland 2	79, 81, 113, 114, 117	C2: F	0.098	Revetment Riprap	0.002	4.4	**		Upper Ohio	Sandbags	0.001	2
				Pipe End Section	0.001	0.7						
Wetland 5	88, 151-155, 158	C2: NF	0.125	Clean Earthen Fill	0.001	1.2	**		Upper Ohio	N/A	0	0
Wetland 7	90, 169	C2: NF	0.003	Revetment Riprap	0.002	6	**		Upper Ohio	N/A	0	0
				Clean Earthen Fill	0.0005	0.5						
Wetland 8	90, 170-175	C2: NF	0.099	Revetment Riprap	0.0035	9.5	**		Upper Ohio	N/A	0	0
				Pipe & End Section	0.0005	0.3						
Wetland 10	95, 184	C2: NF	0.019	Pipe End Section	0.001	2.4	**		Upper Ohio	N/A	0	0
Wetland 16	99, 201	C2: NF	0.004	Pipe End Section	0.001	1.2	**		Upper Ohio	N/A	0	0
Wetland 17	103, 208	C2: NF	0.022	Clean Earthen Fill	0.0023	10.2	**		Upper Ohio	N/A	0	0
Wetland 19	105, 213-216	C2: NF	0.095	Clean Earthen Fill	0.0896	353.2	**		Upper Ohio	N/A	0	0
Wetland 20	106, 220	C2: NF	0.027	Clean Earthen Fill	0.0067	20.7	**		Upper Ohio	N/A	0	0
Wetland 21.2	106, 295	C2: NF	0.007	Clean Earthen Fill	0.0007	0.6	**		Upper Ohio	N/A	0	0
Wetland 22	106, 226	C2: NF	0.023	Clean Earthen Fill	0.0139	45	**		Upper Ohio	N/A	0	0
Wetland 23	107, 227, 228, 230	C2: NF	0.064	Clean Earthen Fill	0.0084	32.3	**		Upper Ohio	N/A	0	0
Wetland 24	107, 231	C2: NF	0.008	Clean Earthen Fill	0.002	6.7	**		Upper Ohio	N/A	0	0
Wetland 25	108, 232-234	C2: NF	0.037	Clean Earthen Fill	0.037	135.2	**		Upper Ohio	N/A	0	0
Wetland 26	113, 250-252, 255, 256	C2: NF	0.122	Clean Earthen Fill	0.0506	211.9	**		Whitewater-East Fork White	N/A	0	0
				Class 2 Riprap	0.003	11						
Wetland 27	114, 258	C2: NF	0.004	Clean Earthen Fill	0.0036	13.5	2:1	0.0072	Whitewater-East Fork White	N/A	0	0
Wetland 29	116, 266, 295	C2: NF	0.006	Clean Earthen Fill	0.0007	2.7	**		Whitewater-East Fork White	N/A	0	0
Wetland 30	121, 122, 279-286	C2: NF	0.085	Clean Earthen Fill	0.0587	248	**		Whitewater-East Fork White	N/A	0	0
Wetland 31	122, 123, 290, 293	C2: NF	0.091	Clean Earthen Fill	0.0077	20.7	**		Whitewater-East Fork White	N/A	0	0
Wetland 32	123, 294	C2: NF	0.054	Pipe End Section	0.0002	0.4	**		Whitewater-East Fork White	Temporary Access	0.02	0
Wetland 33	127, 310	C2: NF	0.013	Clean Earthen Fill	0.013	75	**		Whitewater-East Fork White	N/A	0	0
Wetland 47	128, 311, 312	C2: NF	0.024	Clean Earthen Fill	0.024	85	**		Whitewater-East Fork White	N/A	0	0
Wetland 48	126, 308, 309	C2: NF	0.021	Clean Earthen Fill	0.021	32	**		Whitewater-East Fork White	N/A	0	0
Wetland 49	119, 272	C2: NF	0.018	Clean Earthen Fill	0.018	45.3	**		Whitewater-East Fork White	N/A	0	0
Wetland 50	117, 118, 268-270	C2: NF	0.019	Clean Earthen Fill	0.019	91.1	**		Whitewater-East Fork White	N/A	0	0
Wetland 51	116, 264, 265	C2: NF	0.012	Clean Earthen Fill	0.012	57	**		Whitewater-East Fork White	N/A	0	0
Wetland 52	106, 223, 224, 295	C2: NF	0.03	Clean Earthen Fill	0.03	109.6	**		Upper Ohio	N/A	0	0
Wetland 53	106, 219, 220	C2: NF	0.02	Clean Earthen Fill	0.02	66.7	**		Upper Ohio	N/A	0	0
Wetland 54	105, 213, 214	C2: NF	0.034	Clean Earthen Fill	0.034	154.9	**		Upper Ohio	N/A	0	0
Wetland 55	104, 210, 211	C2: NF	0.042	Clean Earthen Fill	0.042	141	**		Upper Ohio	N/A	0	0
Wetland 56	103, 204-206	C2: NF	0.042	Clean Earthen Fill	0.042	185.6	**		Upper Ohio	N/A	0	0
Wetland 57	101, 202, 203	C2: NF	0.044	Clean Earthen Fill	0.021	68	**		Upper Ohio	N/A	0	0
Wetland 58	97, 188, 189	C2: NF	0.02	Clean Earthen Fill	0.02	57.8	**		Upper Ohio	N/A	0	0
Wetland 59	95, 186, 187	C2: NF	0.02	Clean Earthen Fill	0.02	42.1	**		Upper Ohio	N/A	0	0
Wetland 60	93, 180-182	C2: NF	0.041	Clean Earthen Fill	0.041	100.8	**		Upper Ohio	N/A	0	0
Wetland 61	91, 176	C2: NF	0.033	Clean Earthen Fill	0.033	73.7	**		Upper Ohio	N/A	0	0
Wetland 62	89, 167	C2: NF	0.03	Clean Earthen Fill	0.03	95.9	**		Upper Ohio	N/A	0	0
Wetland 66	83, 123-125	C2: NF	0.136	Clean Earthen Fill	0.029	13.9	**		Upper Ohio	N/A	0	0

Table continued onto next page

Wetland Impact Summary Table: Isolated Wetlands													
				Permanent Impacts			Mitigation			Temporary Impacts			
Wetland ID	Page No.	Wetland Class^	Existing Wetland (ac)	Fill Type	Area of proposed Fill (ac)	Volume of Fill (cys)	Mitigation Ratio	Mitigation Needed	Service Area	Type*	Area of Impacts (ac)	Volume of Fill (cys)	
Wetland 67	85, 86, 131-137	C2: NF	0.099	Clean Earthen Fill	0.075	119.3	**		Upper Ohio	N/A	0	0	
Wetland 68	87, 148, 149	C2: NF	0.322	Clean Earthen Fill	0.013	9.5	**		Upper Ohio	Sandbags	0.001	0.8	
Wetland 70	89, 160, 161	C2: NF	0.023	Clean Earthen Fill	0.003	2.6	**		Upper Ohio	N/A	0	0	
				Revetment Riprap	0.001	5.3							
				Pipe End Section	0.001	0.4							
Wetland 73	92, 179	C2: NF	0.015	Clean Earthen Fill	0.002	1.2	**		Upper Ohio	N/A	0	0	
Wetland 75	98, 192-194	C2: NF	0.022	Clean Earthen Fill	0.022	7.1	**		Upper Ohio	N/A	0	0	
Wetland 79	105, 217, 218	C2: NF	0.009	Clean Earthen Fill	0.009	89.8	**		Upper Ohio	N/A	0	0	
Wetland 80	106, 295	C2: NF	0.004	Clean Earthen Fill	0.0019	8.3	**		Upper Ohio	N/A	0	0	
Wetland 81	107, 295	C2: NF	0.005	Clean Earthen Fill	0.0044	16.3	**		Upper Ohio	N/A	0	0	
Wetland 82	109, 235-238	C2: NF	0.039	Clean Earthen Fill	0.0312	156.7	**		Whitewater-East Fork White	N/A	0	0	
Wetland 83	110, 239, 240	C2: NF	0.015	Clean Earthen Fill	0.0024	8.2	**		Whitewater-East Fork White	N/A	0	0	
Wetland 84	110, 241, 242	C2: NF	0.02	Clean Earthen Fill	0.02	59.9	**		Whitewater-East Fork White	N/A	0	0	
Wetland 85	111, 243, 244	C2: NF	0.024	Clean Earthen Fill	0.0073	27	**		Whitewater-East Fork White	N/A	0	0	
				Pipe End Section	0.0006	1.2							
Wetland 87	111, 246	C2: NF	0.027	Clean Earthen Fill	0.0123	44	**		Whitewater-East Fork White	N/A	0	0	
Wetland 88	112, 247-249	C2: NF	0.022	Clean Earthen Fill	0.0215	59.3	**		Whitewater-East Fork White	N/A	0	0	
Wetland 89	113, 251, 252, 254	C2: NF	0.089	Clean Earthen Fill	0.0087	42	**		Whitewater-East Fork White	N/A	0	0	
				Pipe End Section	0.0004	0.7							
Wetland 90	114, 257	C2: NF	0.016	Clean Earthen Fill	0.015	53.3	**		Whitewater-East Fork White	N/A	0	0	
Wetland 91	114, 259-261	C2: NF	0.031	Clean Earthen Fill	0.0309	42.4	**		Whitewater-East Fork White	N/A	0	0	
Wetland 92	119, 276	C2: NF	0.036	Clean Earthen Fill	0.0022	8.9	**		Whitewater-East Fork White	N/A	0	0	
Wetland 93	120, 277, 278	C2: NF	0.019	Clean Earthen Fill	0.0114	53.3	**		Whitewater-East Fork White	N/A	0	0	
Wetland 94	121, 279	C2: NF	0.018	Clean Earthen Fill	0.018	59.3	**		Whitewater-East Fork White	N/A	0	0	
Wetland 96	124, 300, 301	C2: NF	0.05	Clean Earthen Fill	0.0071	9	2:1	0.0142	Whitewater-East Fork White	N/A	0	0	
Wetland 97	124, 302	C2: NF	0.055	Clean Earthen Fill	0.0008	2	2:1	0.0016	Whitewater-East Fork White	N/A	0	0	
Wetland 98	126, 303-309	C2: NF	0.123	Clean Earthen Fill	0.12	178	**		Whitewater-East Fork White	N/A	0	0	

Total	0.109	Regulated	0.0115	24.5	0.0000	Upper Ohio	0	0 Regulated
	2.566	Non-Regulated	1.1972	3674.2	0.0230	Whitewater-East Fork White	0.022	2.8 Non-Regulated
	2.675	Combined	1.2087	3698.7	0.0230	Combined Service Areas	0.022	2.8 Combined
	Existing Wetland (ac)		Area of proposed Fill (ac)	Volume of Fill (cys)	Mitigation Needed (ac)	Service Area	Area of Impacts (ac)	Volume of Fill (cys)
			Permanent		Mitigation		Temporary	

^Class 2 (C2): Non-Forested (NF) or Forested (F)

* P=Pump Around Practice; X = Crossing; CD=Sandbag Cofferdam; CW=Causeway

** Exempt Class 2 wetlands.

Notes:

No impacts are anticipated to the following isolated wetlands as a result of the proposed project: Wetlands 3.2, 4, 13-15, 18, 28, 32, 64, 72, 74, 77, and 99.

Isolated Wetlands 35, 37, 38, 39, 41.1, 43, 44, 45, 46, and 100-105 are located north of the end of the project outside of construction limits and will not be disturbed. Therefore, they do not appear on the impact exhibits.

Temporary impacts are anticipated to be in place for no more than 2 consecutive months. Post-construction all temporarily disturbed areas will be reseeded with a native restoration seed mix.

Dredge Wetlands Impact Summary Table: Waters of the U.S.					
				Permanent Impacts	
Wetland ID	Page No.	Wetland Type^	Existing Wetland (ac)	Area of proposed dredge (ac)	Volume of proposed dredge (cys)
Wetland 63	78, 109-111	EM	0.218	0.07	90.1
		Total	0.218 ac	0.07 ac	90.1 cys

No temporary impacts are proposed to wetlands.

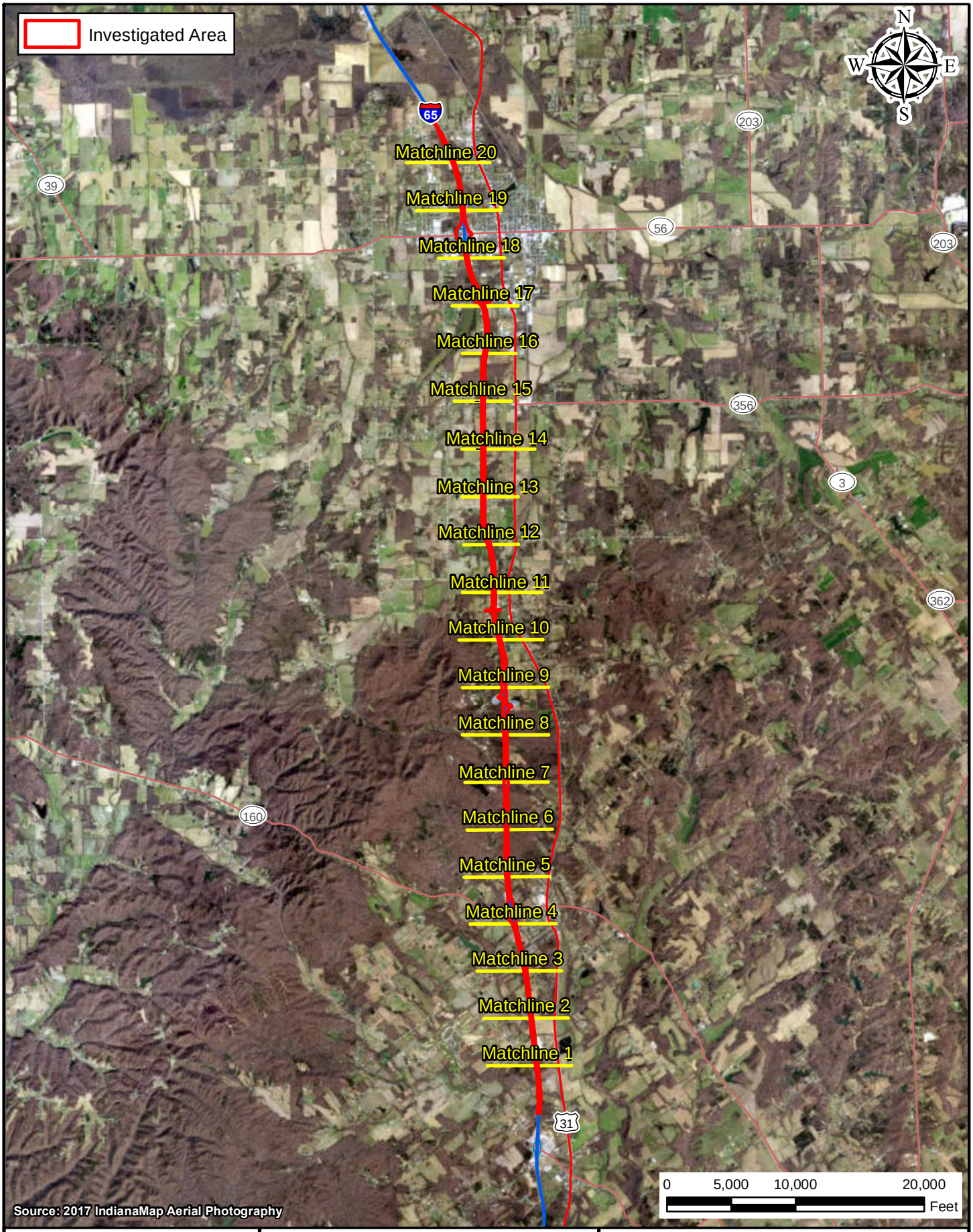
^Emergent (EM)

Dredge Wetlands Impact Summary Table: Isolated Wetlands					
				Permanent Impacts	
Wetland ID	Page No.	Wetland Class^	Existing Wetland (ac)	Area of proposed dredge (ac)	Volume of proposed dredge (cys)
Wetland 2	79, 81, 113, 114, 117	*C2: F	0.098	0.016	37.2
Wetland 5	88, 151-155, 158	*C2: NF	0.125	0.043	68.6
Wetland 6	89, 162-167	*C2: NF	0.132	0.122	396.3
Wetland 8	90, 170-175	*C2: NF	0.099	0.095	308.5
Wetland 11	95, 185	*C2: NF	0.017	0.014	6.9
Wetland 71	90, 172-175	*C2: NF	0.114	0.044	71.5
		Total	0.585 ac	0.334 ac	889 cys

No temporary impacts are proposed to wetlands.

^Class 2 (C2): Non-Forested (NF) or Forested (F)

* Exempt Class 2 wetlands



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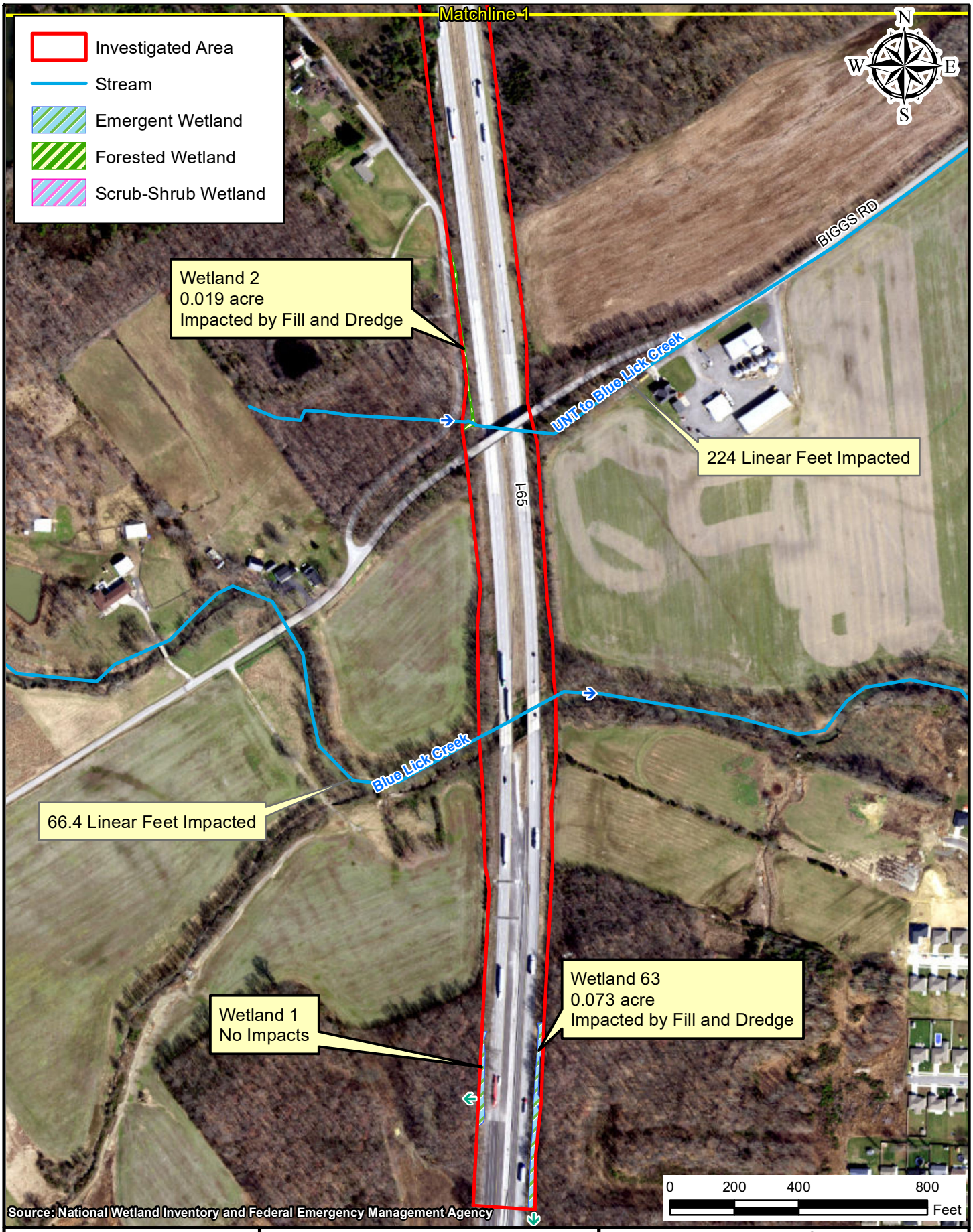
Permit Impacts - Matchline Key

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
State: Indiana

Attachment 14-1

Appendix D



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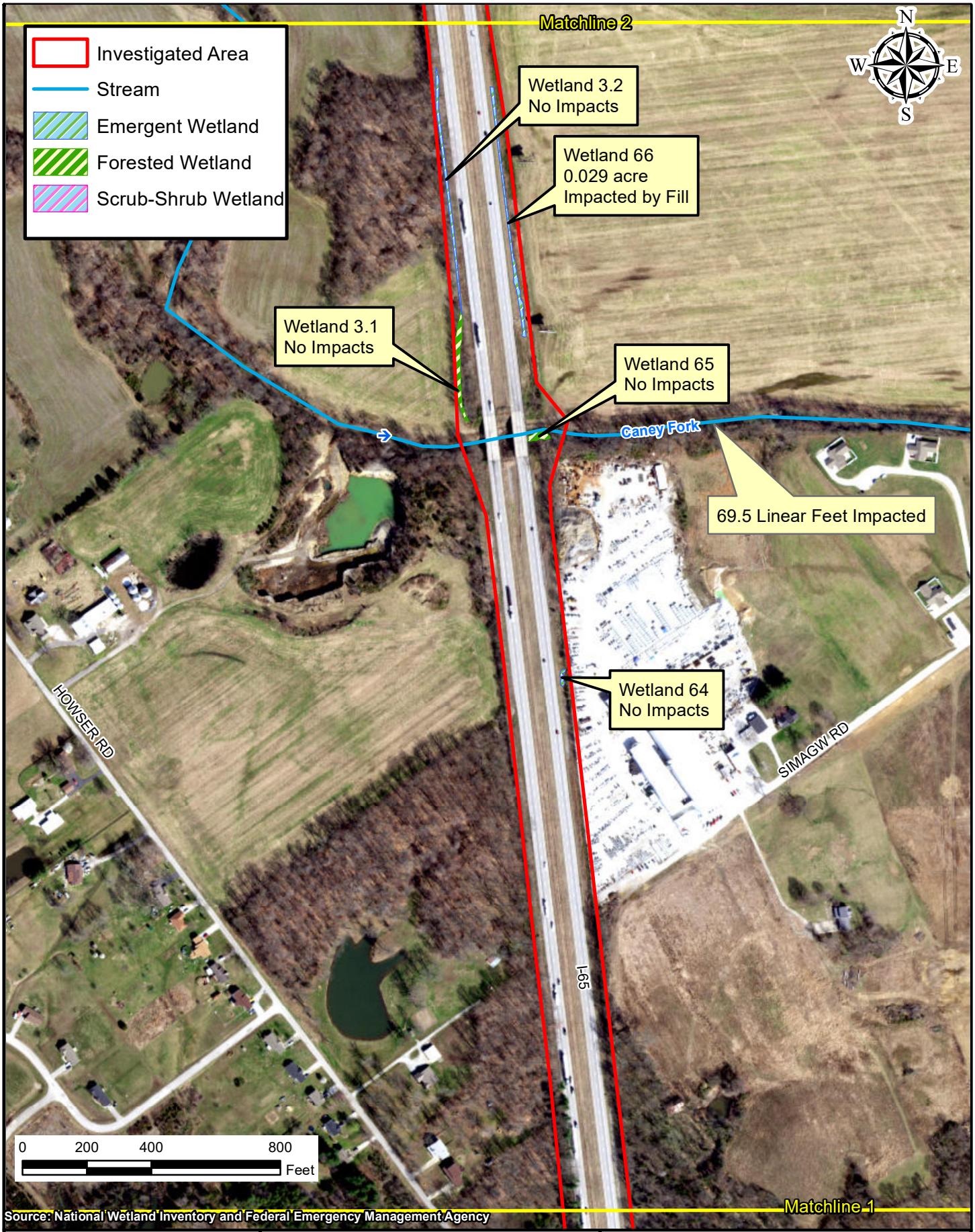
Permit Impact Map - Map 1 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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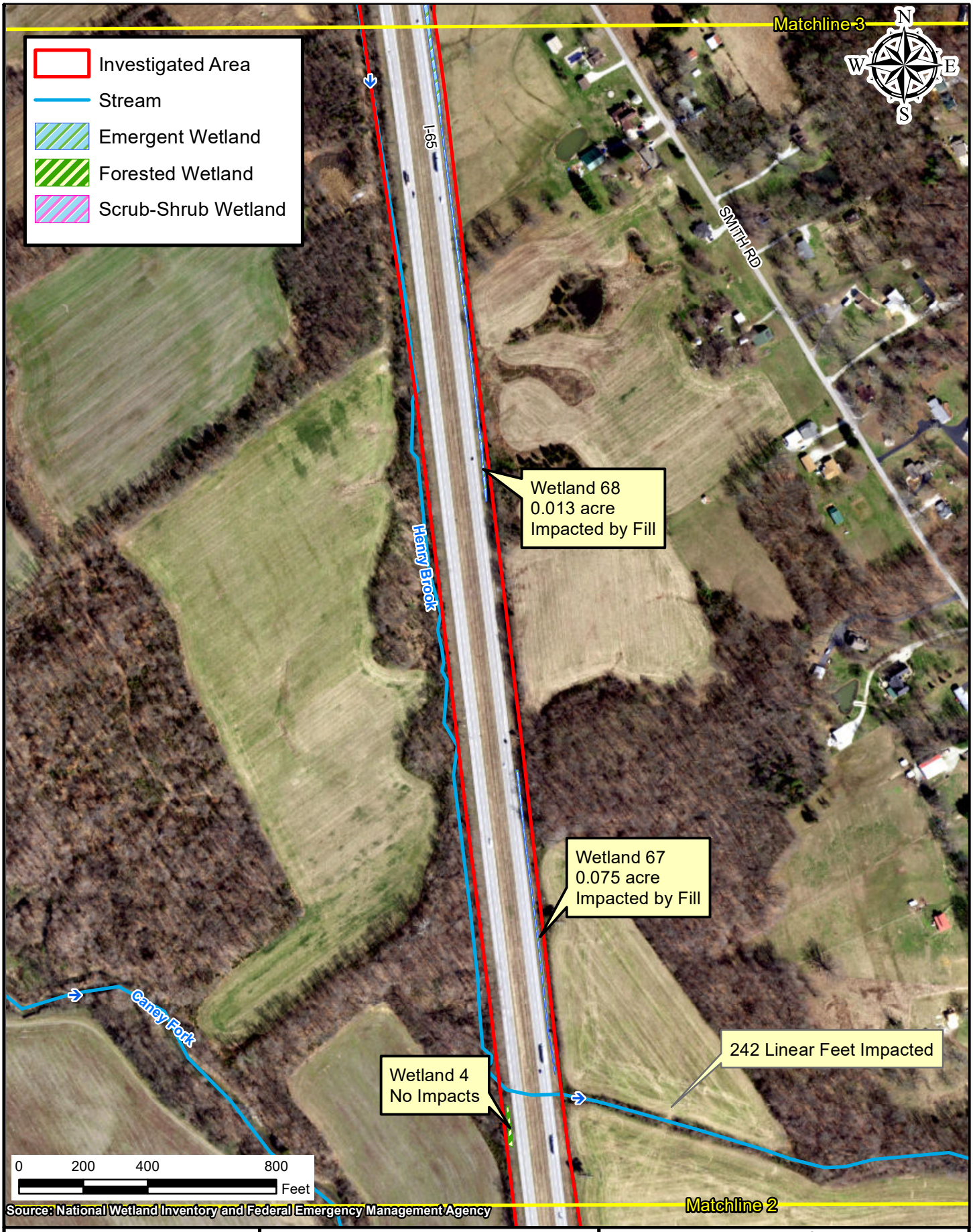
AMERICAN STRUCTUREPOINT INC.

Permit Impact Map - Map 2 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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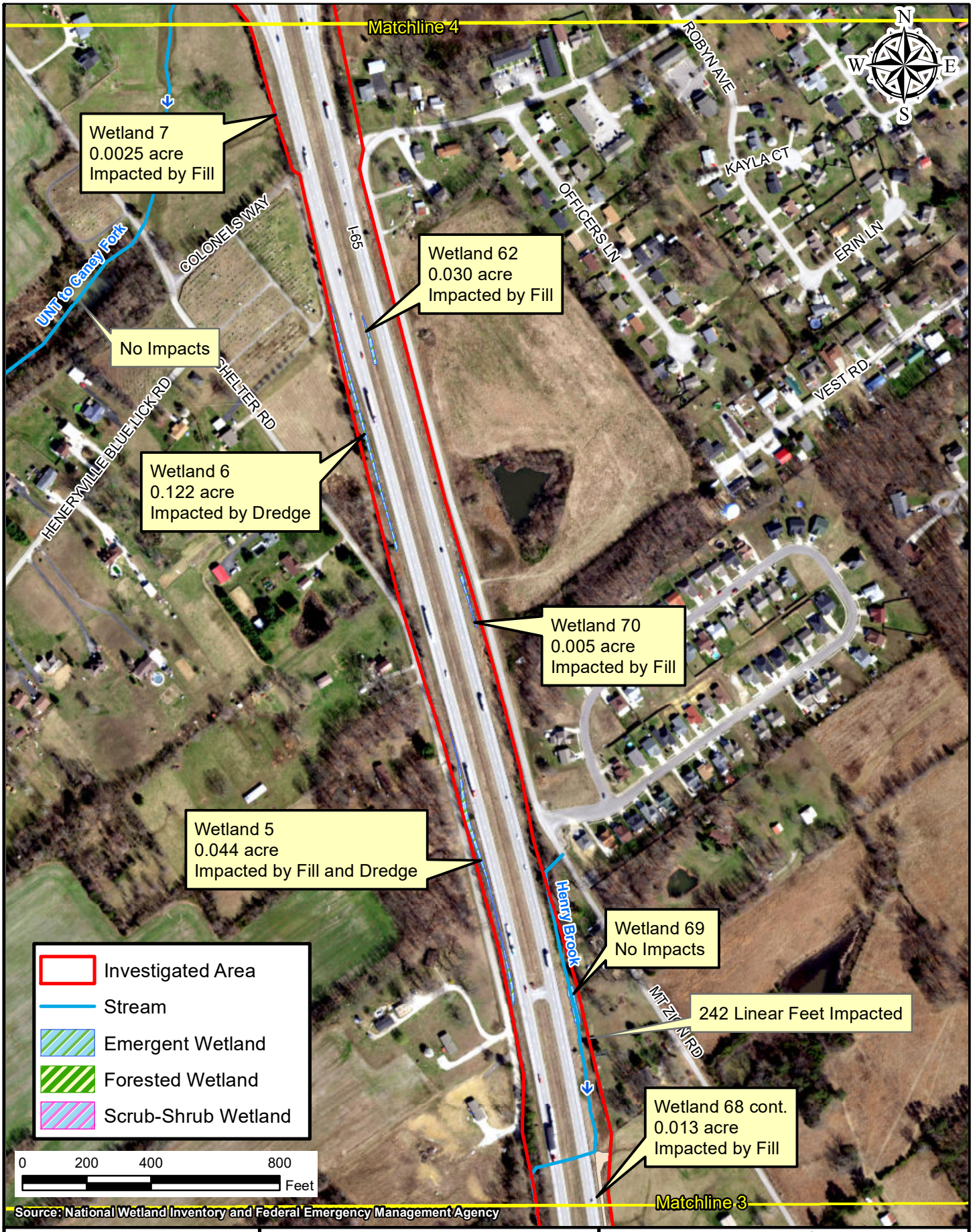
AMERICAN STRUCTUREPOINT INC.

Permit Impact Map - Map 3 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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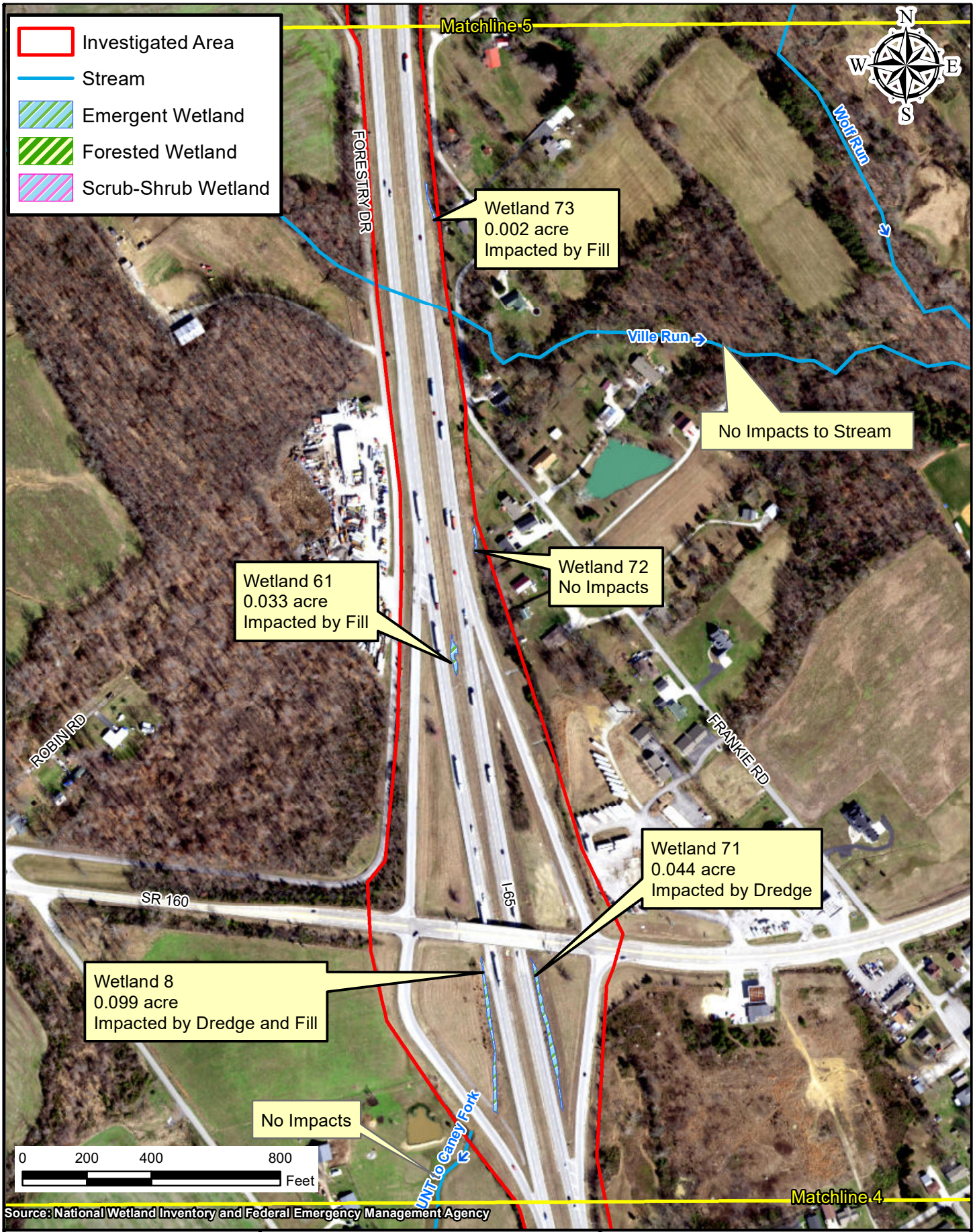
AMERICAN STRUCTUREPOINT INC.

Permit Impact Map - Map 4 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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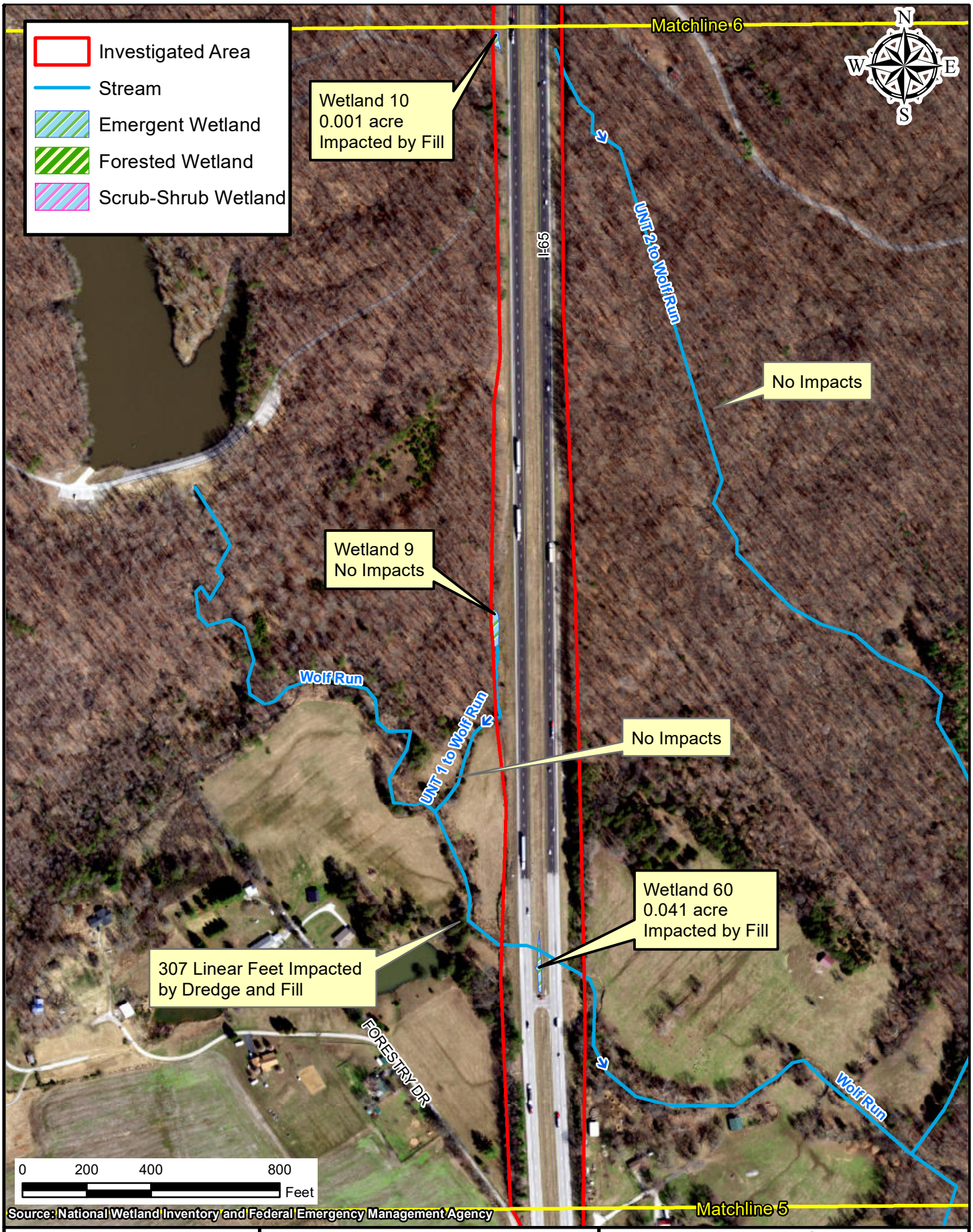
AMERICAN STRUCTUREPOINT INC.

Permit Impact Map - Map 5 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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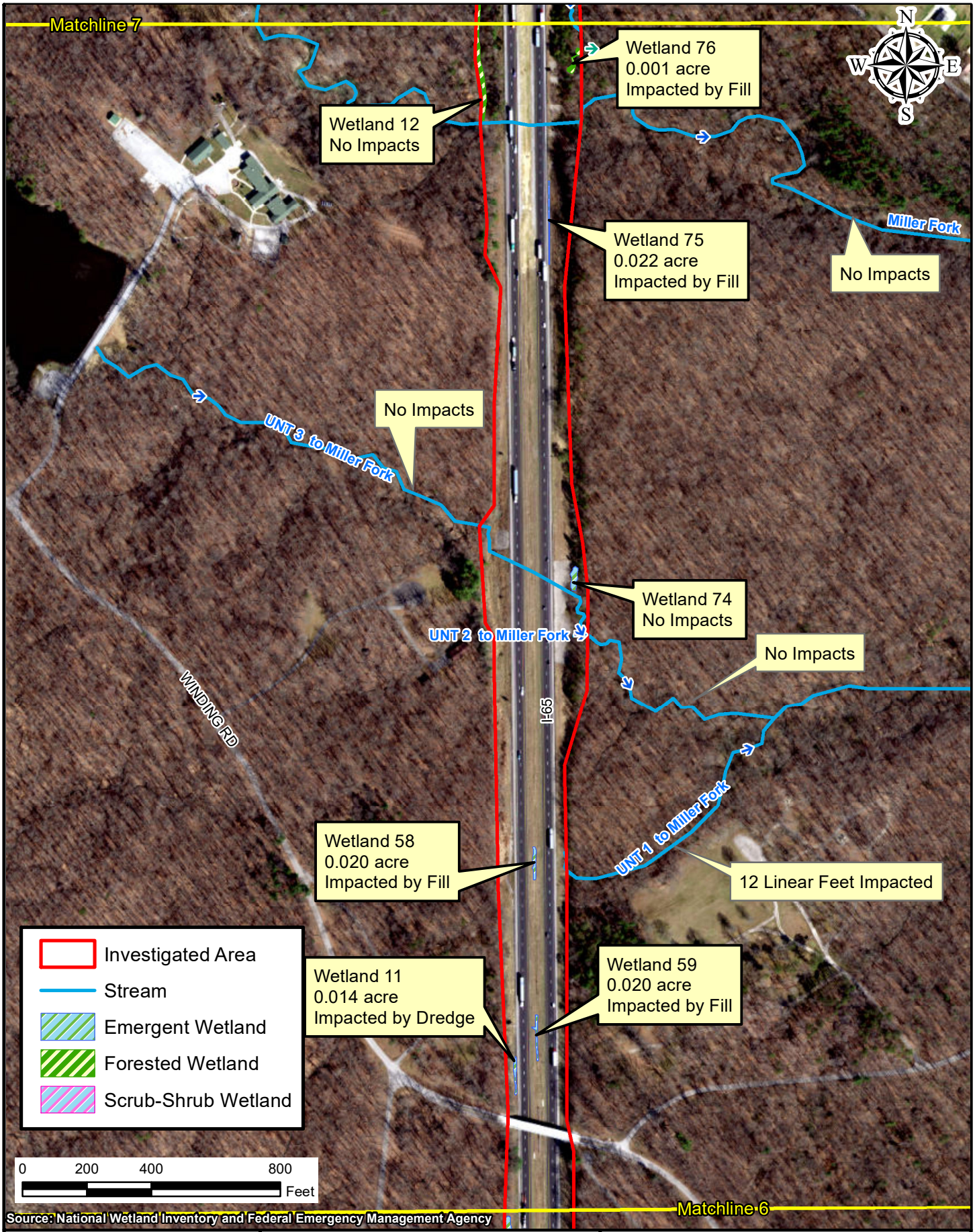
AMERICAN STRUCTUREPOINT INC.

Permit Impact Map - Map 6 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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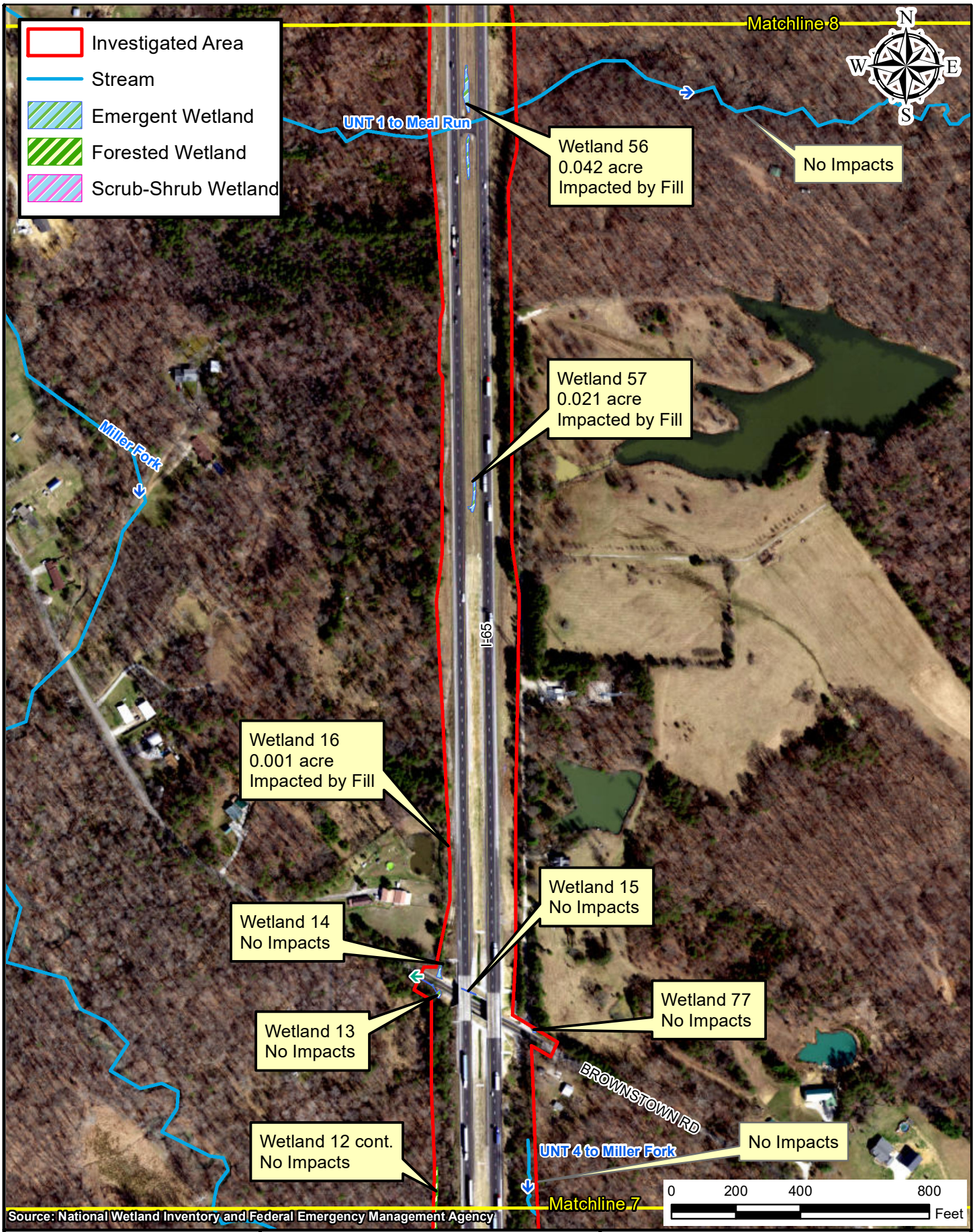
AMERICAN STRUCTUREPOINT INC.

Permit Impact - Map 7 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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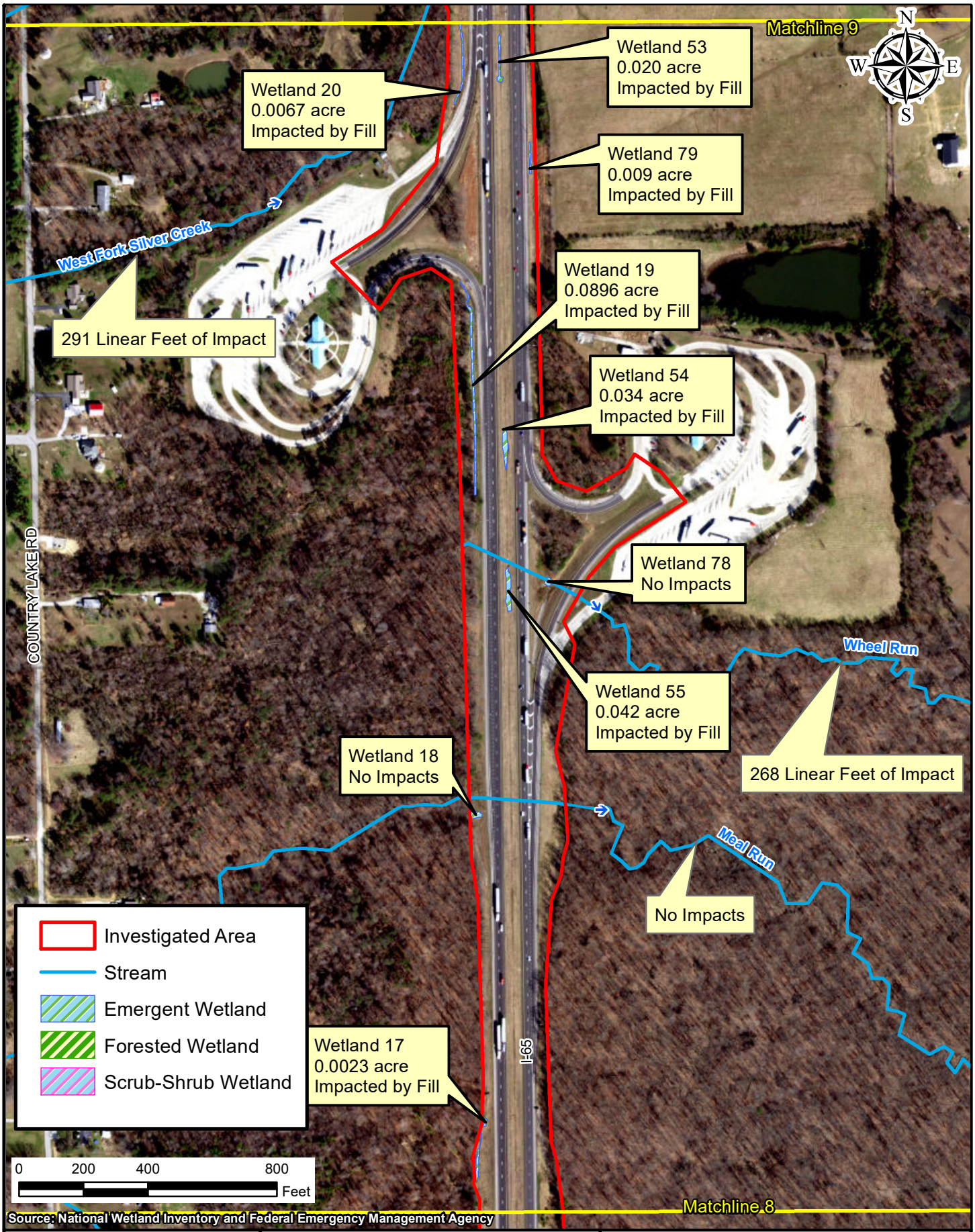
AMERICAN STRUCTUREPOINT INC.

Permit Impact - Map 8 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



Source: National Wetland Inventory and Federal Emergency Management Agency

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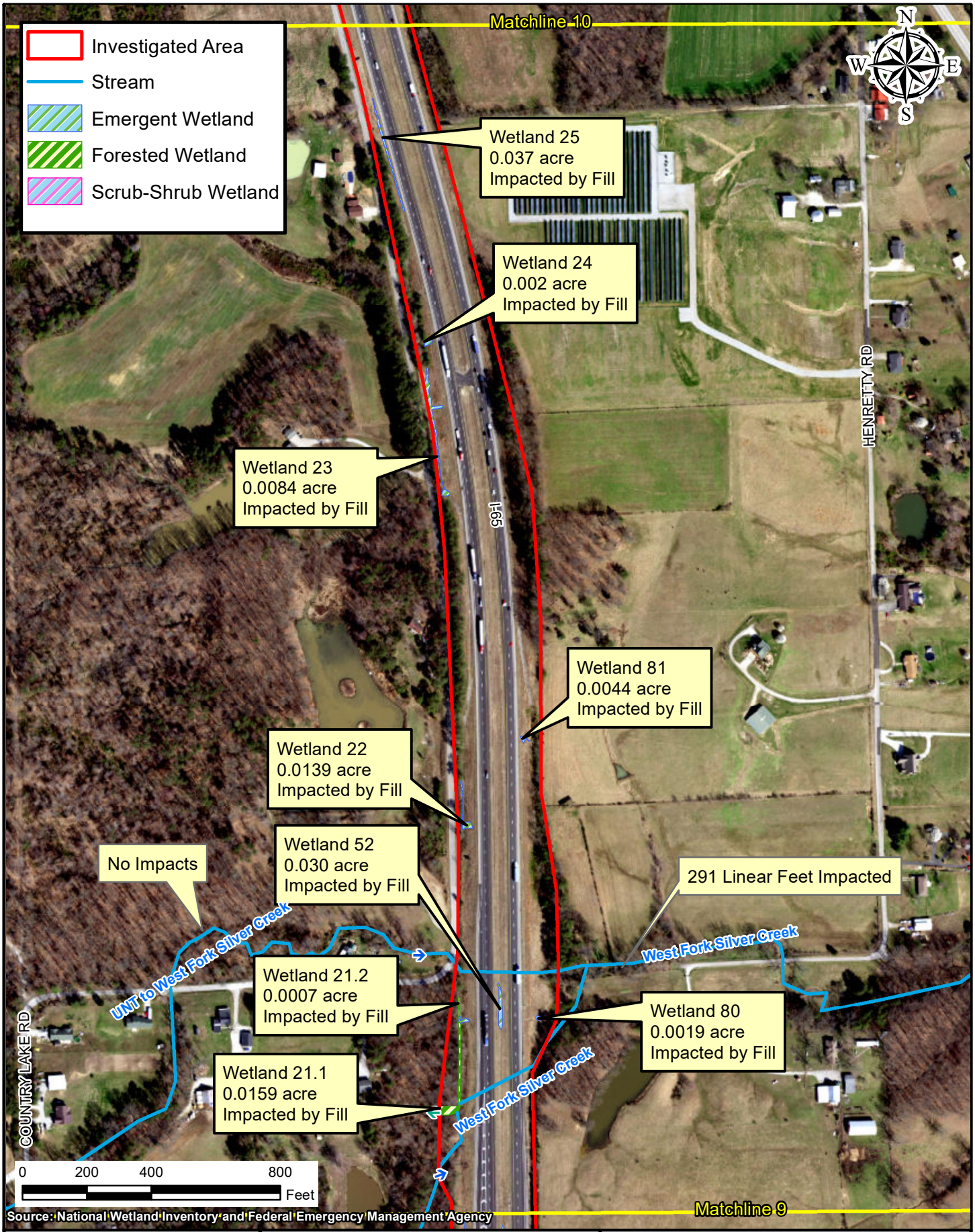
AMERICAN STRUCTUREPOINT INC.

Permit Impact - Map 9 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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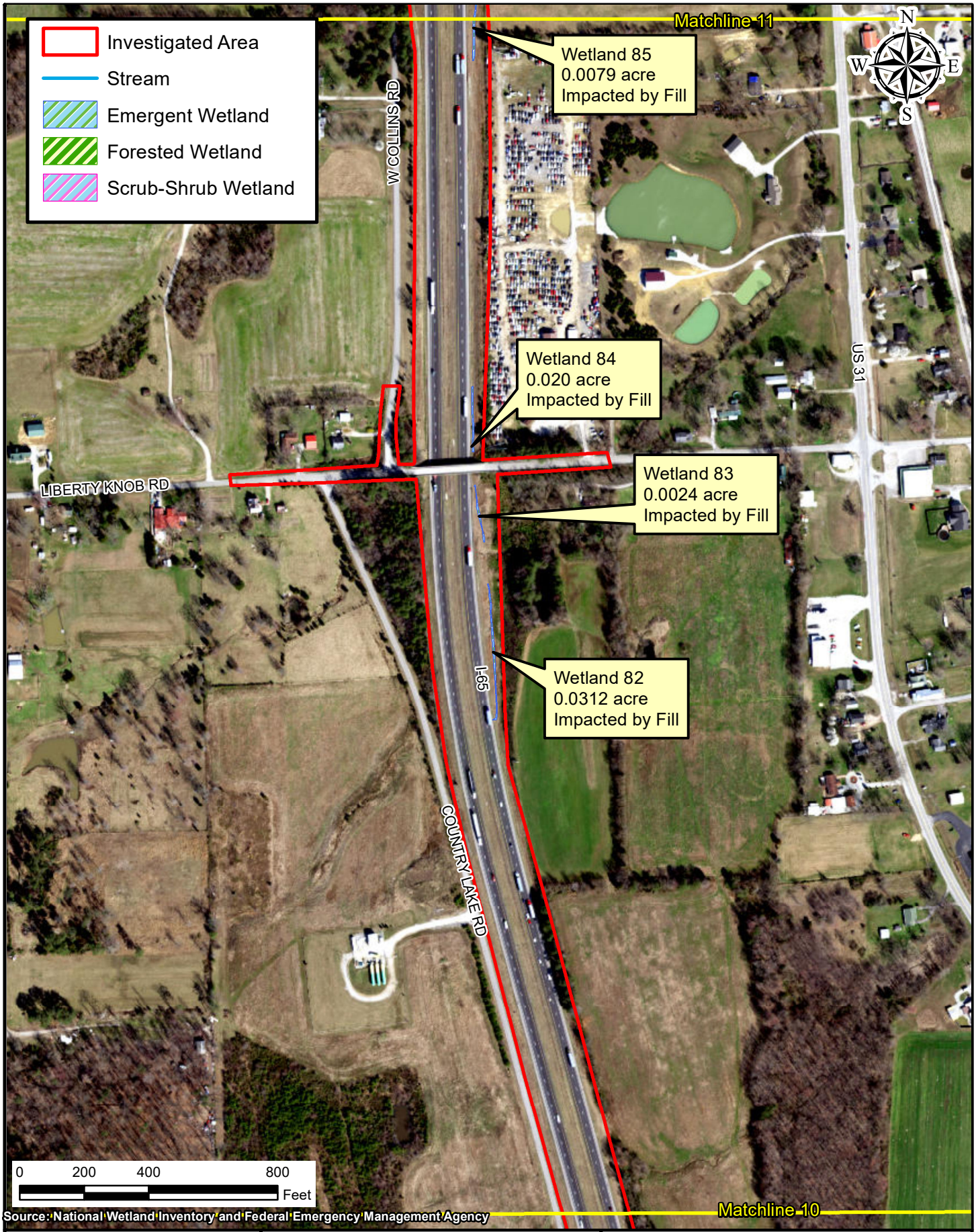
AMERICAN STRUCTUREPOINT INC.

Permit Impact - Map 10 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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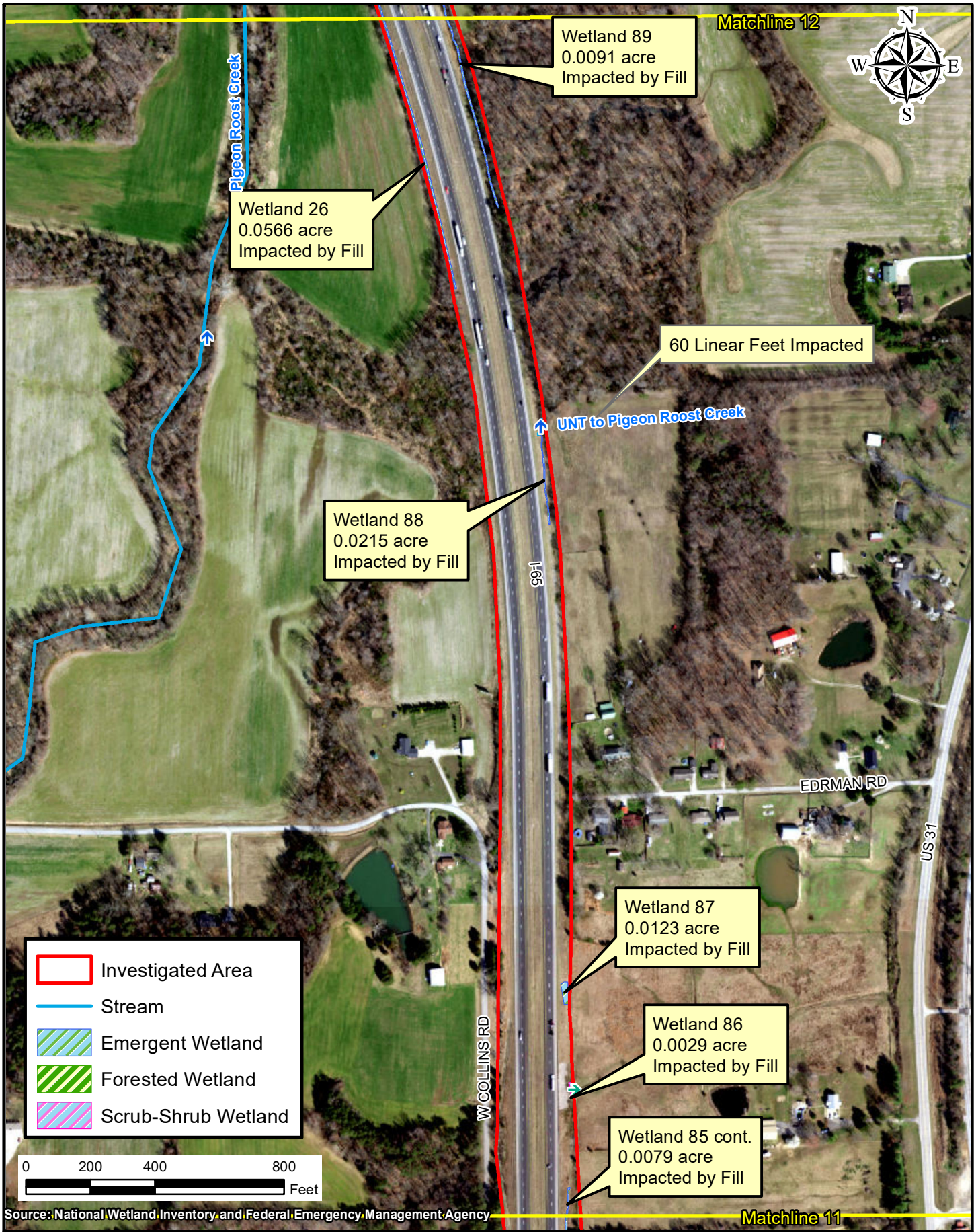
AMERICAN STRUCTUREPOINT INC.

Attachment 14-1

Permit Impacts - Map 11 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana



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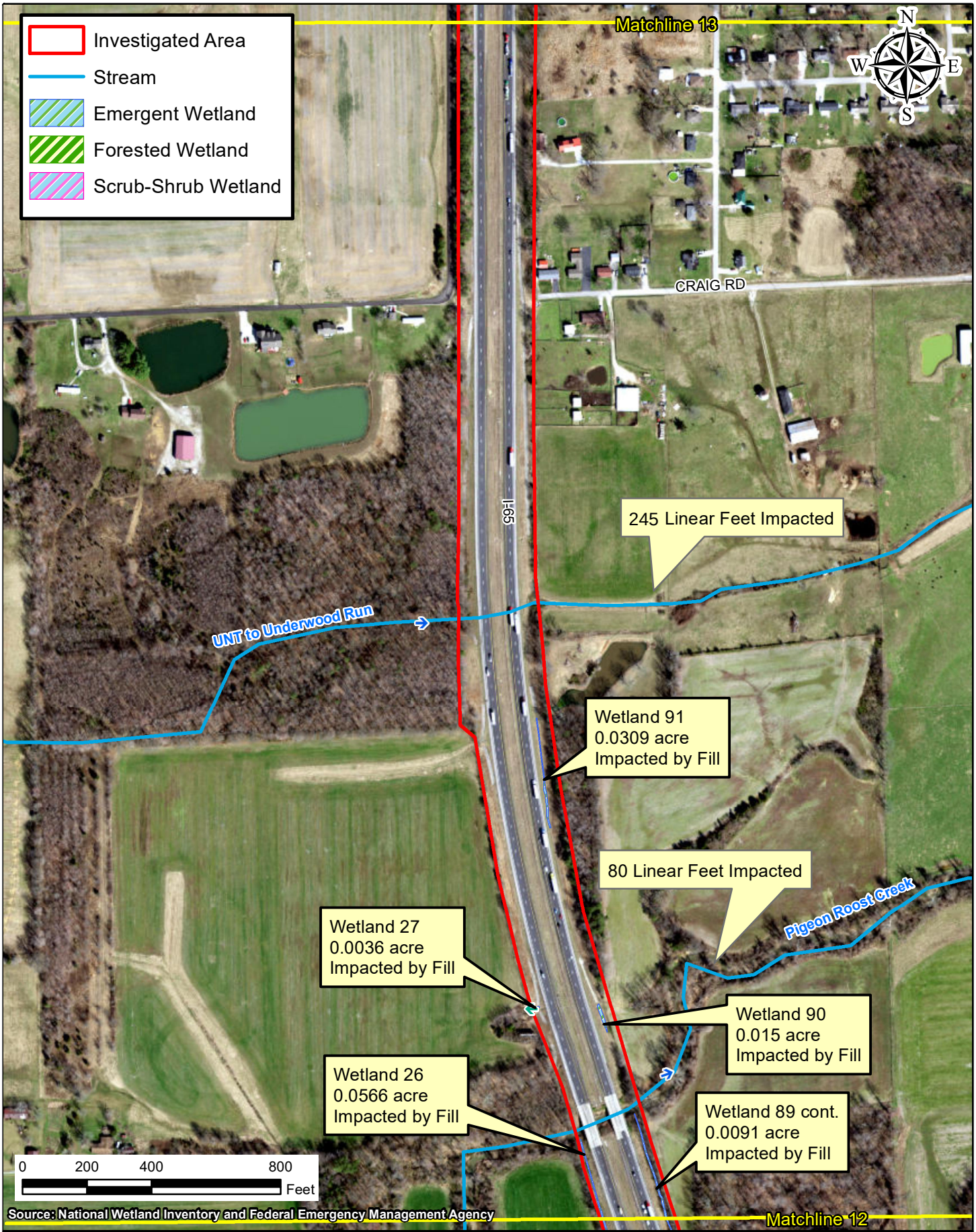
AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 12 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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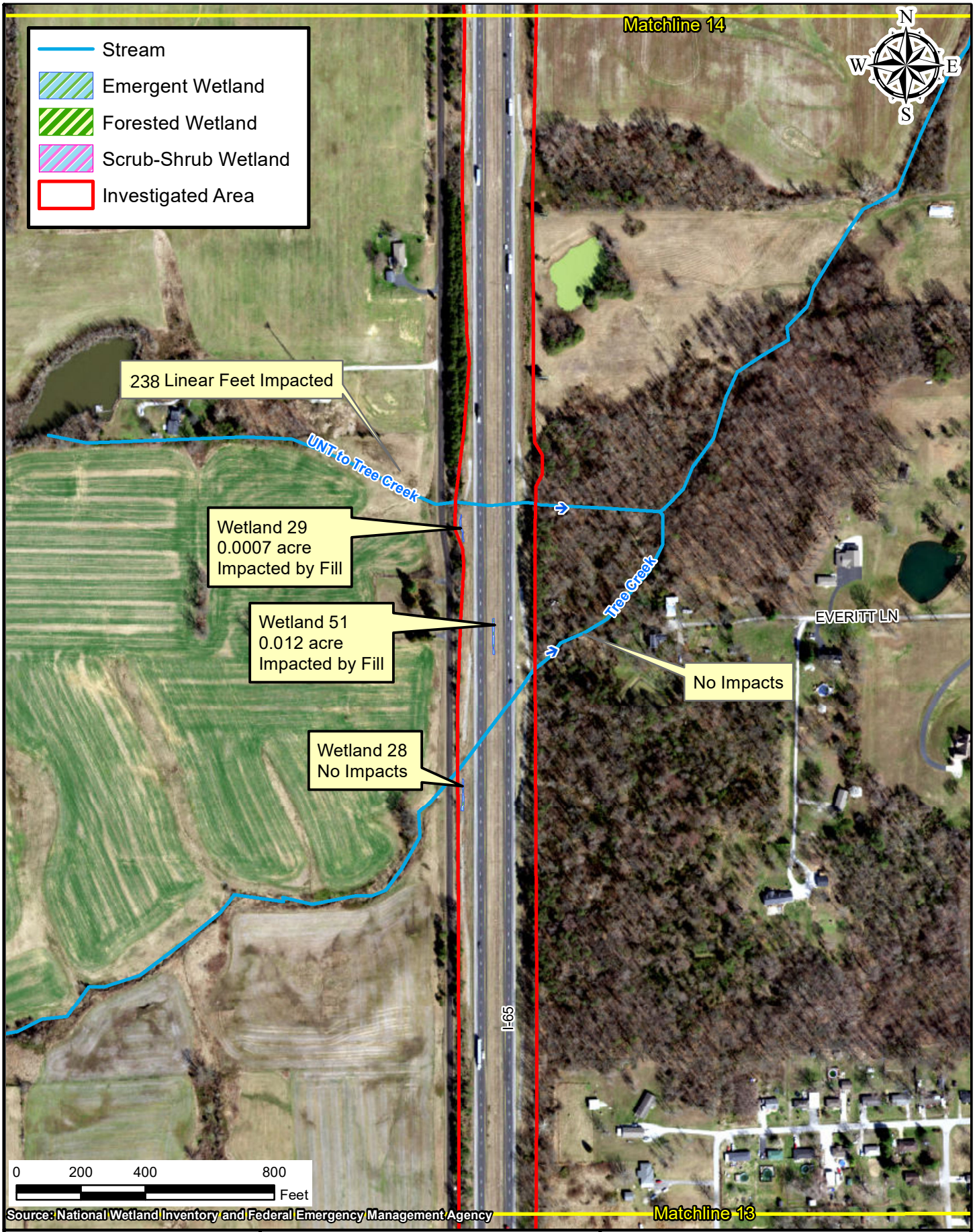
AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 13 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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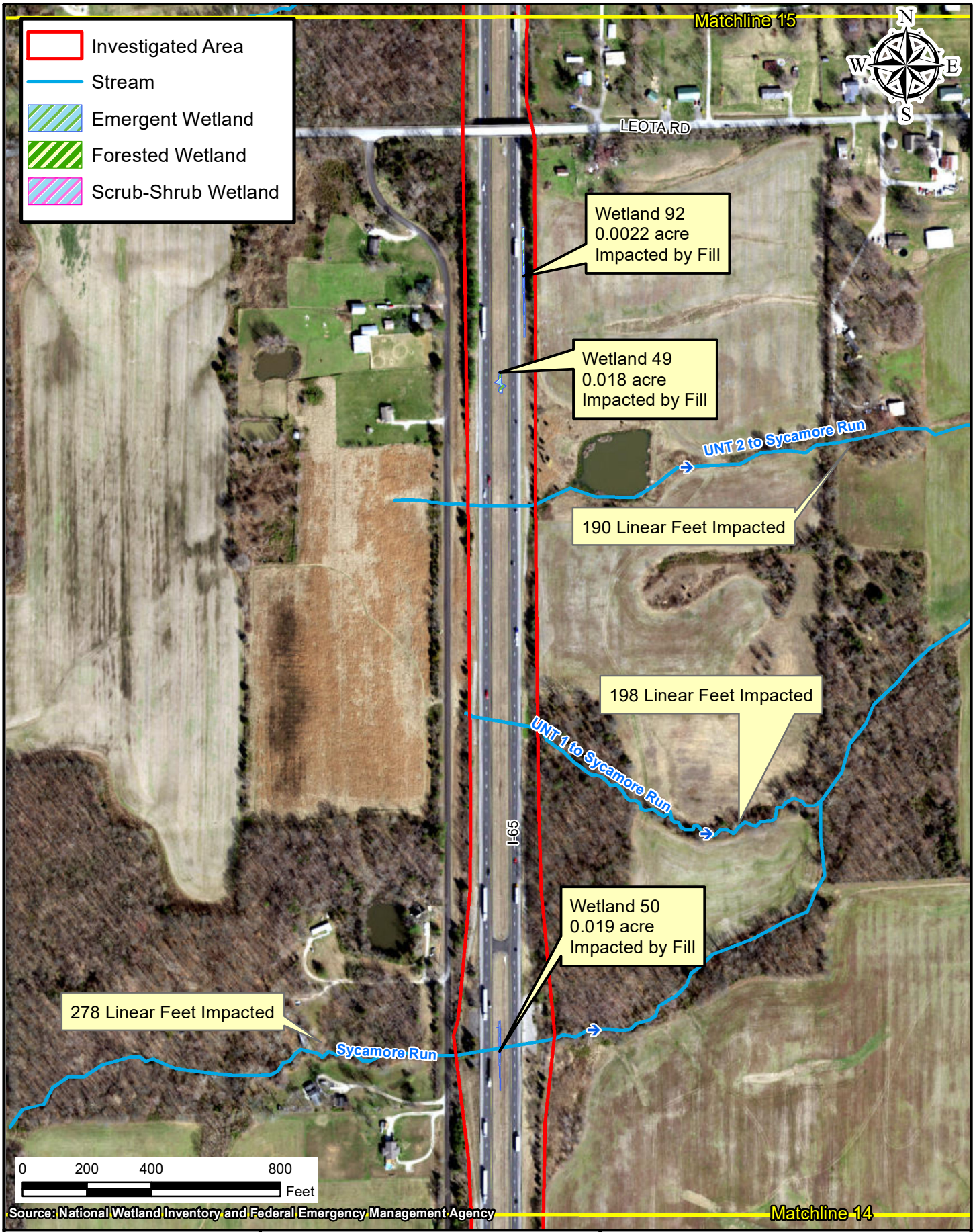
AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 14 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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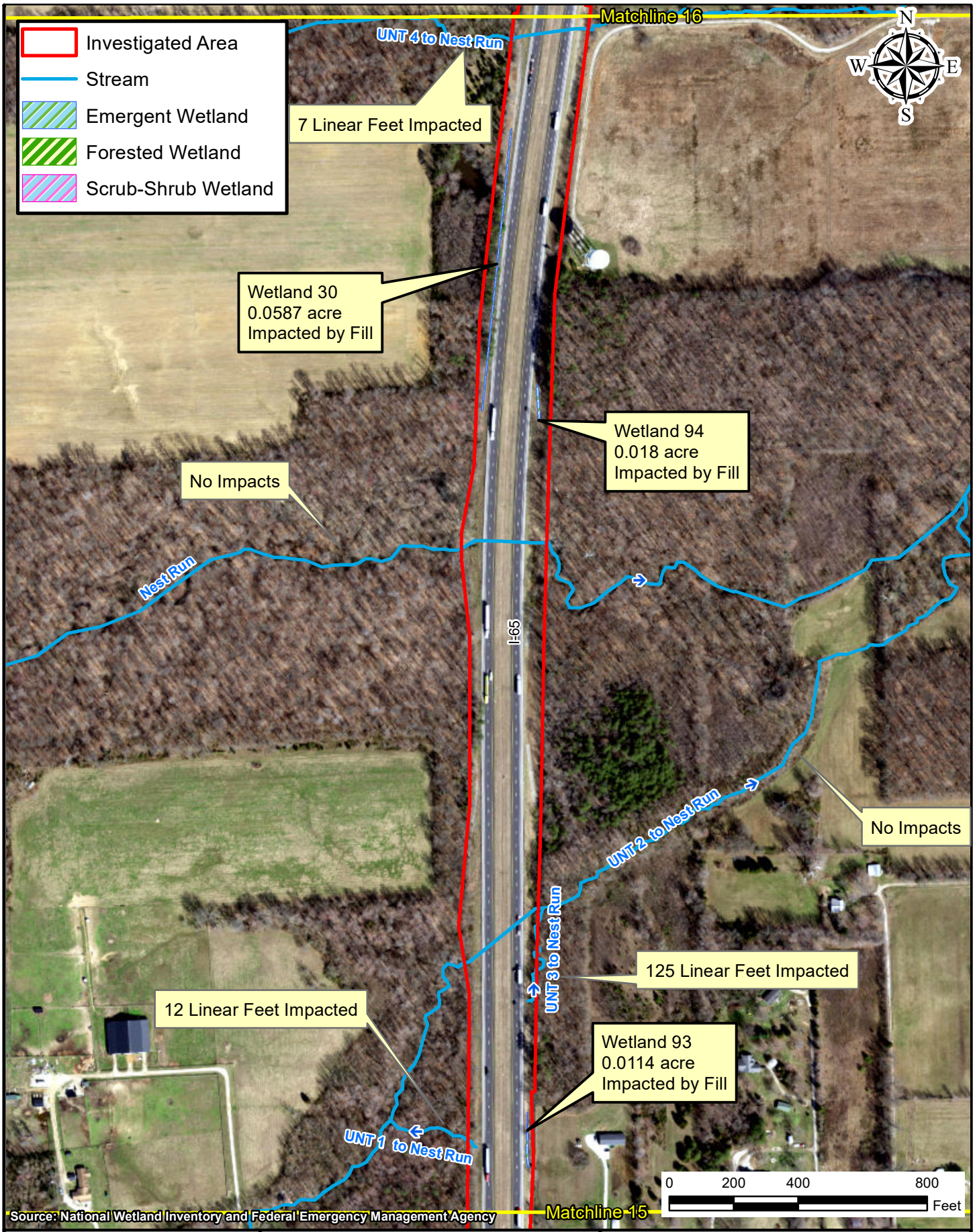
AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 15 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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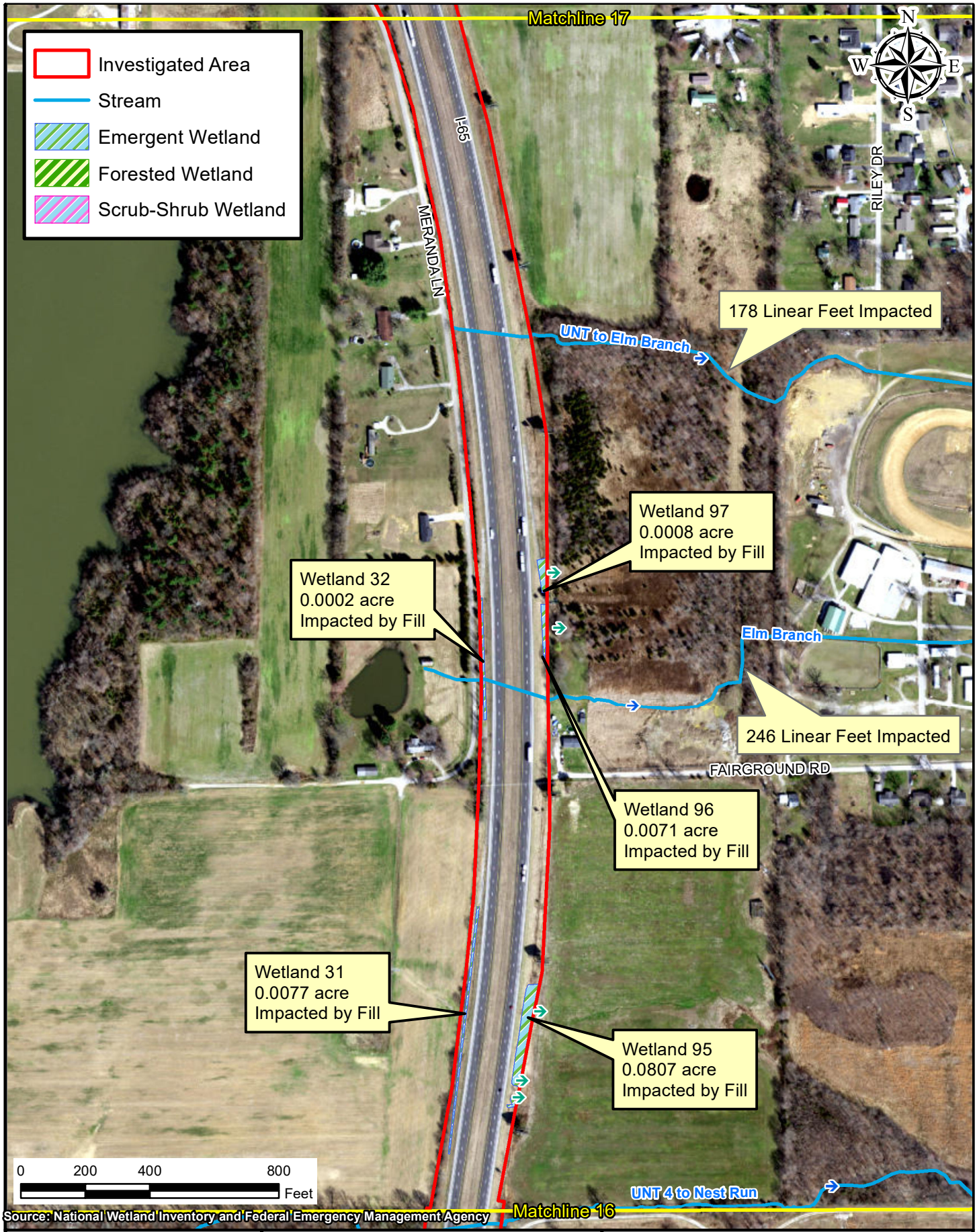
AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 16 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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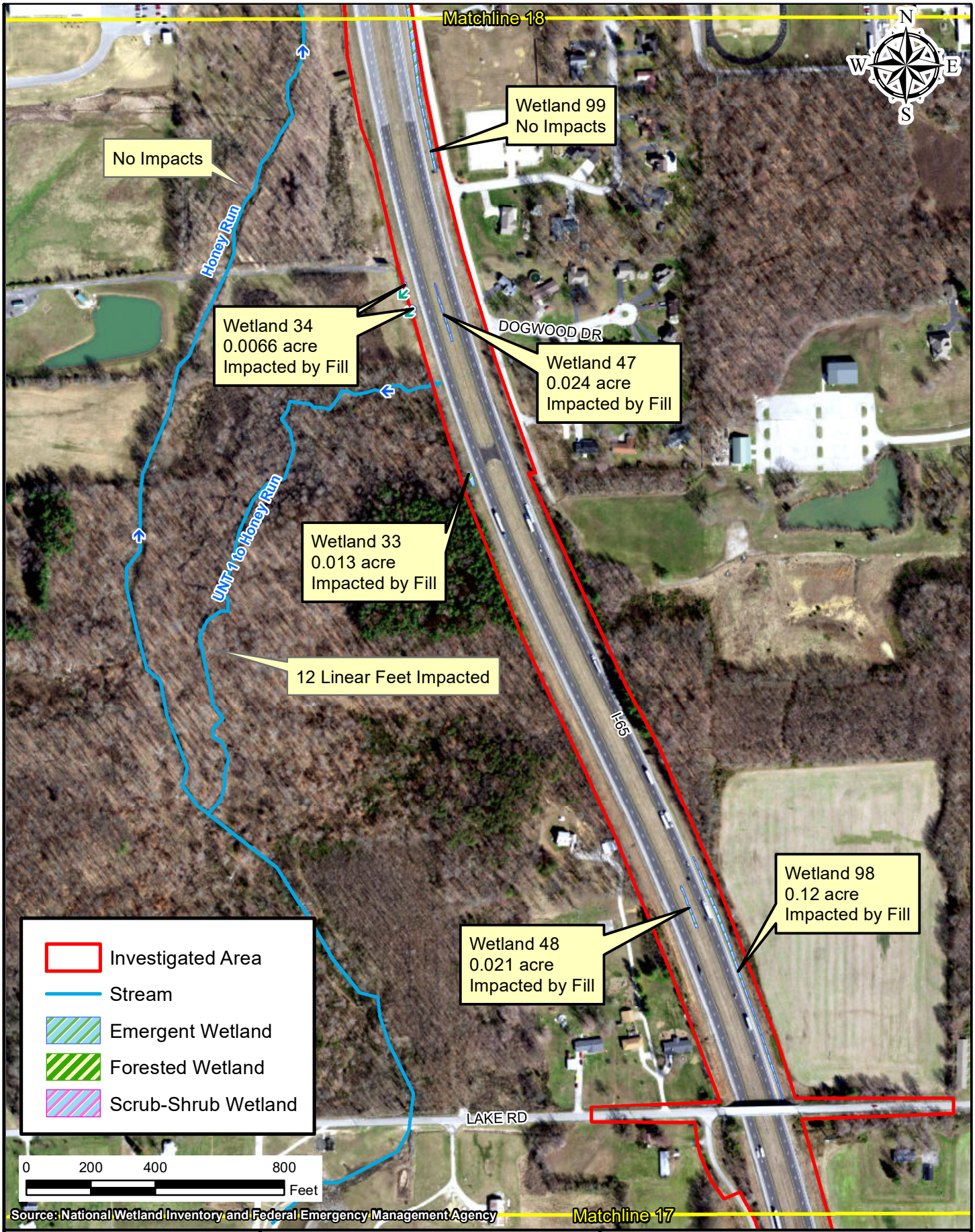
AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 17 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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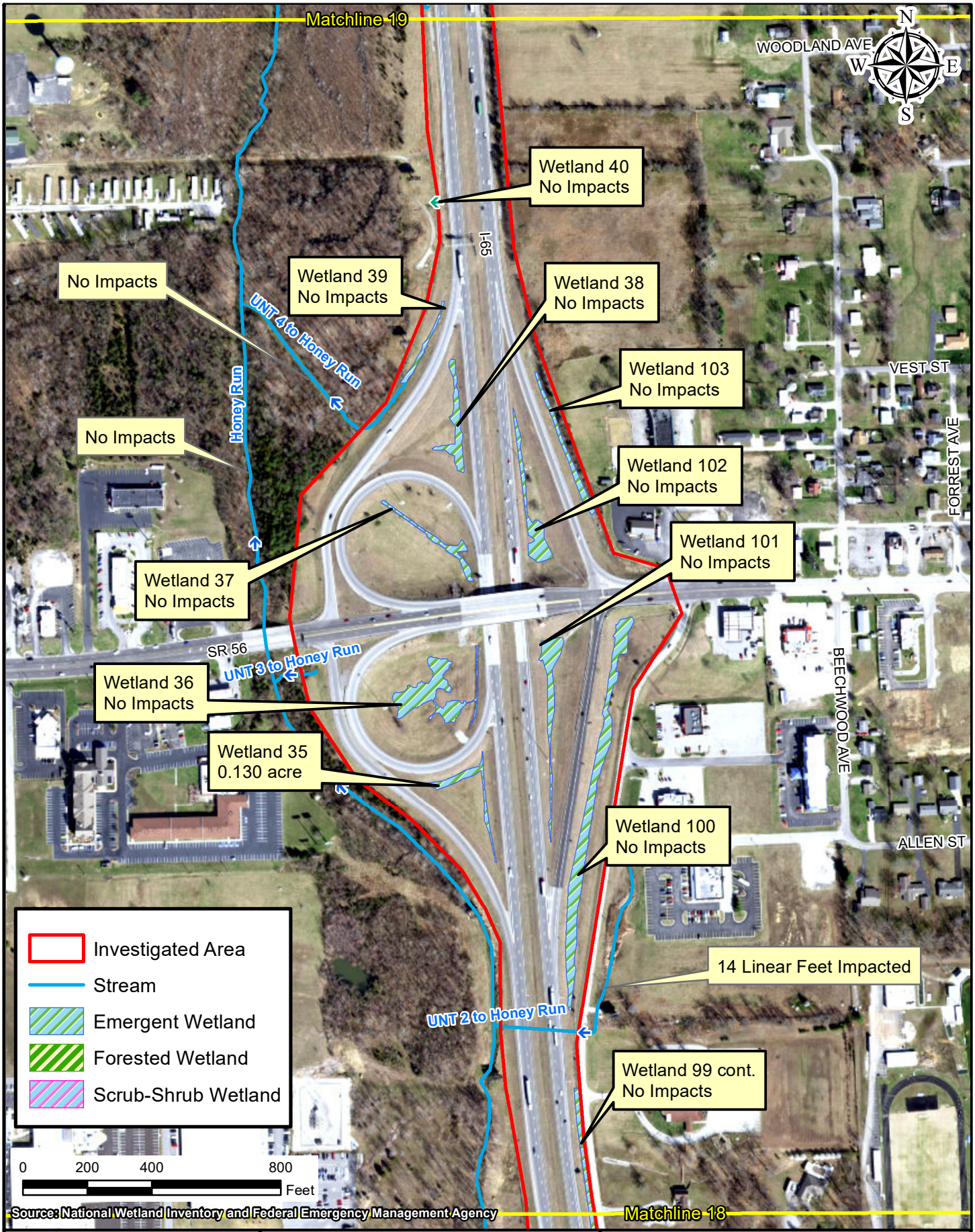
AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 18 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1



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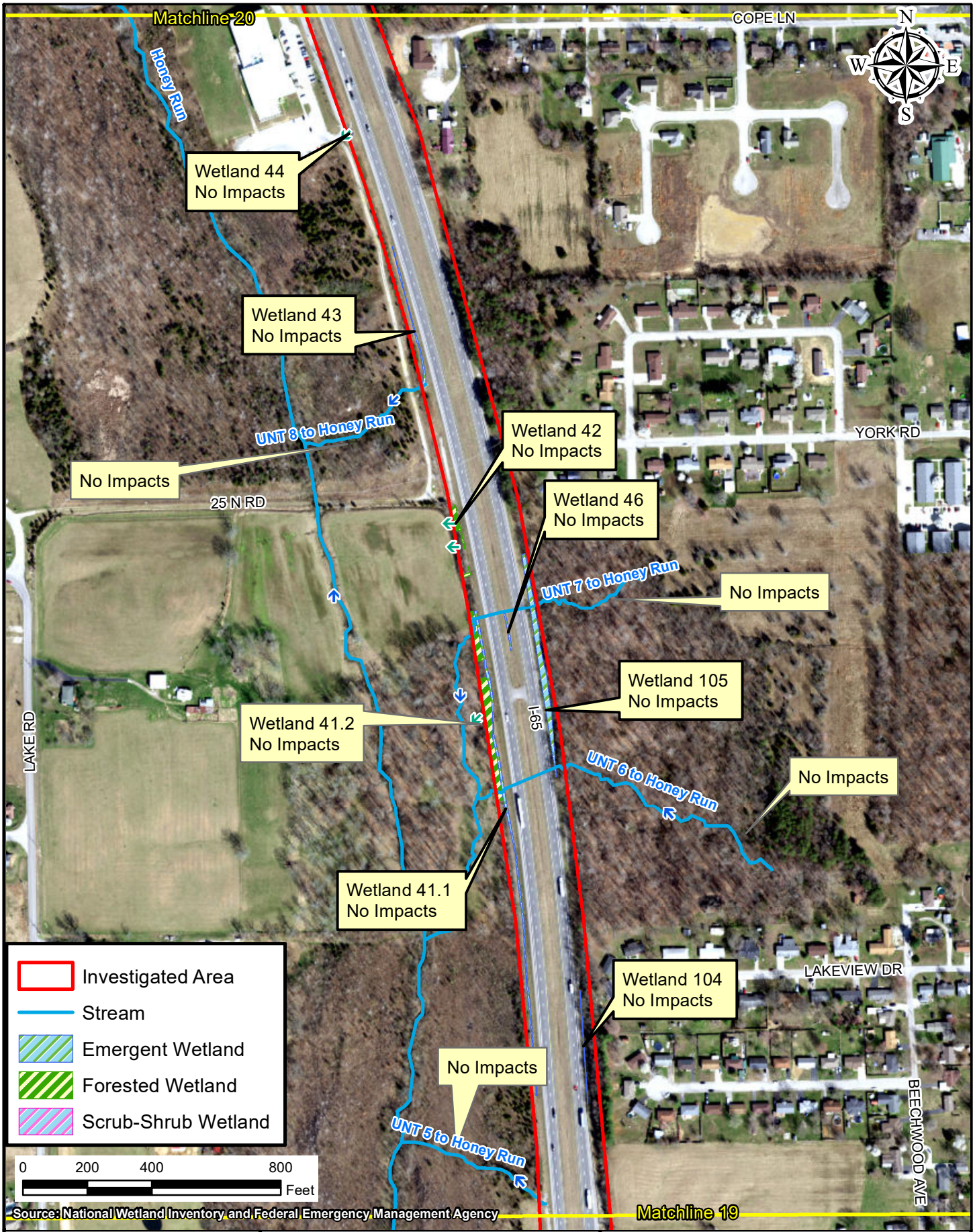
AMERICAN STRUCTUREPOINT INC.

Attachment 14-1

Permit Impacts - Map 19 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana



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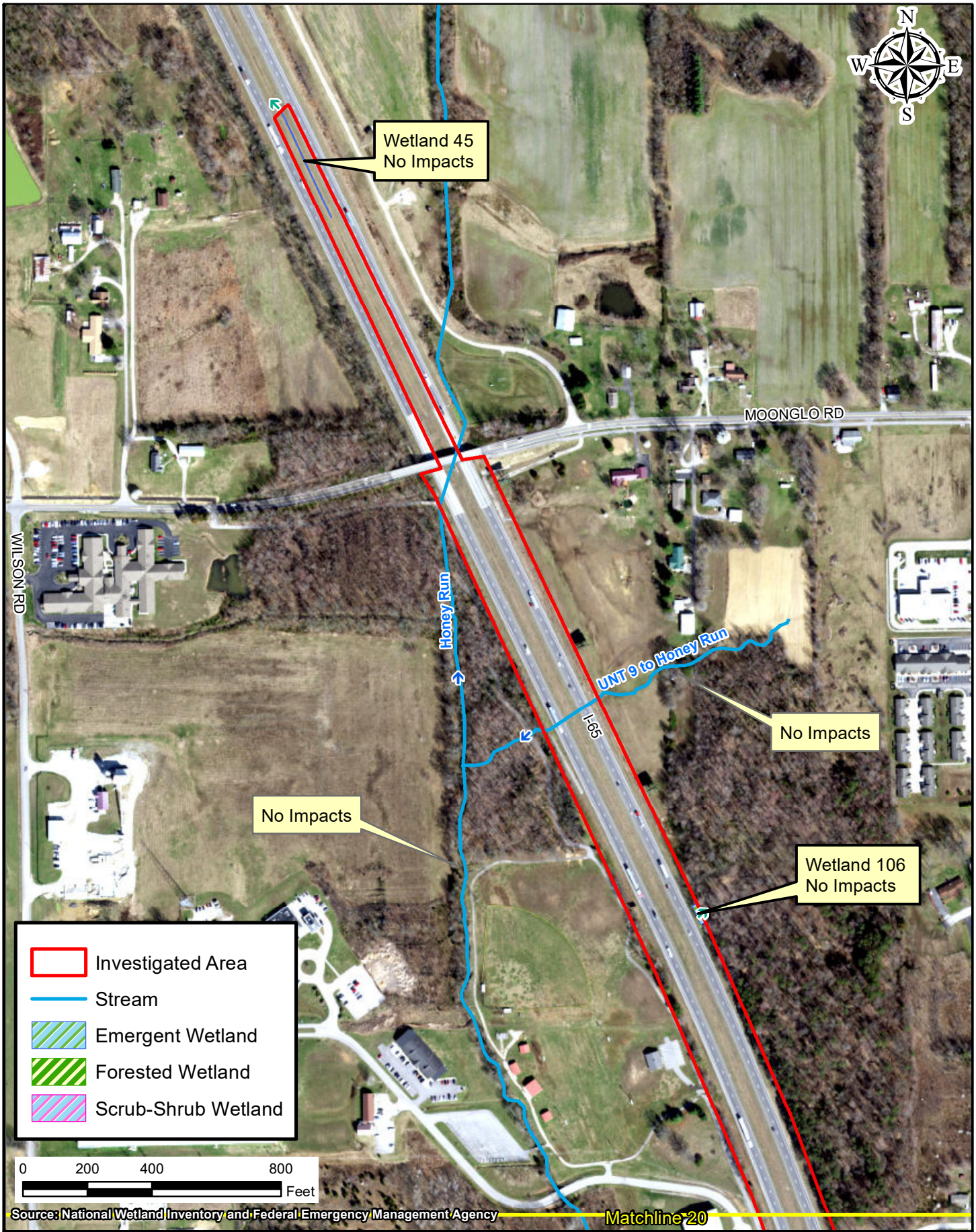
AMERICAN STRUCTUREPOINT INC.

Attachment 14-1

Permit Impacts - Map 20 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana



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AMERICAN STRUCTUREPOINT INC.

Permit Impacts - Map 21 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/08/2022 State: Indiana

Attachment 14-1

Cumulative Permanent Impacts
Wetland 63
0.073 ac
90.1 cys Dredge
2.8 cys Riprap
0.2 cys Pipe End Section

Survey 220 of
the Illinois Grant

GRAF RICHARD L & CATHLEEN M

395+00

400+00

+02.69, 69.74 Drainage pipe direction
+03.43, 69.94 Drainage pipe 4 pvc
+03.31, 69.37 Drainage Pipe direction
+05.67, 79.43' Drainage pipe 4 pvc

+75.17, 0.35' Mon.

BEGIN PROJECT 1700135
BEGIN SEGMENT 1
STA: 391+10.00 "Q"

Wetland 1
No Impacts
Do Not Disturb

App. EX. L.A. R/W

PC 395+74.30 "Q"

Const. Limits

C.P. 855

Grass

Blacktop

SB I-65

NB I-65

Str. No. 101

Str. No. 102

Str. No. 103

Str. No. 104

Str. No. 105

Str. No. 106

Str. No. 107

Str. No. 108

Str. No. 109

Str. No. 110

Str. No. 111

Line "Q"

N3°41'13"E "Q"

15" CONC

12" CONC

Stone

Harmony Woods LLC

Wetland 63
Permanent Impact
0.001 ac
0.2 cys Pipe End Section
(10 sq ft x 0.6')

Wetland 63
Permanent Impact
0.001 ac
1.4 cys Revetment Riprap
(25 sq ft x 1.5')

Wetland 63
Permanent Impact
0.07 ac
90.1 cys Dredge
(307' x 9.9' x .8')

Wetland 63
Permanent Impact
0.001 ac
1.4 cys Revetment Riprap
(25 sq ft x 1.5')

+10

100'
Match Existing

+10

+92.43, 66.15' Delineator Post

+33.95, 71.47' Sign-single post 70 mph
+33.96, 77.74' Sign-single post truck 65 mph

+89.35, 65.64' Drainage pipe direction
+89.43, 69.94' Drainage pipe 4 pvc
+97.27, 74.35' Riprap
+97.47, 79.21' Riprap
+02.41, 79.46' Riprap

+49.21, 2.14' Mon.

Notes:
All Topo described from Line "Q".
Line "Q" to be Constructed to Sta. 407+00.00.
Line "PR-Q" to be Constructed from Sta 407+00.00.
See Geometric Tie Sheets for Line "Q".

PVI Sta = 387+75 NB & SB
Elev = 497.60
VC = 800'

Match Existing
STATION: 390+10 "Q"

Exist. Ground NB & SB I-65

-2.65%

PVI Sta = 393+25 NB & SB
Elev = 495.07
VC = 250'

BEGIN PROJECT 1700135
BEGIN SEGMENT 1
STATION: 391+10.00 "Q"
ELEV: 496.12

Exist. Ground along Line "Q"

Prop. Profile "Q" NB & SB

Exist. Ground along Line "PR-Q"

-0.46%

Inlet 392+00
Str. No. 101

491.31

Inlet 393+90
Str. No. 102

Inlet 394+00
Str. No. 103

490.18
490.21

-0.34%

Inlet 395+25
Str. No. 104

489.81

121' of 15" Pipe @ 0.36%

488.38

Inlet 396+50
Str. No. 105

121' of 15" Pipe @ 0.50%

488.20

Begin Prop Profile SB "Q"
Sta. 396+25.00
Elev. 494.04

PVI Sta = 398+00 SB
Elev = 493.45
VC = 350'

PVI Sta = 398+00 NB
Elev = 493.45
VC = 350'

Prop. Profile NB "Q"

488.80

Inlet 397+75
Str. No. 107

Inlet 399+00
Str. No. 108

488.48

121' of 12" Pipe @ 1.52%

486.65

Inlet 400+25
Str. No. 109

121' of 15" Pipe @ 0.50%

485.04

PVI Sta = 401+25 NB
Elev = 491.39
VC = 250'

Inlet 401+50

485.64

-0.63%

+00.00
490.42

-0.72%

+90.00
489.05

Proposed 4' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

-0.31%

M.H. 396+50
Str. No. 106

+20.00
488.02

482.05

369' of 54" Pipe @ 0.20%

(Plotted 20ft Below Datum)

M.H. 400+25
Str. No. 111

481.31

481.21

239' of 54" Pipe @ 0.20%

PVI Sta = 401+50 SB
Elev = 492.12
VC = 250'

+40.8

268'-9" Guardrail MGS,
6'-3" Spacing Req'd. Lt.

Curved Terminal End

See Next Sheet

GRET, Type OS

+97.4

Prop. Profile SB "Q"
(Plotted 10ft Above Datum)

-0.38%

530 520 510 500 490 480 470 460

495.0 494.5 494.3 494.1 494.0 494.0 493.8 493.6 493.3 493.2 492.9 492.8 492.4 492.3 492.0 491.5 491.1 490.9 490.5 489.9 488.8 488.9

387+00 388+00 389+00 390+00 391+00 392+00 393+00 394+00 395+00 396+00 397+00 398+00 399+00 400+00 401+00

856 — Northing: 245281.0763, Easting: 738416.0956
AZ 359° 32.19' End of Guardrail
AZ 87° 62.36' Guardrail Post
AZ 182° 23.45' Mag Nail
59'-1.65
LINE "Q" STA. 393+85.82 OFFSET 63.61 LT

855 — Northing: 245776.9549, Easting: 738443.8750
Mag Nail
AZ 3° 21.93'
AZ 186° 192.37'
Sign Post "FUZZY ZOELLERS CHAMPIONS POINTE GC"
AZ 95° 63.84' Guardrail Post
59'-1.65
LINE "Q" STA. 398+84.22 OFFSET 63.61 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 391+00.00 TO STA. 401+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	1 of 25
CONTRACT	PROJECT
R-41529	1700135

12/8/2021 2:37:56 PM I:\200035 - I65 ATL\05Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_PlanProfile_01.dgn

Cumulative Permanent Impacts
Wetland 2
0.019 ac
37.2 cys Dredge
4.4 cys Riprap
0.7 cys Pipe End Section

Cumulative Temporary Impacts
Wetland 2
0.001ac
2.0 cys Sandbags

Cumulative Impacts to UNT to Bluelick Creek
Permanent Impact due to installation of new 36" Pipe, pipe end sections and riprap
224 lft (0.021 ac.)
15.5 Cys

Cumulative Impacts to UNT to Bluelick Creek
Temporary Impact due to cofferdam and site access
11 lft (0.0023 ac.)
1.4 Cys Sandbags

PI =
Delta
D
R

Survey 220 of the Illinois Grant

CURVE #2
PI = 411+11.19 "PR-Q"
Delta = 3°55'30" LT
D = 0°28'39"
R = 12000.00'
T = 411.19'
L = 822.05'
E = 7.04'
SE = 2.00%

410+00

415+00

Survey 237 of the Illinois Grant

Blue Lick Creek
Permanent Impact
66.4-lft (0.028 ac)
122-cys Concrete
54 cys Class 1 Riprap
Temporary Impact
131.7-lft (0.072 ac)
116-cys Sandbags
**See Structure Detail for More Information*

GRAF RICHARD L & CATHLEEN M

STRUCTURE:
I65-016-04220 ENBL
I65-016-04220 ESBL
DES. NO. 1600744 & 1600750
REPLACE SUPERSTRUCTURE
(See Part 4)

BEGIN PAVING EXCEPTION
STA. 402+50.00 "Q", SB

App. EX. L.A. R/W

℄ Structure
Sta. 403+66.08 "Q"
Skew: 27° Lt.

POC 407+00.00 "Q" (BK) =
PCC 407+00.00 "PR-Q" (AH)

Str. No. 41
UNT to Bluelick Creek
Permanent Impact
183 lft (0.016 ac) due to installation of New 183 lft of 36" Pipe
9.2 *cys*
(183' x 3' x 0.45')
17 lft (0.003 ac.) due to installation of two pipe end sections
0.9 *cys*
(8.5' x 3' x 0.45') *(inlet)*
(8.5' x 3' x 0.45') *(outlet)*

Ex. Low Clearance: 25.22'
Prop Low Clearance: 24.84'

STR. No. 41
UNT to Bluelick Creek
Temporary Impact
3 lft
0.001 (ac) Cofferdam
0.7 cys Sandbags
(3' x 3' x 2')

UNT to Bluelick Creek
Permanent Impact
12 lft (0.001 ac)
2.7 cys Class 1 Riprap
(12 x 3 x 2')

Wetland 2
Temporary Impact
0.001 (ac) Cofferdam
2.0 cys Sandbags
(12' x 3' x 1.5')

Wetland 2
Permanent Impact
0.001 ac
3.4 cys Revetment Riprap
(60.7 sq ft x 1.5')

Wetland 2
Permanent Impact
0.001 ac
0.7 cys Pipe End Section
(18.8 sq ft x 1.0')

Wetland 2
Permanent Impact
0.014 ac
34.1 cys Dredge
(84' x 7.3' x 1.5')
*Additional Impacts on following sheet

POC 412+
POT 11+9

Const. Limits
Grass
Blacktop
Stone
Str. No. 112
Str. No. 113
Str. No. 114
Str. No. 115
Str. No. 116
Str. No. 117
Str. No. 118
Str. No. 119
Str. No. 120
Str. No. 121
Str. No. 122
Str. No. 123
Str. No. 124
Str. No. 125
Str. No. 126
Str. No. 127
Str. No. 128
Str. No. 130
Str. No. 131
Str. No. 132
Str. No. 133
Str. No. 134
Str. No. 135
Str. No. 136
Str. No. 137
Str. No. 138
Str. No. 139
Str. No. 41
Str. No. 129
12" CMP
24" RCP
12" RCP
C.P. 864
END PAVING EXCEPTION
STA. 404+48.16 "Q", SB
SB I-65
NB I-65
Line "Q"
Line "PR-Q"
N3°41'13"E "Q"
N5°52'00"W "PR-Q"
N57°07'21"E "S-5-Q"
Line "S-5-Q"
App. Section Line
App. Pt.
App. EX. L.A. R/W
Const. Limits
UNT to Bluelick Creek
BIGGS ROAD
Graf Properties Llc

BEGIN PAVING EXCEPTION
STA. 402+84.40 "Q", NB
PI 401+37.60 "PR-Q"

OHWM
Elev 473.25

Bluelick Creek
App. Pt.

PI 405+34.87 "Q"
END PAVING EXCEPTION
STA. 404+80.68 "Q", NB

PI 411+11.19 "PR-Q"

OHWM
Ex. Low Clearance: 22.74'
Prop Low Clearance: 22.71'

PT 415+22.05 "PR-Q"

UNT to Bluelick Creek
Permanent Impact
12 lft 0.001 (ac)
2.7 cys Class 1 Riprap
(12' x 3' x 2')

STR. No. 41
UNT to Bluelick Creek
Temporary Access
5 lft
0.0003 ac
0 cys fill (Access Only)
(5' x 3' x 0')
Temporary Cofferdam
3 lft
0.001 (ac) Cofferdam
0.7 cys Sandbags
(3' x 3' x 2')

GRAF RICHARD L & CATHLEEN M

+43.94, 64.71' Delineator Post
+30.54, 65.65' Delineator Post
+67.65, 68.79' Mon.
+55.09, 66.76' Delineator Post
+57.46, 63.4' Mon.
+40.61, 65.32' Mon.

Notes:
All Topo described from Line "Q".
Line "Q" to be Constructed to Sta. 407+00.00.
Line "PR-Q" to be Constructed from Sta 407+00.00.
See Geometric Tie Sheets for Line "Q".

854 — Northing: 246365.7084, Easting: 738452.2754
Mile Post 16.5, AZ 339° 18.31'
AZ 183° 14.57' Corner of Catch Basin
AZ 95° 40.22' Bridge Deck
Guardrail Post
SB I-65
LINE "Q" STA. 404+76.34 OFFSET 61.96 LT

853 — Northing: 246840.5731, Easting: 738433.8294
Mag Nail AZ 359° 20.95'
AZ 178° 86.08' End of Guardrail
AZ 86° 77.60' Guardrail Post
SB I-65
LINE "Q" STA. 409+54.21 OFFSET 63.67 LT

852 — Northing: 247318.9288, Easting: 738399.3853
Guardrail Post AZ 326° 6.21'
AZ 176° 26.68' Mag Nail
AZ 82° 48.74' Guardrail Post
SB I-65
LINE "Q" STA. 414+36.46 OFFSET 61.16 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
STA. 401+00.00 TO STA. 416+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
N.A.	1700135

SURVEY BOOK	SHEETS
Electronic	2 of 25
CONTRACT	PROJECT
R-41529	1700135

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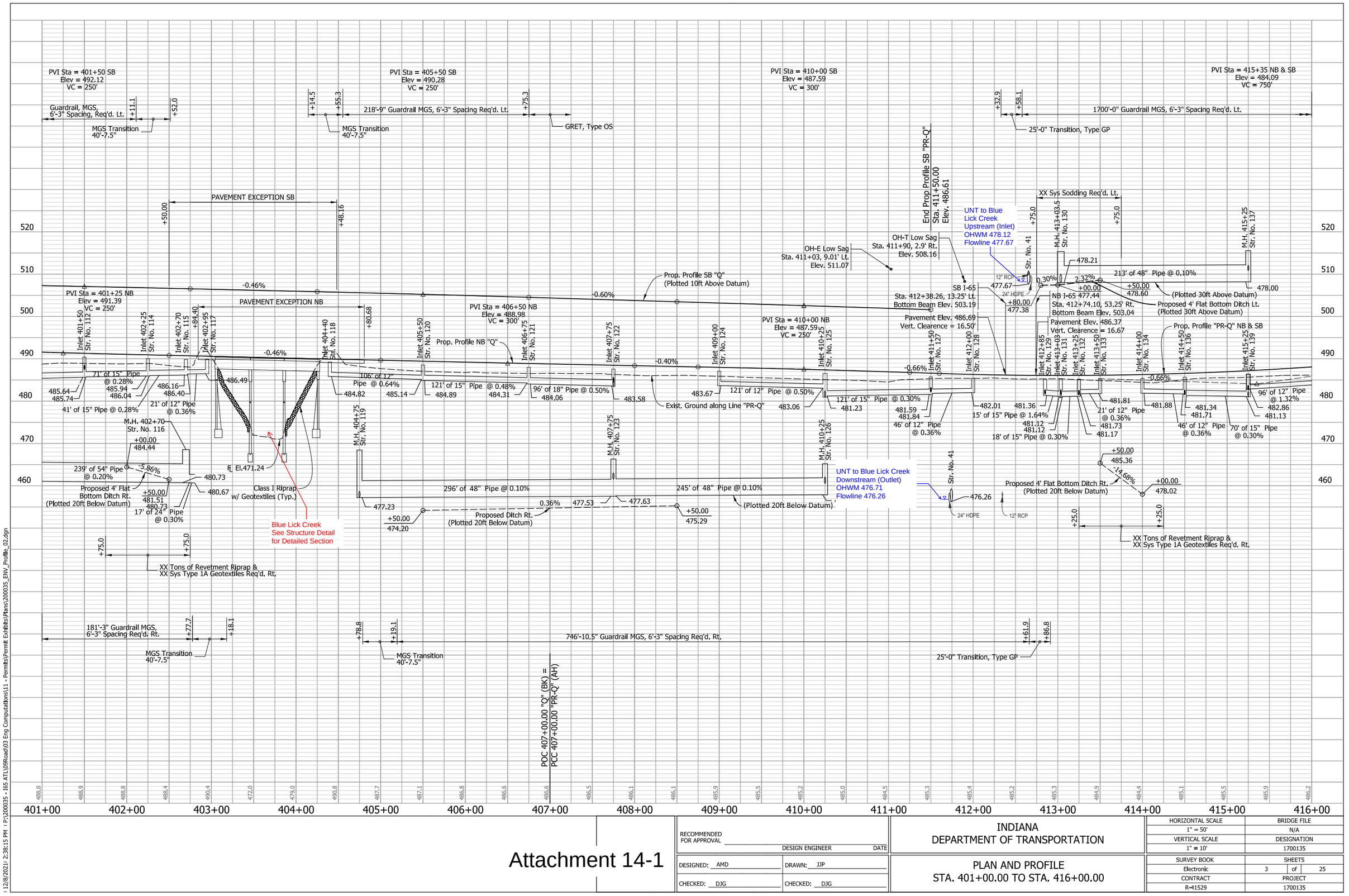

Attachment 14-1

RECOMMENDED FOR APPROVAL	
DESIGN ENGINEER	DATE
DESIGNED: AMD	DRAWN: JJP
CHECKED: DJG	CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 401+00.00 TO STA. 416+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	3 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 2
See previous sheet.

Wetland 2
Permanent Impact
0.002 ac
3.1 cys Dredge
(13' x 4.3' x 1.5')
0.001 ac
1.0 cys Revetment Riprap
(17.6 sq ft x 1.5')

*Additional Impacts
on previous sheet

Survey 237 of
Illinois Grant

Suncire Robin

eather Renee

GUTHRIE DON

Survey 238 of
the Illinois Grant

Herron Michael W Jr &
Patricia D

GRAF RICHARD L & CATHLEEN M

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

Guardrail MGS, 6'-3" Spacing Req'd. Lt.

GRET, Type OS

XX Tons of Revetment Riprap &
XX Sys Type 1A Geotextiles Req'd. Lt.

Proposed 4' Flat
Bottom Ditch Lt.
(Plotted 30ft Above Datum)

293' of 48" Pipe @ 0.10%
(Plotted 30ft Above Datum)

146' of 12" Pipe @ 2.44%

303' of 48" Pipe @ 0.10%
(Plotted 30ft Above Datum)

32' of 24" Pipe @ 0.30%

327' of 60" Pipe @ 0.10%
(Plotted 30ft Above Datum)

293' of 48" Pipe @ 0.10%

8' of 18" Pipe @ 0.10%

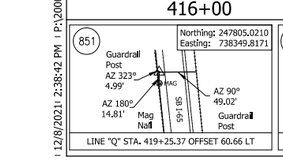
8' of 15" Pipe
@ 0.10%

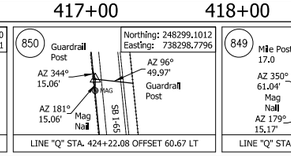
Prop. Profile "PR-Q" NB & SB

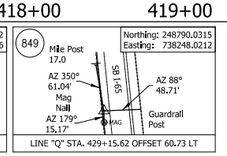
Exist. Ground along Line "PR-Q"

2.77%

3.32%







Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 415+50.00 TO STA. 430+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	4 of 25
CONTRACT	PROJECT
R-41529	1700135

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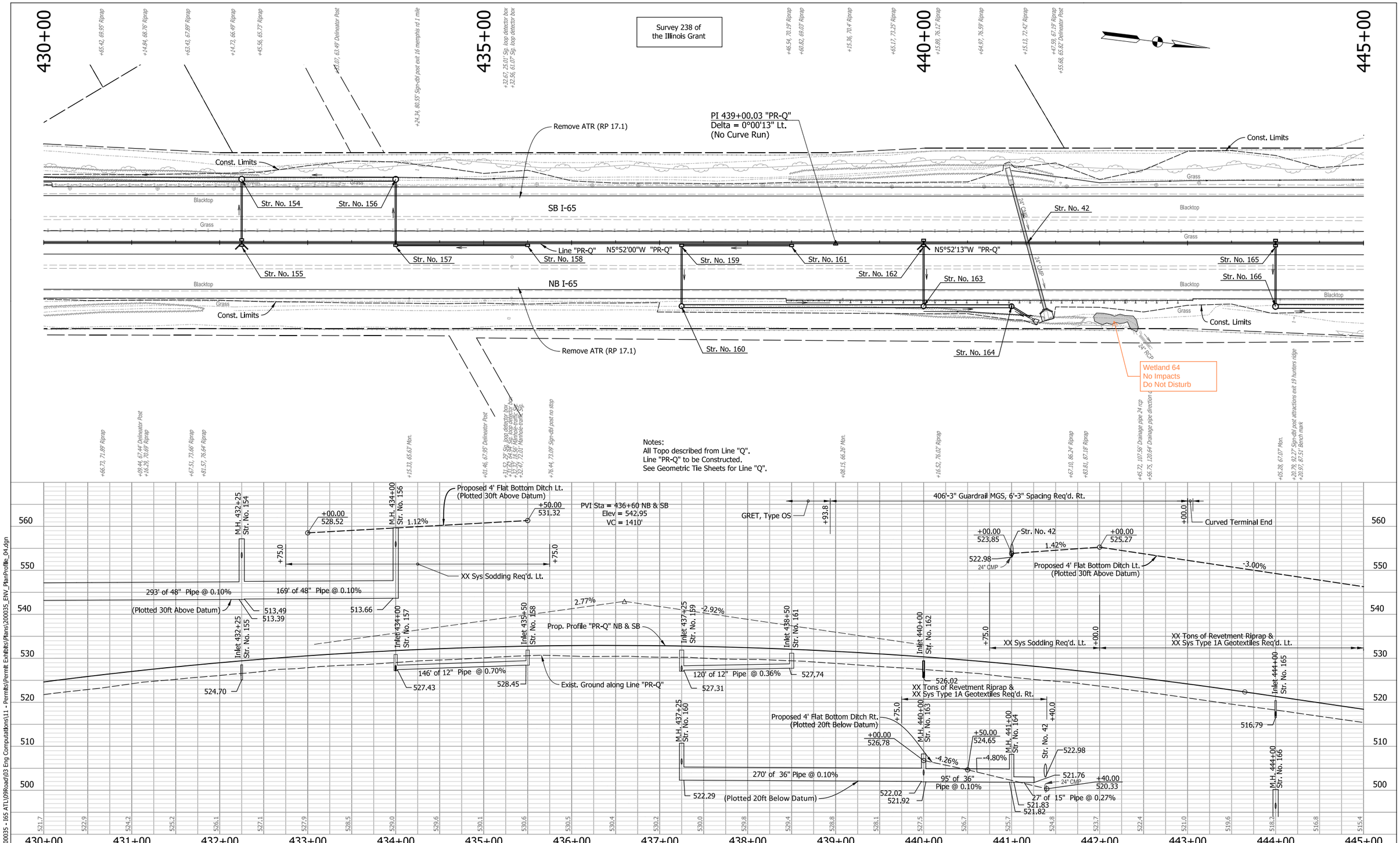

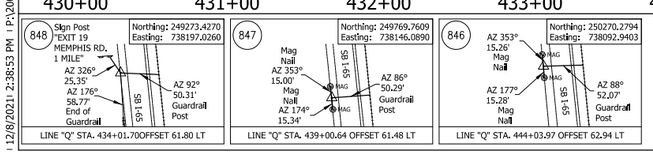

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 430+00.00 TO STA. 445+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	5 of 25
CONTRACT	PROJECT
R-41529	1700135

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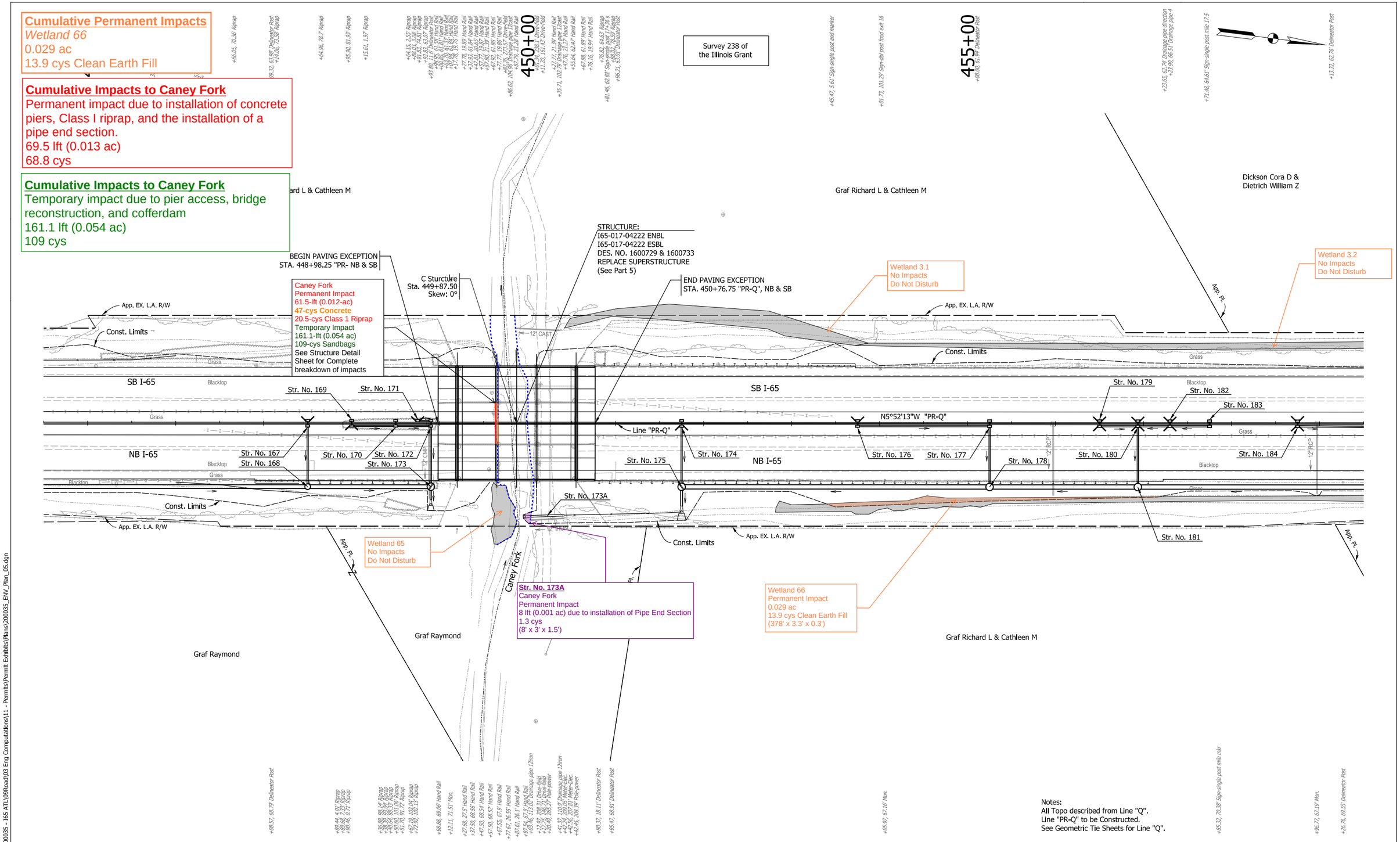
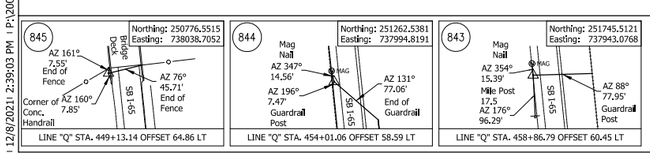




Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

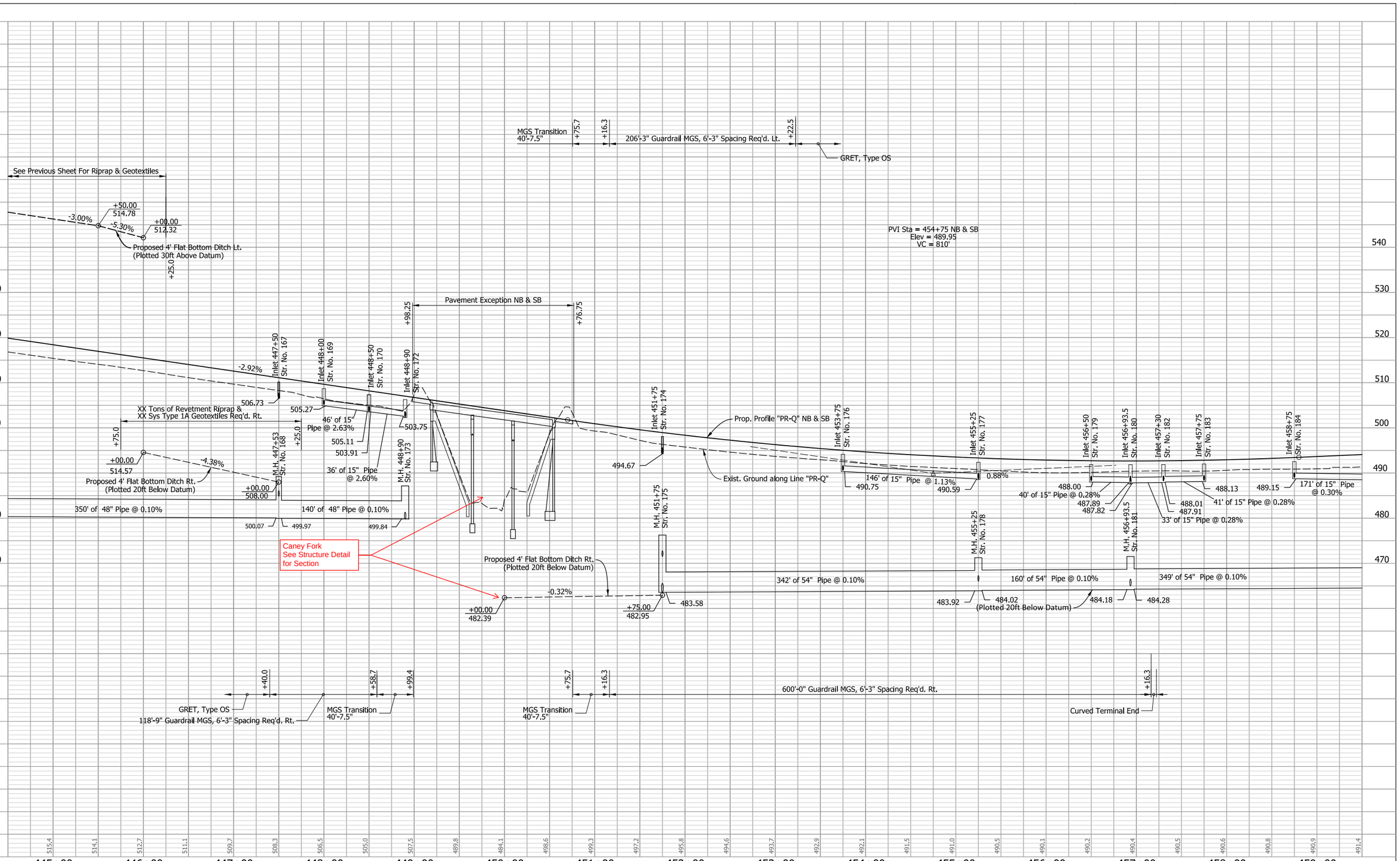
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
STA. 444+50.00 TO STA. 459+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
N.A.	1700135
SURVEY BOOK	SHEETS
Electronic	6 of 25
CONTRACT	PROJECT
R-41529	1700135

12/8/2021 2:39:03 PM P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Plan_05.dgn



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: AMD DRAWN: JJP	PROFILE STA. 444+50.00 TO STA. 459+50.00
CHECKED: DJG CHECKED: DJG	

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	7 of 25
CONTRACT	PROJECT
R-41529	1700135

12/8/2021 2:39:14 PM I:\P\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Profile_05.dgn

Cumulative Permanent Impacts
Wetland 67
0.075 ac
119.3 cys Clean Earth Fill

465+00

470+00

Survey 238 of the Illinois Grant

Survey 253 of the Illinois Grant

Dickson Cora D & Dietrich William Z

Graf Richard L & Cathleen M

Wetland 3.2
No Impacts
Do Not Disturb

Wetland 4
No Impacts
Do Not Disturb

Do Not Disturb Existing Pipe
68" x 43" HDPE

Henry Brook

App. Pl.

App. Section Line

App. EX. L.A. R/W

Const. Limits

C.P. 842

C.P. 841

C.P. 840

Grass

Blacktop

SB I-65

NB I-65

N5°52'13"W "PR-Q"

Line "PR-Q"

Str. No. 185

Str. No. 186

Str. No. 187

Str. No. 188

Str. No. 189

Str. No. 190

Str. No. 191

Str. No. 192

Str. No. 193

Str. No. 195

Str. No. 196

Str. No. 197

Str. No. 198

68" x 43" HDPE

12" RCP

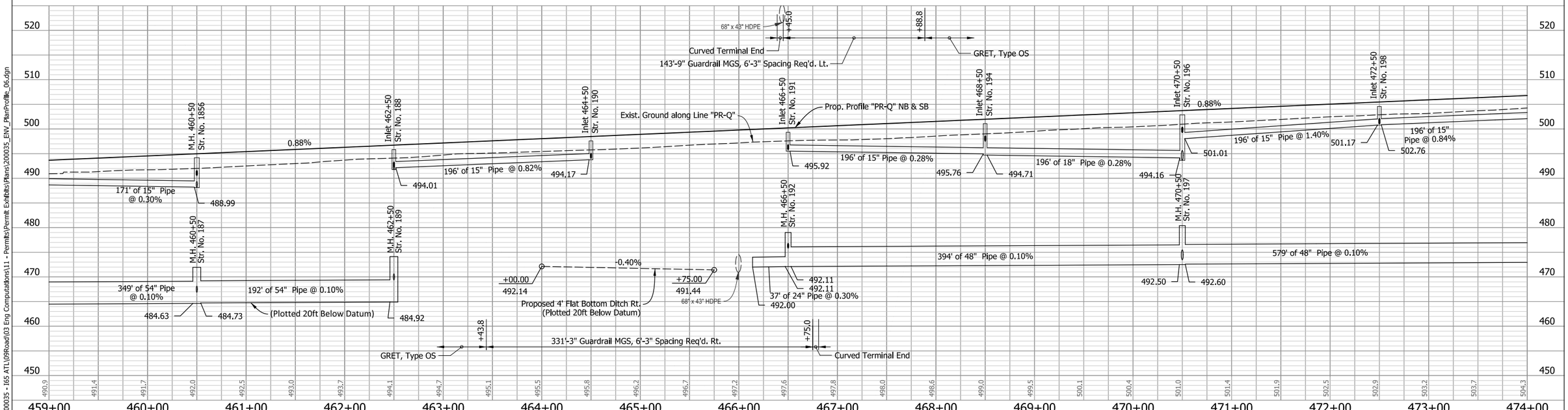
Wetland 65
No Impacts
Do Not Disturb

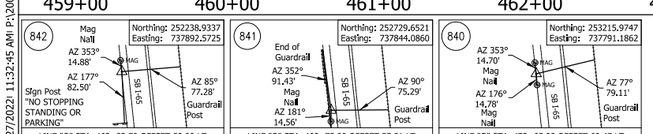
Wetland 67
Permanent Impact
0.002 ac
2.5 cys Clean Earth Fill
(26' x 2.6' x 1.0')

Wetland 67
Permanent Impact
0.046 ac
72.9 cys Clean Earth Fill
(615' x 3.2' x 1.0')
*Additional Impacts
on following sheet

OHWM

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".





Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 459+00.00 TO STA. 474+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	8 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 67
See Previous Sheet

47 | 480+00 | 485+00

+50.52, 62.52' Delineator Post
+42.12, 62.38' Delineator Post
+94.69, 63.19' Drainage pipe
+94.69, 63.31' Drainage pipe
+76.68, 62.74' Delineator Post
+66.20, 62.9' Delineator Post
+86.63, +/-78' Sign-on post watch for trucks and vehicles with trailers use right lane
+47.05, 65.94' Sign-obi post watch for ice on bridges
+35.40, 64.95' Sign-single post mile marker 180

Survey 253 of the Illinois Grant

Graf Richard L & Cathleen M

Mosteller Jerry & Marie

See Next Sheet for impacts

EX. R/W
App. EX. L.A. R/W
OHWM
Henry Brook
C.P. 840
Grass
Blacktop
Const. Limits
C.P. 839
C.P. 838
C.P. 837
12" RCP
Str. No. 199
Str. No. 201
Str. No. 203
SB I-65
Str. No. 206
Str. No. 207
Str. No. 43
24" CMP
Str. No. 209
Str. No. 211
Str. No. 212
N5°52'13"W "PR-Q"
Line "PR-Q"
Str. No. 204
Str. No. 200
Str. No. 202
NB I-65
Str. No. 208
Str. No. 210
36" CMP
Str. No. 205
App. Pl.
App. Section Line

Survey 238 of the Illinois Grant

Wetland 67
Permanent Impact
0.027 ac
43.9 cys Clean Earth Fill
(228' x 5.2' x 1.0')
*Additional Impacts
on previous sheet

+72.13, 67.55' Mon.
+37.53, 70.19' Delineator Post
+64.68, 67.83' Mon.
Havens William & Rebecca
+88.14, 74.4' Riprap
+00.22, 79.67' Riprap
+02.29, 105' Riprap
+61.44, 78.58' Sign-single post mile mkr
Smith Carl & Caroline
+52.91, 68.58' Mon.
+17.58, 69.98' Delineator Post
+97.15, 113.52' Mon.
+15.42, 103.49' Mon.
Mosteller Jerry & Marie
+43.03, 68.05' Mon.

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

Curved Terminal End
Guardrail MGS, 6'-3" Spacing Req'd. Lt.
+40.9
M.H. 484+75
Str. No. 209
Str. No. 43
M.H. 486+50
Str. No. 211
168' of 48" Pipe @ 0.10%
510.72
17' of 24" Pipe
@ 0.30%
(Plotted 30ft Above Datum)
508.66
512.27
PVI Sta = 484+00 NB & SB
Elev = 515.54
VC = 250'
Inlet 474+50
Str. No. 199
Inlet 476+50
Str. No. 201
M.H. 478+50
Str. No. 204
Inlet 480+50
Str. No. 206
Inlet 482+50
Str. No. 207
Inlet 484+75
Str. No. 210
Inlet 486+50
Str. No. 212
Prop. Profile "PR-Q" NB & SB
0.88%
0.98%
Exist. Ground along Line "PR-Q"
196' of 15" Pipe @ 0.84%
502.92
504.67
196' of 15" Pipe @ 0.28%
504.51
508.01
196' of 15" Pipe @ 1.36%
508.17
509.92
511.56
513.35
196' of 15" Pipe @ 0.96%
515.23
M.H. 476-35
Str. No. 200
M.H. 476+50
Str. No. 202
+50.00
507.40
M.H. 478+50
Str. No. 205
Proposed V-Ditch Rt.
(Plotted 20ft Below Datum)
M.H. 482+50
Str. No. 208
+00.00
514.00
Str. No. 43
509.66
192' of 54" Pipe @ 0.10%
392' of 54" Pipe @ 0.10%
499.63
499.63
8' of 24" Pipe @ 0.10%
499.62
499.82
499.92
(Plotted 20ft Below Datum)
500.31
579' of 48" Pipe @ 0.10%
493.18

560 540 530 520 510 500 490 480 470

504.3 504.7 505.1 505.6 505.9 506.2 506.6 507.1 507.5 507.9 508.4 508.9 509.3 509.9 510.2 510.7 511.2 511.3 511.8 512.3 512.9 513.4 514.0 514.5 515.0 515.5 515.9 516.5 517.1 517.7

474+00 475+00 476+00 477+00 478+00 479+00 480+00 481+00 482+00 483+00 484+00 485+00 486+00 487+00 488+00

839 AZ 354° 15.07' Mag Nail Northing: 253706.0767 Easting: 737740.9081
Sign Post "TRUCKS AND VEHICLES WITH TRAILERS USE RIGHT LANE" AZ 183° 71.77' Guardrail Post AZ 82° 78.92'
SB I-65
LINE "Q" STA. 478+56.76 OFFSET 60.14 LT

838 AZ 353° 14.56' Mag Nail Northing: 254193.4101 Easting: 737690.4383
Mile Post 18.0 AZ 177° 92.17' Guardrail Post AZ 81° 78.26'
SB I-65
LINE "Q" STA. 783+47.69 OFFSET 60.69 LT

837 AZ 272° 8.09' Concrete Structure Northing: 254684.2371 Easting: 737639.8349
Mag Nail AZ 175° 14.95' AZ 85° 78.62' Guardrail Post
SB I-65
LINE "Q" STA. 488+41.12 OFFSET 60.19 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP
CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 473+50.00 TO STA. 488+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	9 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Impacts to Henry Brook
Permanent Impact due to installation of new 72" Pipe, ditch grading, and riprap
242 lft (0.036 ac.)
47.1 Cys

Cumulative Impacts to Henry Brook
Temporary Impact due to installation of Cofferdams
32 lft (0.0058 ac.)
1.6 Cys Sandbags

Cumulative Permanent Impacts
Wetland 68
0.013 ac
9.5 cys Clean Earth Fill

Cumulative Temporary Impacts
Wetland 68
0.001 ac
0.8 cys Sandbags

Henry Brook
Permanent Impact
12 lft (0.002 ac)
6.2 cys Class 1 Riprap
(12' x 7' x 2')

Str. No. 45
Henry Brook
Permanent Impact
153 lft (0.021 ac) due to installation of New 153 lft of 66" Pipe
17.0 cys
(153' x 6' x 0.5')

STR. No. 45
Henry Brook
Temporary Access
5 lft
0.0008 ac
0 cys fill (Access Only)
(5' x 7')
Temporary Cofferdam
3 lft
0.001 (ac) Cofferdam
0.4 cys Sand Bags
(3' x 7' x 0.5')

Henry Brook
Permanent Impact
24 lft (0.004 ac)
12.4 cys Class 1 Riprap
(24' x 7' x 2')

STR. No. 44
Henry Brook
Temporary Access
15 lft
0.002 ac
0 cys fill (Access Only)
(15' x 7')
Temporary Cofferdam
6 lft
0.001 (ac) Cofferdam
0.8 cys Sandbags
(6' x 7' x 0.5')

Henry Brook
Permanent Impact
8 lft (0.001 ac)
3.1 cys Revetment Riprap
(8' x 7' x 1.5')

Wetland 68
Temporary Impact
0.001 (ac) Cofferdam
0.8 cys Sandbags
(6' x 7' x 0.5')

Wetland 68
Permanent Impact
0.001 ac
4.0 cys Clean Earth Fill
(12' x 6' x 1.5')

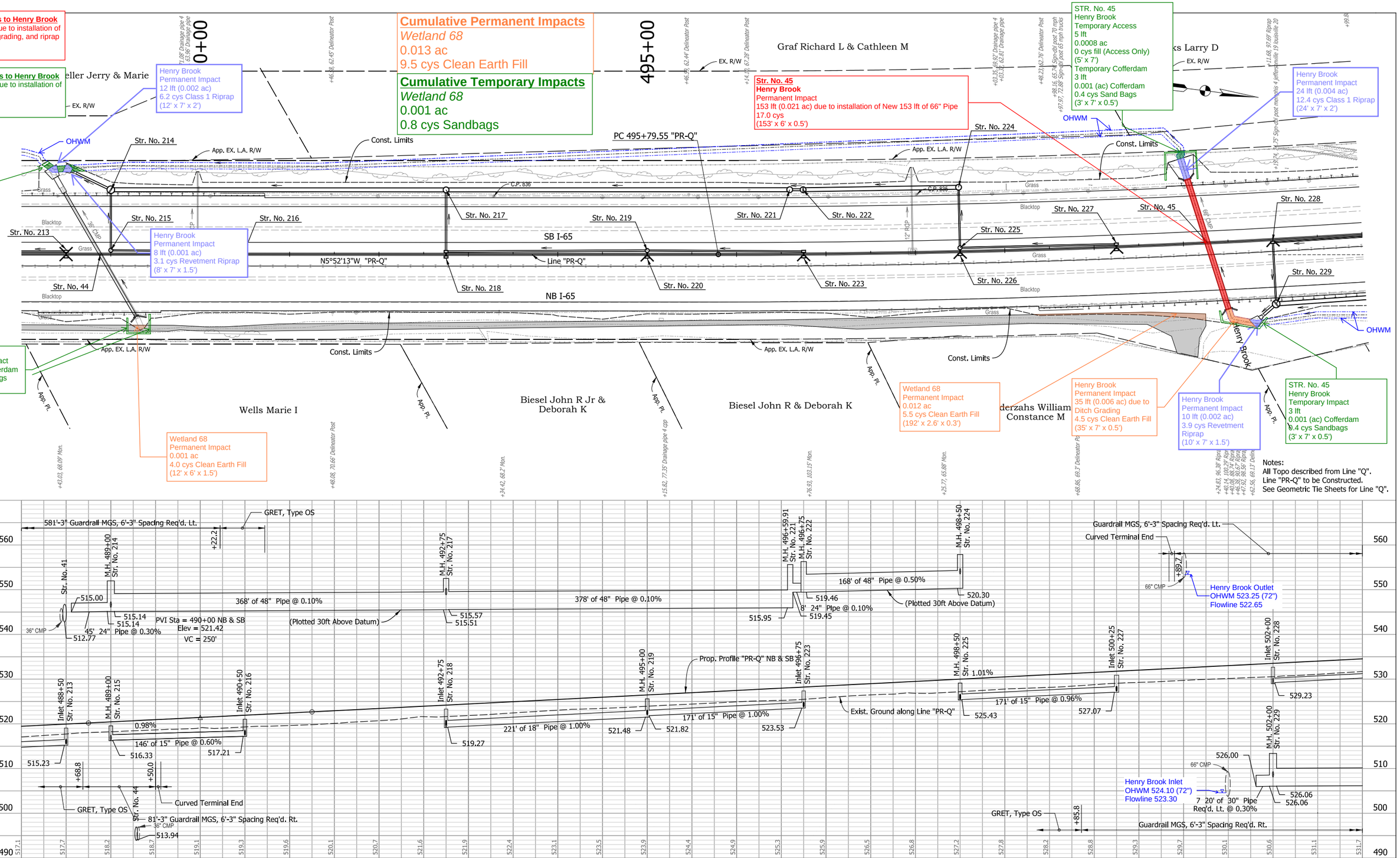
Wetland 68
Permanent Impact
0.012 ac
5.5 cys Clean Earth Fill
(192' x 2.6' x 0.3')

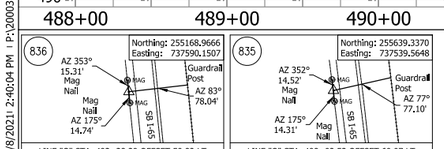
Henry Brook
Permanent Impact
35 lft (0.006 ac) due to Ditch Grading
4.5 cys Clean Earth Fill
(35' x 7' x 0.5')

Henry Brook
Permanent Impact
10 lft (0.002 ac)
3.9 cys Revetment Riprap
(10' x 7' x 1.5')

STR. No. 45
Henry Brook
Temporary Impact
3 lft
0.001 (ac) Cofferdam
0.4 cys Sandbags
(3' x 7' x 0.5')

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 488+00.00 TO STA. 503+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	10 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 5
0.044 ac
68.6 cys Dredge
1.2 cys Clean Earth Fill

Cumulative Impacts to Henry Brook
See previous sheet.

505+00 | 510+00 | 515+00

Joiner Travis Wayne & Lisa Marie | Tomes Charles J & Sara | Meyer Jeffrey | Vincent H,Hoffer D & Basham S(rts Of Surv) | Waterfill Lora J

Survey 238 of the Illinois Grant

Wetland 5
Permanent Impact
0.043 ac
68.6 cys Dredge
(475' x 3.9' x 1.0')

Wetland 5
Permanent Impact
0.001 ac
1.2 cys Clean Earth Fill
(50' x 1.25' x 0.5')

SE = 2.00%

PT 512+17.33 "PR-Q"

PI 503+99.83 "PR-Q"

N14°03'31"W "PR-Q"

Line "PR-Q"

SB I-65

NB I-65

Henry Brook

OHWM

Wetland 69
No Impacts
Do Not Disturb

Nasby Raymond J

Guernsey Kevin & Debra

McDonough Danny P & Freeman Tasha L

Chism Terry S

Stickels Caven D

Green Tiffany

Infinity Homes and Development LLC

Hathaway Ronald L & Eva

Murphy Joey & Patricia L

Survey 254 of the Illinois Grant

Note to reviewer: Noisewall required STA 504+50 to STA 518+50 RT. Design under development and to be included in future submittals.

Notes:
All Topo described from Line "Q", Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

Const. Limits | App. Section Line | App. EX. L.A. R/W | EX. R/W | App. Pl. | C.P. 832 | C.P. 833 | C.P. 834 | Grass | Blacktop | 12" RCP

Str. No. 230 | Str. No. 231 | Str. No. 232 | Str. No. 233 | Str. No. 234 | Str. No. 235 | Str. No. 236 | Str. No. 237 | Str. No. 238 | Str. No. 239 | Str. No. 240 | Str. No. 241 | Str. No. 242

Install Impact Attenuator Type R2-W1, TL-3 | Sta. 506+38, Median Opening W = 30'

Proposed 4' Flat Bottom Ditch Lt. (Plotted 30ft Above Datum)
+50.00 533.52 | 1.17% | +00.00 542.26 | +25.0

1262'-6" Guardrail MGS, 6'-3" Spacing Req'd. Lt.

PVI Sta = 508+00 NB & SB
Elev = 539.59
VC = 350'

Prop. Profile "PR-Q" NB & SB

Exist. Ground along Line "PR-Q"

Inlet 503+75 Str. No. 230 | Inlet 505+50 Str. No. 231 | Inlet 507+25 Str. No. 233 | Inlet 509+00 Str. No. 235 | Inlet 510+75 Str. No. 237 | Inlet 512+50 Str. No. 238 | Inlet 514+50 Str. No. 240 | Inlet 516+50 Str. No. 242

171' of 12" Pipe @ 1.04% | 531.01 | 1.01% | 532.51 | 171' of 15" Pipe @ 1.00% | 534.22 | 171' of 12" Pipe @ 1.04% | 534.47 | 536.25 | 171' of 15" Pipe @ 0.28% | 537.95 | 537.81 | 0.97% | 543.39 | 196' of 15" Pipe @ 0.92% | 543.55

M.H. 505+50 Str. No. 232 | M.H. 508+85 Str. No. 234 | M.H. 509+00 Str. No. 236 | M.H. 512+50 Str. No. 239 | M.H. 514+50 Str. No. 241

345' of 48" Pipe @ 0.10% | 526.51 | 526.41 | 331' of 48" Pipe @ 0.10% | 526.84 | 531.63 | 531.63 | 9' of 24" Pipe @ 0.10% | 531.62 | 346' of 48" Pipe @ 0.10% | 531.98 | 532.08 | 194' of 48" Pipe @ 0.10% | 532.27

(Plotted 20ft Below Datum) | (Plotted 20ft Below Datum)

+05.0 | Curved Terminal End

1025'-0" Guardrail MGS, 6'-3" Spacing Req'd. Rt.

+88.6 | GRET, Type OS

+43.5 | 481'-3" Guardrail MGS, 6'-3" Spacing Req'd. Rt. | GRET, Type OS

531.7 | 532.1 | 532.6 | 533.2 | 533.8 | 534.4 | 535.7 | 537.4 | 536.0 | 536.4 | 536.9 | 537.3 | 537.8 | 538.2 | 538.7 | 539.2 | 539.6 | 540.1 | 540.7 | 541.2 | 541.5 | 541.9 | 542.3 | 543.0 | 543.3 | 543.8 | 544.5 | 545.1 | 545.7 | 545.9

503+00 | 504+00 | 505+00 | 506+00 | 507+00 | 508+00 | 509+00 | 510+00 | 511+00 | 512+00 | 513+00 | 514+00 | 515+00 | 516+00 | 517+00

560 | 550 | 540 | 530 | 520 | 510 | 500

---

(834) Northing: 256143.9517 Easting: 737466.5375
Mag Nail AZ 354° 24.66' | AZ 177° 95.08' | Sign Post "MEMPHIS 4 JEFFERSONVILLE 19 LOUISVILLE 20" | Guardrail Post AZ 80° 77.24' | SB I-65
LINE "Q" STA. 503+15.14 OFFSET 60.57 LT

(833) Northing: 256620.6789 Easting: 737377.8659
AZ 333° 9.94' Guardrail Post | End of Guardrail AZ 170° 130.30' | AZ 83° 48.05' Guardrail Post | SB I-65
LINE "Q" STA. 508+02.63 OFFSET 59.37 LT

(832) Northing: 257093.6620 Easting: 737267.8431
AZ 319° 5.78' Guardrail Post | Mile Post 18.5 AZ 168° 164.14' | AZ 88° 48.80' Guardrail Post | SB I-65
LINE "Q" STA. 512+90.43 OFFSET 59.41 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP | CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 502+50.00 TO STA. 517+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	11 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts

Wetland 6
0.122 ac
396.3 cys Dredge

Wetland 62
0.030 ac
95.9 cys Clean Earthen Fill

Wetland 70
0.005 ac
2.6 cys Clean Earthen Fill
5.3 cys Riprap
0.4 cys Pipe End Section

Wetland 6
Permanent Impact
0.122 ac
396.3 cys Dredge
(723' x 7.4' x 2.0')

Survey 254 of
the Illinois Grant

Wetland 70
Permanent Impact
0.002 ac
0.9 cys Clean Earth Fill
(4' x 4.2' x 1.5')
0.001 ac
5.3 cys Revetment Riprap
(49.7 sq ft x 1.5')

Note to reviewer: Noisewall required
STA 504+50 to STA 518+50 RT.
Design under development and
to be included in future submittals.

Wetland 70
Permanent Impact
0.001 ac
1.7 cys Clean Earth Fill
(13' x 3.6' x 1.0')
0.001 ac
0.4 cys Pipe End Section
(11.6 sq ft x 1.0')

Wetland 62
Permanent Impact
0.030 ac
95.9 cys Clean Earthen Fill
(156' x 8.3' x 2.0')

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

Albatys Andrew J &
Sharon K Embrey

Mount Zion Cemetery Assoc Inc

Murphy Joey & Patricia L

520+00 525+00 530+00

PC 528+88.61 "PR-Q"

SB I-65

NB I-65

N14°03'31"W "PR-Q"

Line "PR-Q"

Str. No. 46 Str. No. 243 Str. No. 244 Str. No. 245 Str. No. 246 Str. No. 247 Str. No. 248 Str. No. 249 Str. No. 250 Str. No. 251 Str. No. 252 Str. No. 253 Str. No. 254 Str. No. 255 Str. No. 256

C.P. 828 C.P. 829 C.P. 830

12" RCP 18" RCP 30" CP

App. EX. L.A. R/W EX. R/W App. Section Line App. Pl. Const. Limits Grass Blacktop

XX Sys Sodding Req'd. Lt.

XX Tons of Revetment Riprap & XX Sys Type 1A Geotextiles Req'd. Lt.

Proposed 4' Flat Bottom Ditch Lt.
(Plotted 30ft Above Datum)

Prop. Profile "PR-Q" NB & SB

Exist. Ground along Line "PR-Q"

XX Tons of Revetment Riprap & XX
Sys Type 1A Geotextiles Req'd. Rt.

20' of 24" Pipe @ 0.30%

Proposed 4' Flat
Bottom Ditch Rt.
Plotted 20ft Below Datum)

218' of 48" Pipe @ 0.10%

219' of 48" Pipe @ 0.10%

(Plotted 20ft Below Datum)

79' of 48" Pipe
@ 0.10%

11.5' of 24" Pipe @ 0.10%

125' of 48" Pipe @ 0.10%

275' of 48" Pipe @ 0.10%

(Plotted 20ft Below Datum)

127.3' of 48" Pipe @ 0.10%

127.8' of 48" Pipe @ 0.10%

221' of 15" Pipe @ 1.00%

221' of 15" Pipe @ 0.40%

Proposed 6' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

Guardrail MGS, 6'-3" Spacing Req'd. Rt.

Curved Terminal End

PVI Sta = 518+00 NB & SB
Elev = 549.33
VC = 250'

PVI Sta = 530+00 NB & SB
Elev = 561.52
VC = 400'

0.97% 1.40% 3.76% 0.84% 0.88% 1.73% 1.02% 0.97% 1.00% 5.32% 0.32%

Inlet 518+50 Str. No. 243
Inlet 520+75 Str. No. 245
Inlet 523+00 Str. No. 247
Inlet 525+25 Str. No. 251
Inlet 527+50 Str. No. 253
Inlet 529+75 Str. No. 255
Inlet 532+00
M.H. 518+50 Str. No. 244
M.H. 520+75 Str. No. 246
M.H. 523+00 Str. No. 248
M.H. 523+85 Str. No. 249
M.H. 524+00 Str. No. 250
M.H. 525+25 Str. No. 252
M.H. 528+00 Str. No. 254
M.H. 530+71.77 Str. No. 256
M.H. 532+00

547.65 543.03 543.06 543.06 542.11 542.12 541.96 543.02 543.28 543.38 547.81 549.94 543.60 543.70 543.78 547.19 547.18 547.41 547.31 554.51 554.67 547.78 547.68 556.94 548.05 548.15 548.27 556.78 557.82

+62.00 +87.00 543.03 +20.00 544.89 +20.00 +00.00 547.90 +25.00 +50.00 550.85 +50.00 553.50 +00.00 556.10 +25.0 +25.0 +00.0 +42.0 +95.01 +95.00 +70.00 543.60 +42.00 +24.75

XX Sys Sodding Req'd. Lt.
XX Tons of Revetment Riprap & XX Sys Type 1A Geotextiles Req'd. Lt.
XX Sys Sodding Req'd. Rt.

510 520 530 540 550 560 570 580

517+00 518+00 519+00 520+00 521+00 522+00 523+00 524+00 525+00 526+00 527+00 528+00 529+00 530+00 531+00 532+00

831 Northing: 257566.4311 Easting: 737148.2524
Concrete Structure AZ 306° 15.86' AZ 163° 131.37' End of Guardrail AZ 71° 49.44' Guardrail Post
LINE "Q" STA. 567+99.94 OFFSET 61.31 LT

830 Northing: 258041.6797 Easting: 737029.5152
AZ 346° 14.03' Mag Nail AZ 167° 13.65' Mag Nail AZ 82° 49.92' Guardrail Post
LINE "Q" STA. 572+89.80 OFFSET 61.80 LT

829 Northing: 258474.1171 Easting: 736911.4265
AZ 119° 81.17' Guardrail Post Guardrail Post AZ 53° 64.65' AZ 90° 61.43' Guardrail Post
LINE "Q" STA. 577+37.95 OFFSET 71.99 LT

828 Northing: 258891.6632 Easting: 736807.1019
Guardrail Post AZ 114° 76.81' AZ 48° 69.35' Guardrail Post AZ 83° 61.43' Guardrail Post
LINE "Q" STA. 581+67.61 OFFSET 73.53 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 517+00.00 TO STA. 532+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	12 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts

Wetland 7
0.0025 ac
6.0 cys Revetment Riprap
0.5 cys Clean Earth Fill

Wetland 8
0.099 ac
308.5 cys Dredge
9.5 cys Riprap
0.3 cys pipe and PES

Wetland 71
0.044 ac
71.5 cys Dredge

Survey 269 of the Illinois Grant

Wetland 7 Permanent
0.0005 ac
0.5 cys Clean Earth Fill (2' x 3' x 1.5')
0.002 ac
6.0 cys Revetment Riprap (108 sq ft x 1.5')

Wetland 8 Permanent Impact
0.0005 ac
3.8 cys Revetment Riprap (22.9 sq ft x 1.5')

Wetland 8 Permanent Impact
0.002 ac
4.5 cys Revetment Riprap (80.7 sq ft x 1.5')

Wetland 8 Permanent Impact
0.095 ac
308.5 cys Dredge (490' x 8.5' x 2.0')

Wetland 8 Permanent Impact
0.0005 ac
0.9 cys Revetment Riprap (16.4 sq ft x 1.5')
0.00025 ac
0.2 cys Pipe with PES (7.1 sq ft x 0.6')

Wetland 8 Permanent Impact
0.0005 ac
0.3 cys Revetment Riprap (4.5 sq ft x 1.5')
0.00025 ac
0.1 cys Pipe End Section (6.0 sq ft x 0.5')

Wetland 71 Permanent Impact
0.044 ac
71.5 cys Dredge (230' x 8.4' x 1.0')

535+00 540+00 545+00

Campbell Adam L & Casey J

Masters Elmer R & Kil C

SB I-65 NB I-65

Line "PR-Q" = "FAS 39"

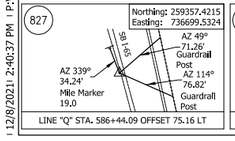
SR 160 FAS

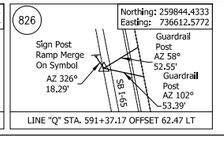
Str. No. 258 Str. No. 259 Str. No. 260 Str. No. 261 Str. No. 262 Str. No. 263 Str. No. 264 Str. No. 265 Str. No. 266 Str. No. 267 Str. No. 268 Str. No. 269 Str. No. 270 Str. No. 271 Str. No. 272 Str. No. 273 Str. No. 274 Str. No. 275 Str. No. 276 Str. No. 47 Str. No. 48

Const. Limits
Ex. Low Clearance: 19.51'
Prop Low Clearance: 19.56'
App. EX. L.A. R/W
App. Section Line
App. PI.
EX. R/W
Grass
Blacktop
12" CMP
24" CMP
18" RCP
12" RCP
36" RCP
Conc

Survey 254 of the Illinois Grant

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 531+50.00 TO STA. 546+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	13 of 25
CONTRACT	PROJECT
R-41529	1700135

PVI Sta = 545+70 NB & SB
Elev = 563.29
VC = 230'

PVI Sta = 538+60 NB & SB
Elev = 569.82
VC = 650'

Inlet 532+00 Str. No. 258
Inlet 534+00 Str. No. 260
Inlet 536+50 Str. No. 263
Inlet 539+75 Str. No. 267
Inlet 540+75.00 Str. No. 270
Inlet 542+00 Str. No. 272
Inlet 543+25 Str. No. 273
Inlet 544+50 Str. No. 274
Inlet 545+25 Str. No. 275
Inlet 546+40 Str. No. 276
M.H. 532+00 Str. No. 259
M.H. 535+20.4 Str. No. 261
M.H. 536+50 Str. No. 262
M.H. 539+75 Str. No. 266
M.H. 540+75 Str. No. 268
M.H. 541+25 Str. No. 271

OH-T Low Sag Sta. 532+98, 4.3' Lt. Elev. 583.68
Curved Terminal End
356'-3" Guardrail MGS, 6'-3" Spacing Req'd. Lt.
GRET, Type OS
Prop. Profile "PR-Q" NB & SB
Exist. Ground along Line "PR-Q"
0.97%
196' of 15" Pipe @ 1.50%
125' of 36" Pipe @ 0.10%
95' of 36" Pipe @ 0.10%
45' of 36" Pipe @ 0.10%
121' of 12" Pipe @ 0.36%
121' of 15" Pipe @ 0.84%
-0.92%
0.24%
6.00%
0.30%
-10.05%
Proposed 6' Flat Bottom Ditch Rt. (Plotted 20ft Below Datum)
Sodding Req'd. Rt.
GRET, Type OS
243'-9" Guardrail MGS, 6'-3" Spacing Req'd. Rt.
Curved Terminal End
Proposed 4' Flat Bottom Ditch Rt. (Plotted 30ft Above Datum)
Proposed 10' Flat Bottom Ditch Lt. (Plotted 30ft Above Datum)
262'-6" Guardrail MGS, 6'-3" Spacing Req'd. Rt.
25'-0" Transition, Type GP
XX Tons of Revetment Riprap & XX Sys Type IA Geotextiles Req'd. Lt.
Revetment Riprap & Geotextiles Req'd. Rt.
SB I-65 Sta. 545+70.95, 39.25' Lt. Bottom Beam Elev. 579.62
NB I-65 Sta. 545+46.73, 39.25' Rt. Bottom Beam Elev. 579.58
Pavement Elev. 563.56 Vert. Clearance = 16.02'
Pavement Elev. 563.37 Vert. Clearance = 16.25'
Elevations: 560.91, 561.07, 562.88, 563.81, 561.95, 562.38, 560.82, 559.81, 559.42, 556.78, 562.07, 554.49, 557.27, 557.14, 559.27, 559.07, 559.17, 559.02, 559.34, 558.48, 559.13, 562.13, 560.67, 562.00, 562.68, 561.92, 557.90
Stations: +50.00, +45.0, +99.7, +85.6, +30.0, +53.4, +16.7, +41.7, +75.0, +00.0, +25.00, +75.00, +40.00

600 590 580 570 560 550 540 530

532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00 541+00 542+00 543+00 544+00 545+00 546+00

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Cumulative Permanent Impacts
Wetland 61
0.033 ac
73.7 cys Clean Earthen Fill

550+00

555+00

560+00

CURVE # 4
PI = 557+41.91 "PR-Q"
Delta = 14°12'37" RT
D = 0°15'01"
R = 22891.00'
T = 2853.30'
L = 5677.32'
E = 177.14'
SE = N.C.

PI 557+41.91 "PR-Q"

Survey 269 of the Illinois Grant

FAS 39
SR 160
Const. Limits
C.P. 825
Grass
App. EX. L.A. R/W
Schuler David J Jr (Life Estate)
EX. R/W
18" RCP
18" CMP
12" RCP
C.P. 824
C.P. 823
Const. Limits
App. EX. L.A. R/W
Grass
Blacktop

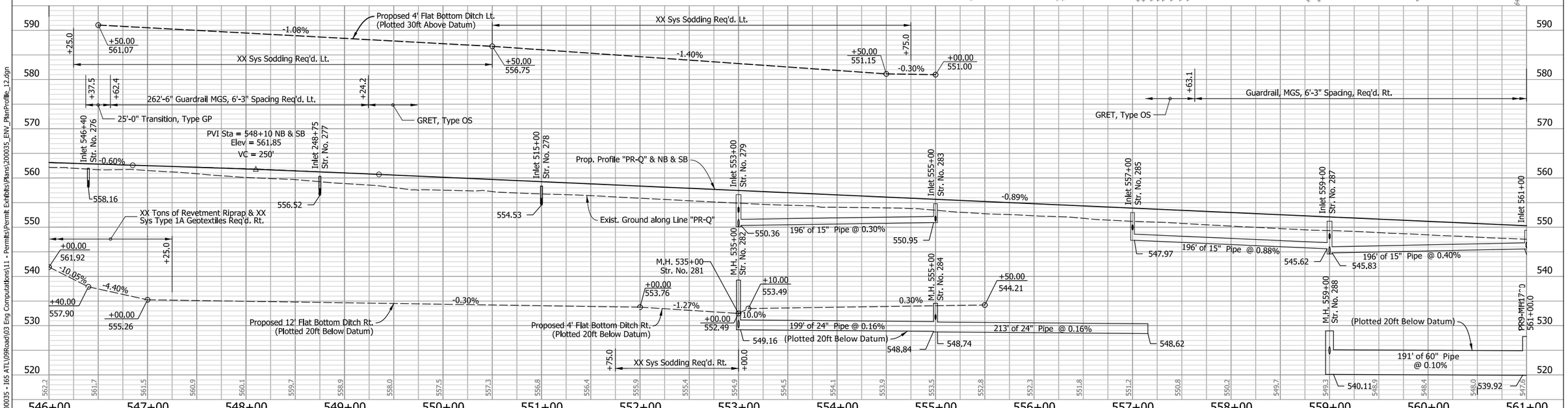
Str. No. 276
Str. No. 277
SB I-65
Str. No. 278
Str. No. 279
Line "PR-Q"
NB I-65
Str. No. 280
Str. No. 281
Str. No. 282
Str. No. 283
Str. No. 284
Str. No. 285
Str. No. 286
Str. No. 287
Str. No. 288
Grass
Woods
Blacktop

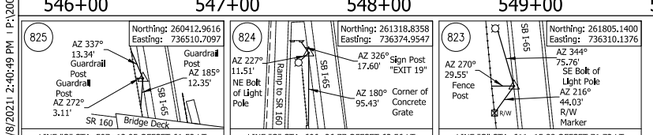
Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

Wetland 61
Permanent Impact
0.033 ac
73.7 cys Clean Earthen Fill
(128' x 11.1' x 1.4')

Wetland 72
No Impacts
Do Not Disturb

Guernsey Kevin
Eve Beth Ann Lumpkins & Jeremy S
Guernsey Guy C Jr & Elizabeth A & Andrew & Tuesday
Munk Jay Keith & Norma Frances





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 546+00.00 TO STA. 561+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	14 of 25
CONTRACT	PROJECT
R-41529	1700135

12/8/2021 2:40:49 PM I:\P\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_PlanProfile_12.dgn

Cumulative Permanent Impacts
Wetland 73
0.002 ac
1.2 cys Clean Earth Fill

er David J Jr
fe Estate)

Survey 269 of
the Illinois Grant

Vaughn Robert Keith
& Sheila M

Grebe Phillip

Bruce James David Iii

Guthrie Teresa

Hemphill Nancy K.
& Michael W.

Silletto Gary

Munk Jay Keith &
Norma Frances

565+00

570+00

575+00

EX. R/W

App. Pl.

Const. Limits

App. EX. L.A. R/W

Do Not Disturb Existing Pipe
54" CMP

ATR to be upgraded (RP 19.8)

Str. No. 287

Str. No. 49

Str. No. 290

Str. No. 291

Str. No. 292

Str. No. 293

Str. No. 294

Str. No. 295

Str. No. 296

Str. No. 297

Str. No. 298

Str. No. 299

Str. No. 300

Str. No. 301

Str. No. 302

Str. No. 303

SB I-65

NB I-65

Line "PR-Q"

18" RCP

12" RCP

18" CMP

54" CMP

C.P. 823

C.P. 822

C.P. 821

C.P. 820

Grass

Blacktop

Ville Run

Ville Run
No Impacts
Do Not Disturb

OHWM

Wetland 73
Permanent Impact
0.002 ac
1.2 cys Clean Earth Fill
(20' x 3.3' x .5')

Note to Reviewer:
Proposed ATR Details to be
included in future submittals.

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

580
570
560
550
540
530
520
510

Str. No. 49
+45.00
546.88
18" RCP (LL)
542.98
-1.23%
+00.00
542.51
Proposed 4' Flat Bottom Ditch Lt.
(Plotted 30ft Above Datum)
+20.0
XX Sys Sodding Req'd. Lt.
+25.0

PVI Sta = 563+75 NB & SB
Elev = 547.84
VC = 300'

PVI Sta = 566+50 NB & SB
Elev = 545.11
VC = 250'

PVI Sta = 569+00 NB & SB
Elev = 542.96
VC = 250'

Inlet 561+00
Str. No. 289
545.99
-0.89%

Inlet 563+00
Str. No. 292
542.13
196' of 15" Pipe @ 0.30%

Inlet 565+00
Str. No. 294
542.29
-0.99%

Inlet 567+00
Str. No. 297
540.38
196' of 15" Pipe @ 1.40%

Inlet 569+00
Str. No. 298
540.22
-0.86%

Prop. Profile NB "PR-Q" NB & SB

Exist. Ground along Line "PR-Q"

Inlet 571+00
Str. No. 300
536.50
196' of 15" Pipe @ 0.84%
-0.87%

Inlet 573+00
Str. No. 301
534.85
534.75
196' of 15" Pipe @ 0.84%

Inlet 575+00
Str. No. 302
533.10

M.H. 561+00
Str. No. 290
24' of 18" Pipe @ 0.50%
539.92
539.82
539.92
Str. No. 49
536.45
8" RCP (RL)

M.H. 563+00
Str. No. 293
193' of 48" Pipe @ 0.10%
536.43
(Plotted 20ft Below Datum)
536.24
536.24
13' of 18" Pipe @ 0.50%
536.20

M.H. 565+00
Str. No. 295

M.H. 566+52
Str. No. 296
(Plotted 20ft Below Datum)
243' of 48" Pipe @ 0.10%
531.90
532.02
532.02
31' of 18" Pipe @ 0.50%

M.H. 569+00
Str. No. 299
532.26
+10.1
Curved Terminal End

Proposed 4' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)
+00.00
538.59
-0.52%
+00.00
537.55
-0.88%

M.H. 575+00
Str. No. 303
523.11

1043'-9" Guardrail MGS, 6'-3" Spacing Req'd. Rt.

547.6 547.0 546.5 546.3 545.7 545.3 545.0 544.6 544.2 543.5 542.9 542.5 542.0 541.4 541.1 540.6 540.0 539.9 539.5 539.0 538.8 538.3 537.9 537.3 536.9 536.6 536.3 535.7 534.8

561+00 562+00 563+00 564+00 565+00 566+00 567+00 568+00 569+00 570+00 571+00 572+00 573+00 574+00 575+00

822
Northing: 262285.4827
Easting: 736272.6204
AZ 62°
82.94'
Guardrail
Post
AZ 90°
76.75'
Guardrail
Post
Guardrail Post
AZ 117°
90.05'
SB I-65
LINE "Q" STA. 615+96.21 OFFSET 63.68 LT

821
Northing: 262763.7406
Easting: 736236.4807
AZ 88°
75.39'
Guardrail
Post
AZ 116°
87.21'
Guardrail
Post
AZ 344°
49.78'
Sign Post
"EXIT 19"
SB I-65
LINE "Q" STA. 620+74.52 OFFSET 64.49 LT

820
Northing: 263245.8763
Easting: 736210.0646
Guardrail
Post
AZ 62°
84.36'
AZ 90°
75.81'
Guardrail
Post
Guardrail
Post
AZ 117°
88.04'
SB I-65
LINE "Q" STA. 625+56.03 OFFSET 65.44 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 560+50.00 TO STA. 575+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	15 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 60
0.041 ac
100.8 cys Clean Earthen Fill

Cumulative Impacts to Wolf Run
Permanent Impact due to installation of new 9' x 9' RC Box and riprap
240 lft (0.040 ac.)
111.5 Cys
Channel grading
30 lft channel grading (0.0048 ac)
12.8 cys Dredge

Cumulative Impacts to Wolf Run
Temporary Impact due to installation of Cofferdams
6 lft (0.002 ac.)
2.6 Cys Sandbags

Wetland 60
Permanent Impact
0.041 ac
100.8 cys Clean Earthen Fill
(189' x 9.6' x 1.5')

Survey 269 of the Illinois Grant

STR. No. 50
Wolf Run
Temporary Cofferdam
3 lft
0.001 (ac) Cofferdam
1.3 cys Sandbags
(3' x 7.2' x 1.6')

Wolf Run
Permanent Impact
Channel grading
25 lft (0.004 ac)
10.7 cys Dredge due to channel grading
(25' x 7.2' x 1.6')

Wolf Run
Permanent Impact
Riprap
35 lft (0.006 ac)
24.0 cys Class 2 Riprap
(35' x 7.2' x 2.5')

STR. No. 50
Wolf Run
Temporary Cofferdam
3 lft
0.001 (ac) Cofferdam
1.3 cys Sandbags
(3' x 7.2' x 1.6')

Str. No. 50
Wolf Run
Permanent Impact
205 lft (0.034 ac) due to installation of New 205 lft of 9' x 9' RC Box
87.5 cys
(205' x 7.2' x 1.6')

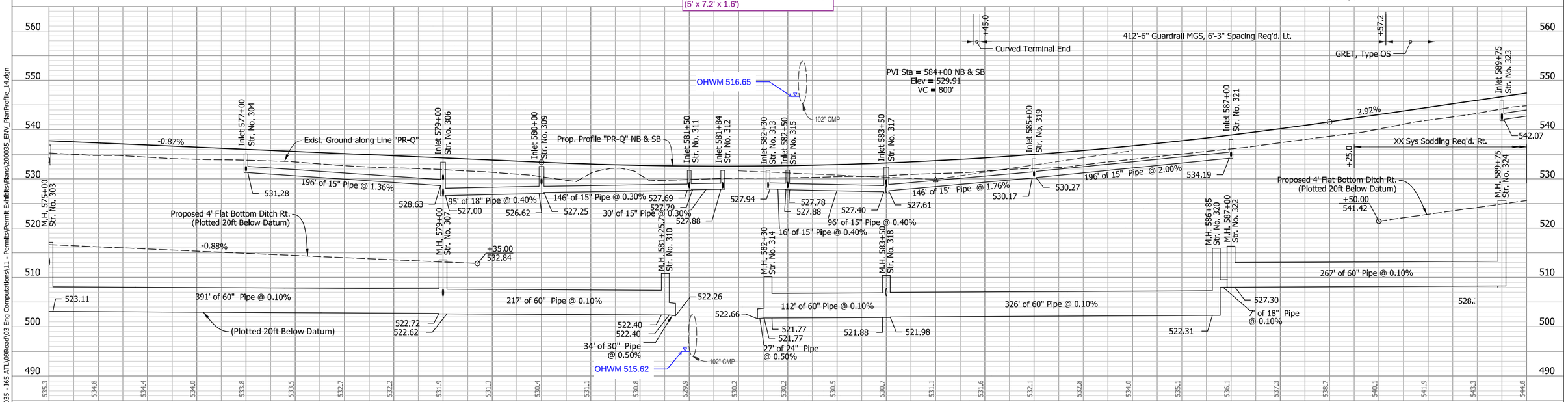
Wolf Run
Permanent Impact
Channel grading
5 lft (0.0008 ac)
2.1 cys Dredge due to channel grading
(5' x 7.2' x 1.6')

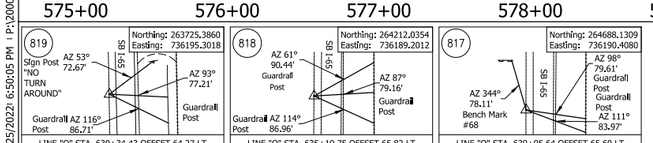
Hardee Hoyt & Inez

Carr Joe H Ii & Patricia Lea

Carr Joe H Ii & Patricia Lea

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".





Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 575+00.00 TO STA. 590+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	16 of 25
CONTRACT	PROJECT
R-41529	1700135

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590+00

595+00

600+00

Survey 269 of the Illinois Grant

Wetland 9
No Impacts
Do Not Disturb

Hardee Hoyt & Inez

Survey 283 of the Illinois Grant

State Of Indiana

State Of Indiana Dept Of Highways Div

UNT 1 to Wolf Run

App. EX. L.A. R/W

App. Section Line

Const. Limits

C.P. 817 Grass

C.P. 816

C.P. 815

Grass C.P. 814

Blacktop

Str. No. 323

Str. No. 325

Str. No. 326

Str. No. 327

Str. No. 328

Str. No. 330

Str. No. 332

Str. No. 52

Str. No. 324

Str. No. 51

Str. No. 329

Str. No. 331

Str. No. 333

Str. No. 334

18" RCP

SB I-65

NB I-65

N0°09'06"E "PR-Q"

Line "PR-Q"

12" RCP

18" RCP

24" CMP

Grass

Carr Joe H Ii & Patricia L.

App. Pl.

State Of Indiana

Survey 270 of the Illinois Grant

Storm Manhole (str#10098)
32" Sq, Solid Lid
Inaccessible
TC = 581.27

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

+54.66, 68.43' Sign-single post mile 20.0
+51.27, 104.74' Riprap
+94.65, 81.44' Riprap
+96.29, 86.29' Riprap
+96.00, 96.58' Riprap
+33.21, 68.04' Riprap
+42.51, 89.41' Riprap
+46.70, 93.57' Riprap
+52.42, 93.23' Riprap
+01.77, 65.09' Riprap
+51.54, 77.52' Riprap
+00.98, 74.67' Riprap
+34.14, 67.2' Delineator Post
+40.68, 71.21' Riprap
+45.53, 72.58' Riprap
+51.13, 62.58' Riprap
+94.78, 0.35' Riprap
+99.49, 69.4' Drainage Pipe 4
+99.49, 69.4' Drainage Pipe 4 pvc
+98.37, 73.77' Drainage pipe 4 pvc
+96.92, 20.4' Drainage Pipe direction
+96.76, 0.4' Riprap
+51.76, 3.27' Riprap
+90.20, 2.94' Riprap
+58.9' section Cor. traver 1.5
+19.10, 66.07' Delineator Post
+57.32, 65.64' Riprap
+93.11, 64.55' Delineator Post
+01.04, 63.01' Mon.
+01.96, 63.1' Drainage pipe 4 pvc
+02.18, 18.19' Drainage pipe direction
+07.43, 66.25' Riprap
+54.27, 66.07' Riprap
+06.92, 66.32' Riprap
+55.50, 66.31' Riprap
+57.81, 67.61' Sign-single post mile 20.0
+06.79, 67.51' Riprap
+56.54, 64.63' Riprap
+06.51, 67' Riprap
+56.33, 67.44' Riprap
+79.99, 65.52' Delineator Post
+06.36, 67.39' Riprap
+55.95, 68.43' Riprap
+80.98, 63.68' Mon.
+80.79, 69.35' Riprap
+01.50, 69.42' Riprap
+12.08, 80.35' Sign, Rest area 2 miles
+40.72, 66.13' Delineator Post
+55.62, 75' Riprap
+97.07, 73.07' Riprap
+98.28, 77.97' Drainage pipe 4 pvc
+98.42, 13.73' Drainage pipe 4 pvc
+98.17, 10.68' Drainage pipe direction
+47.81, 66.26' Delineator Post
+50.35, 78.71' Sign-dbl post scottsburg 10 indianapolis 93
+53.17, 81.92' Riprap
+79.76, 79.16' Riprap
+98.38, 6.96' Drainage pipe
+98.23, 72.9' Drainage pipe 4
+03.85, 77.19' Riprap
+41.18, 64.36' Mon.
+53.55, 72.31' Riprap

M.H. 595+75
Str. No. 326

PVI Sta = 596+50 NB & SB
Elev = 565.78
VC = 250'

M.H. 597+50
Str. No. 328

PVI Sta = 599+00 NB & SB
Elev = 573.53
VC = 250'

554.09

Str. No. 51

554.24

554.24

550.58 35' of 18" Pipe @ 0.50%

18" CMP

169' of 48" Pipe @ 0.10%

(Plotted 30ft Above Datum)

554.41

PVI Sta = 594+00 NB & SB
Elev = 559.11
VC = 250'

Inlet 596+50
Str. No. 327

M.H. 597+50
Str. No. 329

Inlet 600+00
Str. No. 330

Inlet 603+00
Str. No. 332

Prop. Profile "PR-Q" NB & SB

2.74%

571.80

Proposed 4' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

+50.00
585.97

3.10%

571.55

XX Sys Sodding Req'd. Rt.

246' of 15" Pipe @ 3.00%

564.17

560.95

96' of 18" Pipe @ 0.60%

560.37

+25.0

+75.01

M.H. 601+99.9
Str. No. 331

Inlet 603+00
Str. No. 333

M.H. 603+74.9
Str. No. 334

+00.00
578.01

1.25%

579.37

94' of 48" Pipe @ 0.10%

18" RCP

579.40

579.40

+68.00
578.85

8.68%

94' of 48" Pipe @ 0.10%

24' of 18" Pipe @ 0.21%

+50.00
578.33

571.99

(Plotted 20ft Below Datum)

571.90

XX Tons of Revetment Riprap &
XX Sys Type 1A Geotextiles Req'd. Rt.

+00.0

+43.0

+50.0

XX Sys Sodding Req'd. Rt.

GRET, Type OS

+42.9

Guardrail, MGS, 6'-3" Spacing, Req'd. Rt.

Inlet 589+75
Str. No. 323

2.92%

346' of 15" Pipe @ 2.92%

Inlet 593+25
Str. No. 325

552.18

Exist. Ground along Line "PR-Q"

542.07

Sodding Req'd. Rt.

+25.0

+00.00
559.62

Str. No. 51

18" CMP

550.58

M.H. 589+75
Str. No. 324

2.80%

Proposed 4' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

+50.00
569.93

2.67%

2.80%

Proposed 4' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

+25.0

590 591 592 593 594 595 596 597 598 599 600 601 602 603 604

520 530 540 550 560 570 580 590

590+00 591+00 592+00 593+00 594+00 595+00 596+00 597+00 598+00 599+00 600+00 601+00 602+00 603+00 604+00

816 Northing: 265169.5162 Easting: 736192.1607
AZ 69° 83.64' Guardrail Post
AZ 100° 79.39' Guardrail Post
AZ 124° 94.81' Guardrail Post
SB I-65
LINE "Q" STA. 644+77.00 OFFSET 64.19 LT

815 Northing: 265646.7019 Easting: 736193.4963
AZ 70° 83.27' Guardrail Post
AZ 98° 79.10' Guardrail Post
AZ 123° 93.36' Guardrail Post
SB I-65
LINE "Q" STA. 649+54.19 OFFSET 64.63 LT

814 Northing: 266127.1194 Easting: 736195.1191
AZ 59° 90.97' Guardrail Post
AZ 86° 78.07' Guardrail Post
AZ 113° 84.61' Guardrail Post
SB I-65
LINE "Q" STA. 654+34.60 OFFSET 64.07 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 589+50.00 TO STA. 604+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	17 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts

Wetland 10
0.001 ac
2.4 cys Pipe End Section

Wetland 11
0.014 ac
6.9 cys Dredge

Wetland 59
0.020 ac
42.1 cys Clean Earthen Fill

Survey 283 of
the Illinois Grant

605+00

610+00

615+00

Wetland 10
Permanent Impact
0.001 ac
2.4 cys Pipe End Section
(44 sq ft x 1.5')

Wetland 11
Permanent Impact
0.014 ac
6.9 cys Dredge
(119' x 5.2' x 0.3')

Wetland 59
Permanent Impact
0.020 ac
42.1 cys Clean Earthen Fill
(141' x 6.2' x 1.3')

State Of Indiana

State Of Indiana

State Of Indiana

State Of Indiana

POT A 613+68.39 "PR-Q" =
POT 14+16.27 "S-6-Q"

Line "S-6-Q"

Prop Low Clearance: 26.64'

Ex. Low Clearance: 26.51'

Storm Drop Inlet (strt#10099)
29"x46" Steel Plate
24"x40" Concrete Structure
TC = 588.10
Se Inv.: = 585.70 (18" RCP)

App. EX. L.A. R/W

Const. Limits

C.P. 814

C.P. 813

C.P. 812

Grass

Blacktop

SB I-65

NB I-65

Line "PR-Q"

N0°09'06"E "PR-Q"

WINDING ROAD S74°51'33"E "S-6-Q"

18" RCP

12" CMP

12" RCP

24" CMP

Str. No. 52
Str. No. 335
Str. No. 336
Str. No. 337
Str. No. 338
Str. No. 339
Str. No. 340
Str. No. 341
Str. No. 342
Str. No. 343
Str. No. 344
Str. No. 345
Str. No. 346
Str. No. 347
Str. No. 348
Str. No. 349
Str. No. 350
Str. No. 351
Str. No. 352
Str. No. 353
Str. No. 354

+41.18, 64.36' Mon.
+53.55, 72.31' Riprap
+99.53, 20.51' Drainage pipe direction
+99.59, 16.11' Drainage pipe 4 pvc
+03.99, 68.23' Riprap
+27.76, 66.09' Delineator Post
+53.11, 66.9' Riprap
+97.55, 68.24' Riprap
+99.25, 73.07' Riprap
+99.79, 76.11' Riprap
+40.72, 105.99' Riprap
+48.97, 100.05' Riprap
+56.91, 97.05' Riprap
+71.49, 94.54' Riprap
+03.72, 93.05' Riprap
+20.38, 64.27' Mon.
+35.36, 66.4' Delineator Post
+51.47, 89.44' Riprap
+02.26, 65.58' Riprap
+23.10, 84.9' Riprap
+33.15, 82.85' Riprap
+40.27, 81.86' Riprap
+40.48, 83.78' Riprap
+52.05, 83.25' Riprap
+61.96, 83.29' Riprap
+26.24, 76.74' Sign, Use right lane
+04.22, 71.23' Sign, Hebron church rd
+26.47, 148.03' Sign, Campground Entrance
+31.17, 139.6' Sign, Do not mow or spray
+31.62, 174.08' Anchor for guy rope
+35.89, 111.86' Pole-power
+43.12, 75.92' Riprap
+51.09, 207.14' Delineator Post
+56.03, 218.21' Manhole-other
+64.25, 65.68' Hand Rail
+71.65, 142.91' Sign, Do not mow or spray
+82.47, 97.76' Riprap
+89.74, 69.89' Riprap
+00.08, 64.5' Mon.
+01.28, 76.7' Hand Rail
+82.95, 14.18' Delineator Post
+10.14, 66.76' Delineator Post
+99.09, 17.81' Drainage pipe 4 pvc
+99.16, 23.32' Drainage pipe direction
+59.46, 67.35' Drainage pipe
+59.84, 71.59' Drainage pipe 4
+07.07, 71.09' Sign-single post mile 20.5
+80.58, 64.91' Mon.
+03.35, 67.74' Delineator Post

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

813
Northing: 266608.3124
Easting: 736195.8190
AZ 71° 82.92'
Guardrail Post
AZ 99° 79.67' Guardrail Post
AZ 124° 94.95' Guardrail Post
SB I-65
LINE "Q" STA. 659+15.80 OFFSET 65.43 LT

812
Northing: 267159.7692
Easting: 736201.1259
AZ 228° 5.18' Guardrail Post
AZ 199° 21.59' Sign Post "HEBRON CHURCH RD"
AZ 346° 15.25' Guardrail Post
SB I-65
LINE "Q" STA. 664+67.27 OFFSET 60.34 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

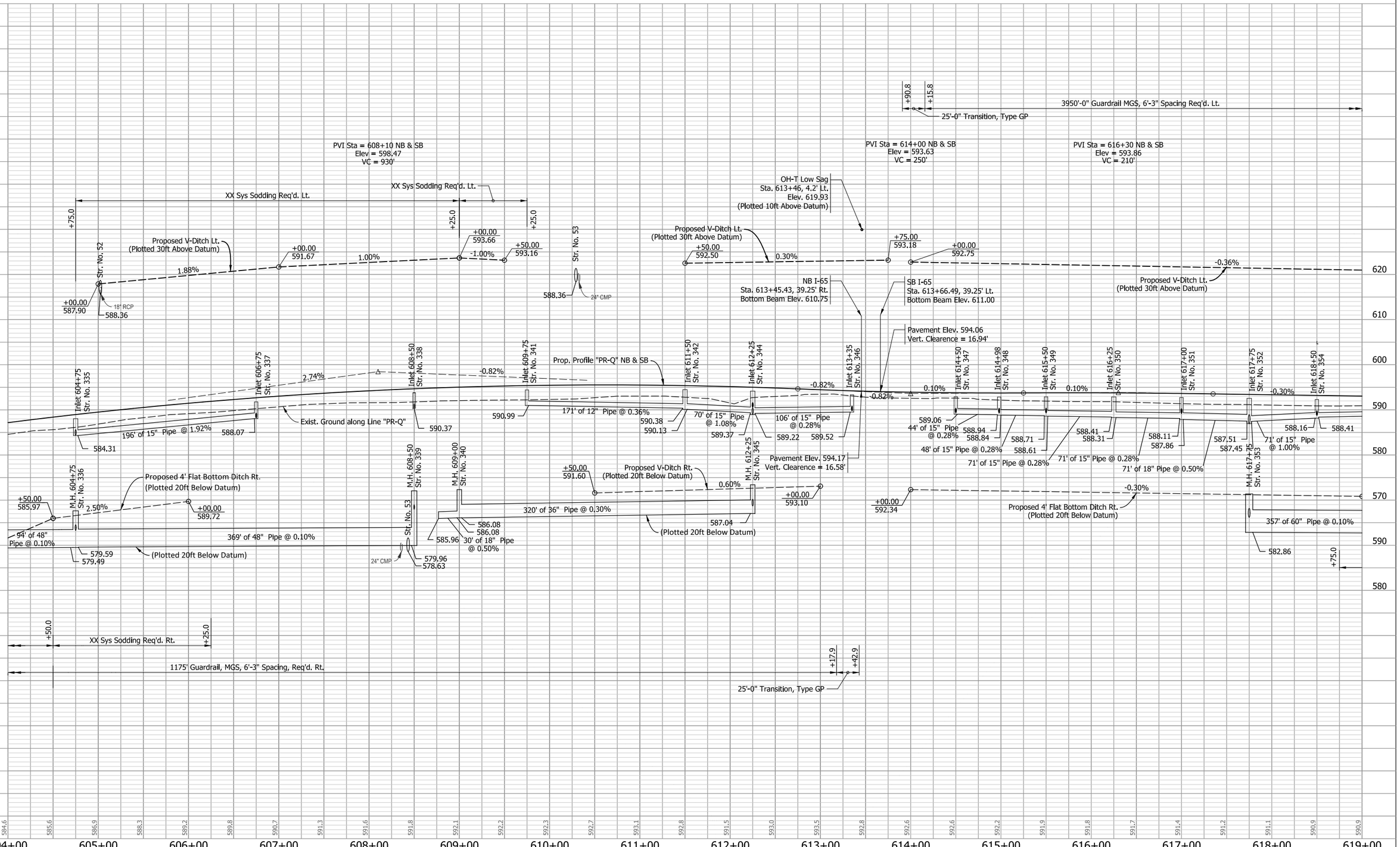
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
STA. 604+00.00 TO STA. 619+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	18 of 25
CONTRACT	PROJECT
R-41529	1700135

12/8/2021 2:41:32 PM I:P\200035 - I65 ATL\05Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Plan_16.dgn



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PROFILE
STA. 604+00.00 TO STA. 619+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	19 of 25
CONTRACT	PROJECT
R-41529	1700135

12/8/2021 2:41:41 PM P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Profile_16.dgn

Cumulative Permanent Impacts

Wetland 58

0.020 ac

57.8 cys Clean Earthen Fill

Cumulative Impacts to UNT 1 to Miller Fork
Permanent Impact due to installation of riprap
12 lft (0.001 ac.)
3.1 Cys

Cumulative Impacts to UNT 1 to Miller Fork
Temporary Impact due to installation of Cofferdams
6 lft (0.001 ac.)
0.4 Cys Sandbags

Wetland 58
Permanent Impact
0.020 ac
57.8 cys Clean Earthen Fill
(102' x 8.5' x 1.8')

Survey 283 of
the Illinois Grant

625+00

630+00

State Of Indiana

State Of Indiana

State Of Indiana

State Of Indiana

App. EX. L.A. R/W

App. EX. L.A. R/W

App. EX. L.A. R/W

Const. Limits

Do Not Disturb Existing Pipe
66" HDPE

Const. Limits

Const. Limits

C.P. 811

C.P. 810

C.P. 809

SB I-65

NB I-65

Line "PR-Q"

N0°10'29"E "PR-Q"

Str. No. 354 Str. No. 355 Str. No. 356 Str. No. 357 Str. No. 358 Str. No. 359 Str. No. 360 Str. No. 361 Str. No. 362 Str. No. 363 Str. No. 364 Str. No. 365 Str. No. 366 Str. No. 367 Str. No. 368 Str. No. 369 Str. No. 370 Str. No. 371 Str. No. 372 Str. No. 373 Str. No. 374 Str. No. 375 Str. No. 376 Str. No. 377 Str. No. 378

Str. No. 54 Str. No. 55

30" CMP 12" CMP 24" CMP 102" CMP 66" HDPE

Grass Blacktop

STR. No. 54
UNT 1 to Miller Fork
Temporary Impact
6 lft
0.001 (ac) Cofferdam
0.4 cys Sand Bags
(6' x 3.5' x 0.5')

UNT 1 to Miller Fork
Permanent Impact
12 lft (0.001 ac)
3.1 cys Class I Riprap
(12' x 3.5' x 2')

UNT 1 to Miller Fork

OHWM

UNT 2 to Miller Fork

OHWM

UNT 2 to Miller Fork
No Impacts
Do Not Disturb

Wetland 74
No Impacts
Do Not Disturb

+75.00 "PR-Q"
= 0°01'23" RT
rve Run)

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

Proposed V-Ditch Lt.
(Plotted 30ft Above Datum)

Proposed 4' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

Proposed 6' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

Exist. Ground along Line "PR-Q"

Prop. Profile "PR-Q" NB & SB

PVI Sta = 625+50 NB & SB
Elev = 591.10
VC = 300'

PVI Sta = 629+50 NB & SB
Elev = 589.11
VC = 250'

Guardrail MGS, 6'-3" Spacing Req'd. Lt.

468'-9" Guardrail, MGS,
6'-3" Spacing, Req'd. Rt.

GRET, Type OS

XX Sys Sodding Req'd. Rt.

XX Tons of Revetment Riprap &
XX Sys Type 1A Geotextiles Req'd. Rt.

(Plotted 20ft Below Datum)

Curved Terminal End

24" CMP (RT)
(Plotted 10ft Below Datum)

24" CMP (RT)
(Plotted 10ft Below Datum)

357' of 60" Pipe @ 0.10%

294' of 48" Pipe @ 0.10%

219' of 48" Pipe @ 0.10%

319' of 48" Pipe @ 0.10%

71' of 15" Pipe @ 0.28%

71' of 12" Pipe @ 0.36%

71' of 12" Pipe @ 2.24%

71' of 15" Pipe @ 0.40%

71' of 15" Pipe @ 0.40%

71' of 12" Pipe @ 0.28%

61' of 15" Pipe @ 0.28%

96' of 15" Pipe @ 0.28%

96' of 15" Pipe @ 0.28%

96' of 15" Pipe @ 0.40%

96' of 15" Pipe @ 0.28%

96' of 15" Pipe @ 0.50%

-0.36% -0.30% 0.30% 0.30% -1.00% -6.88% 1.00% -1.64% -0.50% -0.22%

588.41 588.66 588.03 587.73 587.83 587.56 582.23 587.84 586.26 585.80 586.08 586.18 586.46 586.65 586.91 584.62 584.89 584.99 585.26 584.83 584.45 584.00 583.53 583.73 583.15 583.05 582.50 576.97 580.71 580.32 580.42 580.10 578.84

590.84 589.55 590.80 589.57 572.24

+00.00 590.26 +00.00 588.45 +00.00 588.60 +00.00 589.50 +50.00 585.90 +50.00 589.34 +75.00 590.80 +50.00 589.57

+75.0 +25.0 +00.0 +25.0 +75.0 +75.0 +41.3 +10.0

Str. No. 5 Str. No. 54 Str. No. 55

30" CMP (LL) 30" CMP (RT) 102" CMP

M.H. 621+40 Str. No. 359 M.H. 622+75 Str. No. 363 M.H. 625+75 Str. No. 369 M.H. 628+00 Str. No. 372 M.H. 631+00 Str. No. 375

Inlet 619+25 Str. No. 355 Inlet 620+00 Str. No. 356 Inlet 620+75 Str. No. 357 Inlet 621+40 Str. No. 358 Inlet 622+00 Str. No. 360 Inlet 622+75 Str. No. 362 Inlet 623+50 Str. No. 364 Inlet 624+50 Str. No. 365 Inlet 625+00 Str. No. 366 Inlet 625+75 Str. No. 368 Inlet 626+75 Str. No. 370 Inlet 627+75 Str. No. 371 Inlet 629+00 Str. No. 373 Inlet 630+00 Str. No. 374 Inlet 631+25 Str. No. 376 Inlet 632+25 Str. No. 377 Inlet 633+25 Str. No. 378

66" HDPE

620 610 600 590 580 570 560 550

619+00 620+00 621+00 622+00 623+00 624+00 625+00 626+00 627+00 628+00 629+00 630+00 631+00 632+00 633+00

811 AZ 60° 57.30' Guardrail Post — Northing: 268048.0438 Easting: 736201.0618 — AZ 102° 50.86' Guardrail Post — Guardrail Post — AZ 122° 58.47' — SB I-65 — LINE "Q" STA. 673+55.54 OFFSET 62.37 LT

810 Guardrail Post AZ 281° 4.87' — Northing: 268535.3530 Easting: 736202.3777 — AZ 341° 14.14' Guardrail Post — AZ 202° 12.43' Guardrail Post — SB I-65 — LINE "Q" STA. 678+42.85 OFFSET 62.13 LT

809 AZ 258° 4.45' Guardrail Post — Northing: 269011.9615 Easting: 736203.4529 — AZ 339° 12.38' Guardrail Post — AZ 197° 14.12' Guardrail Post — SB I-65 — LINE "Q" STA. 683+19.46 OFFSET 62.11 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 618+50.00 TO STA. 633+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	20 of 25
CONTRACT	PROJECT
R-41529	1700135

I: 12/8/2021 2:42:15 PM - P:\200035 - I65 ATLW\9Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_PlanProfile_17.dgn

Cumulative Permanent Impacts

Wetland 75
0.022 ac
7.1 cys Clean Earth Fill

Wetland 76
0.001 ac
0.1 cys Clean Earth Fill

Survey 283 of the Illinois Grant

640+00

645+00

State Of Indiana

Miller Fork

Miller Fork
No Impacts
Do Not Disturb

Wetland 12
No Impacts
Do Not Disturb

PI 644+75.00 "PR-Q"
Delta = 0°3'53" Rt.
(No Curve Run)

Do Not Disturb Existing Pipe
126" CMP

App. EX. L.A. R/W

Const. Limits

C.P. 808

C.P. 807

C.P. 806

SB I-65

NB I-65

Line "PR-Q"

N0°10'29"E "PR-Q"

N0°06'36"E "PR-Q"

Str. No. 378
Str. No. 379
Str. No. 380
Str. No. 381
Str. No. 382
Str. No. 383
Str. No. 384
Str. No. 385
Str. No. 386
Str. No. 387
Str. No. 388
Str. No. 389
Str. No. 390
Str. No. 391
Str. No. 392
Str. No. 393
Str. No. 394
Str. No. 395
Str. No. 396

12" CMP

Wetland 75
Permanent Impact
0.022 ac
7.1 cys Clean Earth Fill
(259' x 3.7' x 0.2')

Wetland 76
Permanent Impact
0.001 ac
0.1 cys Clean Earth Fill
(2' x 1' x 1.5')

OHWM

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

620

0.51%

+50.00
584.93

Proposed 4' Flat Bottom Ditch Lt.
(Plotted 30ft Above Datum)

+50.00
585.96

PVI Sta = 637+50 NB & SB
Elev = 587.35
VC = 300'

Guardrail MGS, 6'-3" Spacing Req'd. Lt.

PVI Sta = 645+80 NB & SB
Elev = 584.53
VC = 850'

126" CMP (Lt.)
(Plotted 10ft Above Datum)

Prop. Profile "PR-Q" NB & SB

Exist. Ground along Line "PR-Q"

Prop. Profile "PR-Q" NB

Inlet 633+25 Str. No. 378
Inlet 634+25 Str. No. 379
Inlet 635+50 Str. No. 381
Inlet 636+75 Str. No. 382
Inlet 638+00 Str. No. 384
Inlet 639+25 Str. No. 385
Inlet 640+75 Str. No. 387
Inlet 641+90 Str. No. 389
Inlet 642+41 Str. No. 390
Inlet 642+90 Str. No. 391
Inlet 643+50 Str. No. 392
Inlet 644+50 Str. No. 394
Inlet 646+25 Str. No. 395

-0.22%

-0.34%

3.02%

583.15
583.05

96' of 15" Pipe
@ 0.72%
582.36

583.07

121' of 15" Pipe
@ 0.80%
582.10

581.83

121' of 15" Pipe
@ 0.50%
582.44

582.04

146' of 15" Pipe
@ 1.00%
580.58
580.32

580.87

111' of 15" Pipe
@ 0.50%

47' of 15" Pipe @ 0.30%
580.97

581.11

56' of 15" Pipe
@ 0.30%
580.99

96' of 15" Pipe
@ 0.56%
581.43
581.16

581.97

584.11

221' of 15" Pipe
@ 1.96%

M.H. 634+25
Str. No. 380

579.16

M.H. 636+75
Str. No. 383

575.75

Proposed 4' Flat Bottom Ditch Rt.
(Plotted 20ft Below Datum)

-0.30%

+50.00
585.90

392' of 60" Pipe @ 0.10%

(Plotted 20ft Below Datum)

M.H. 640+75
Str. No. 388

575.35

575.25

267' of 60" Pipe @ 0.10%

+00.00
583.65

M.H. 643+50
Str. No. 393

574.98
574.98

44' of 24" Pipe
@ 0.50%

574.79

M.H. 646+25
Str. No. 396

217' of 60" Pipe @ 0.10%

577.62
(Plotted 20ft Below Datum)

126" CMP (RT.)
(Plotted 10ft Below Datum)

+44.4

GRET, Type OS

1743'-9" Guardrail, MGS, 6'-3" Spacing, Req'd. Rt.

586.1 585.9 585.8 585.4 585.3 585.4 585.5 585.4 585.1 584.8 584.8 584.5 584.2 583.9 583.7 583.7 583.7 583.6 583.3 582.8 582.4 582.3 582.6 584.0 584.9 585.3 585.9 586.5 587.3 588.5 589.5

633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00 641+00 642+00 643+00 644+00 645+00 646+00 647+00 648+00

808
Northing: 736203.4529
Easting: 736205.7156
AZ 51° 61.70' Guardrail Post
AZ 92° 48.82' Guardrail Post
AZ 114° 53.45' Guardrail Post
SB I-65
LINE "Q" STA. 688+01.13 OFFSET 60.91 LT

807
Northing: 269974.5360
Easting: 736207.2455
AZ 121° 58.27' Guardrail Post
AZ 57° 58.27' Guardrail Post
AZ 90° 48.97' Guardrail Post
SB I-65
LINE "Q" STA. 692+82.04 OFFSET 60.44 LT

806
Northing: 270456.0787
Easting: 736208.0863
AZ 310° 4.83' Guardrail Post
AZ 231° 4.99' Guardrail Post
AZ 193° 15.81' Guardrail Post
SB I-65
LINE "Q" STA. 697+63.58 OFFSET 60.67 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 633+00.00 TO STA. 648+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	21 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 16
0.001 ac
1.2 cys Pipe End Section

650+00

655+00

660+00

Survey 283 of the Illinois Grant

Survey 283 of the Illinois Grant

CURVE # 7
PI = 656+00.00 "PR-Q"
Delta = 0°02'45" LT

Survey 31 of the Illinois Grant

Wetland 16
Permanent Impact
0.001 ac
1.2 cys Pipe End Section
(21.5 sq ft x 1.5')

Wetland 12
No Impacts
Do Not Disturb

Brishaber Calvin J Jr. & Kimberly A.

Wetland 15
No Impacts
Do Not Disturb

Wetland 13
No Impacts
Do Not Disturb

Wetland 14
No Impacts
Do Not Disturb

Walker Charles & Debra

Smallwood Brenda C & Robertson Dale S

App. EX. L.A. R/W

POT 654+25.35 "PR-Q" =
POT 8+73.83 "S-7-Q"

BEGIN PAVING EXCEPTION
STA. 653+67.39 "PR-Q", SB

END PAVING EXCEPTION
STA. 655+23.07 "PR-Q", SB

PI 656+00.00 "PR-Q"
Delta = 0°2'45" Lt.
(No Curve Run)

App. Pl.

App. Ex. R/W

App. Section Line

Const. Limits

Grass

Blacktop

C.P. 805

C.P. 804

C.P. 803

S56°37'30"E "S-7-Q"

Line "S-7-Q"

Str. No. 398

SB I-65

Str. No. 1100

Str. No. 1106

Str. No. 1107

Str. No. 1108

Str. No. 56

Line "PR-Q"

N0°06'36"E "PR-Q"

Str. No. 1105

Str. No. 1104

Str. No. 1102

Str. No. 1109

Str. No. 397

Str. No. 399

NB I-65

Str. No. 1110

Str. No. 1101

BEGIN PAVING LIMITS
STA. 653+27.61 "PR-Q", NB

Ex. Low Clearance: 25.97'
Prop Low Clearance: 25.50'

24' RCP

Str. No. 1103

END PAVING EXCEPTION
STA. 654+83.29 "PR-Q", NB

Miller Fork

24" HDPE

15" CMP

BROWNSTOWN ROAD

℄ Structure
Sta. 654+25.34
Skew: 31° Rt.

Str. No. 1111

STRUCTURE:
I65-021-09939 ASBL
I65-021-09940 ASBL
DES. No. 2001600 & 2001601
BRIDGE WIDENING
(See Part 6)

State Of Indiana

White Thomas W.

Wetland 77
No Impacts
Do Not Disturb

+76.64, 120.79' Headwall
+76.67, 120.96' Headwall
+76.11, 93.61' Headwall
+76.13, 94.14' Headwall
+79.34, 94.08' Headwall
+68.38, 9.99' Delineator Post
+84.73, 14.68' Drainage pipe 12 hdpe
+88.24, 17.06' Drainage pipe 12 hdpe
+91.96, 153.58' Meter-water
+03.15, 21.58' Hand Rail
+03.30, 23.93' Hand Rail
+00.07, 22.2' Hand Rail
+44.24, 28.86' Riprap
+25.55, 16.81' Riprap
+34.32, 41.11' Riprap
+44.14, 54.56' Riprap
+45.23, 64.58' Sign, Mile 21.24
+26.95, 73.64' Riprap
+46.58, 69.92' Mon.
+70.29, 227.80' Drive-private
+74.93, 241.85' Drive-private
+77.61, 248.63' Mail box (single box)
+80.58, 254.45' Drive-private
+80.53, 231.36' Drive-private
+10.10, 122.40' Riprap
+20.71, 67.57' Hand Rail
+46.71, 67.57' Hand Rail
+49.98, 66.82' Drainage post 21+24
+50.00, 117.71' Drainage pipe 24 hdpe
+51.83, 165.01' Drive-power
+24.54, 162.79' Drive-private
+23.01, 164.11' Water shutoff
+07.46, 122.39' Drive-private
+98.81, 119.13' Drainage pipe 24 hdpe
+98.70, 162.85' Drainage pipe 15 cmp
+02.39, 139.66' Drive-private
+03.49, 132.77' Manhole-Tel.
+33.18, 67.14' Hand Rail
+43.18, 67.06' Hand Rail
+00.00, 160.41' Drive-private
+98.80, 25.59' Riprap
+98.80, 17.57' Riprap
+12.79, 3.78' Riprap
+30.44, 16.62' Delineator Post
+03.56, 68.75' Delineator Post
+53.98, 126.66' Pole-power
+25.28, 71.21' Mon.
+54.98, 69.35' Delineator Post
+65.81, 67.02' Mon.
+62.20, 127.05' Pedestal-Tel.

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

805 — Northing: 270937.8386, Easting: 736210.4828
Guardrail Post AZ 332° 7.90'
AZ 282° 3.88'
Guardrail Post
SB I-65
AZ 199° 10.30'
Guardrail Post
LINE "Q" STA. 702+45.35 OFFSET 59.33 LT

804 — Northing: 271414.5521, Easting: 736210.0259
Guardrail Post AZ 342° 8.99'
Guardrail Post AZ 215° 4.83'
SB I-65
AZ 189° 16.81'
Guardrail Post
LINE "Q" STA. 707+22.06 OFFSET 60.84 LT

803 — Northing: 271898.2826, Easting: 736209.9157
Guardrail Post AZ 110° 84.15'
SB I-65
Guardrail Post AZ 66°
86.30'
AZ 88°
79.08'
Guardrail Post
LINE "Q" STA. 712+05.79 OFFSET 62.02 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
STA. 647+50.00 TO STA. 662+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
N.A.	1700135

SURVEY BOOK	SHEETS
Electronic	22 of 25
CONTRACT	PROJECT
R-41529	1700135

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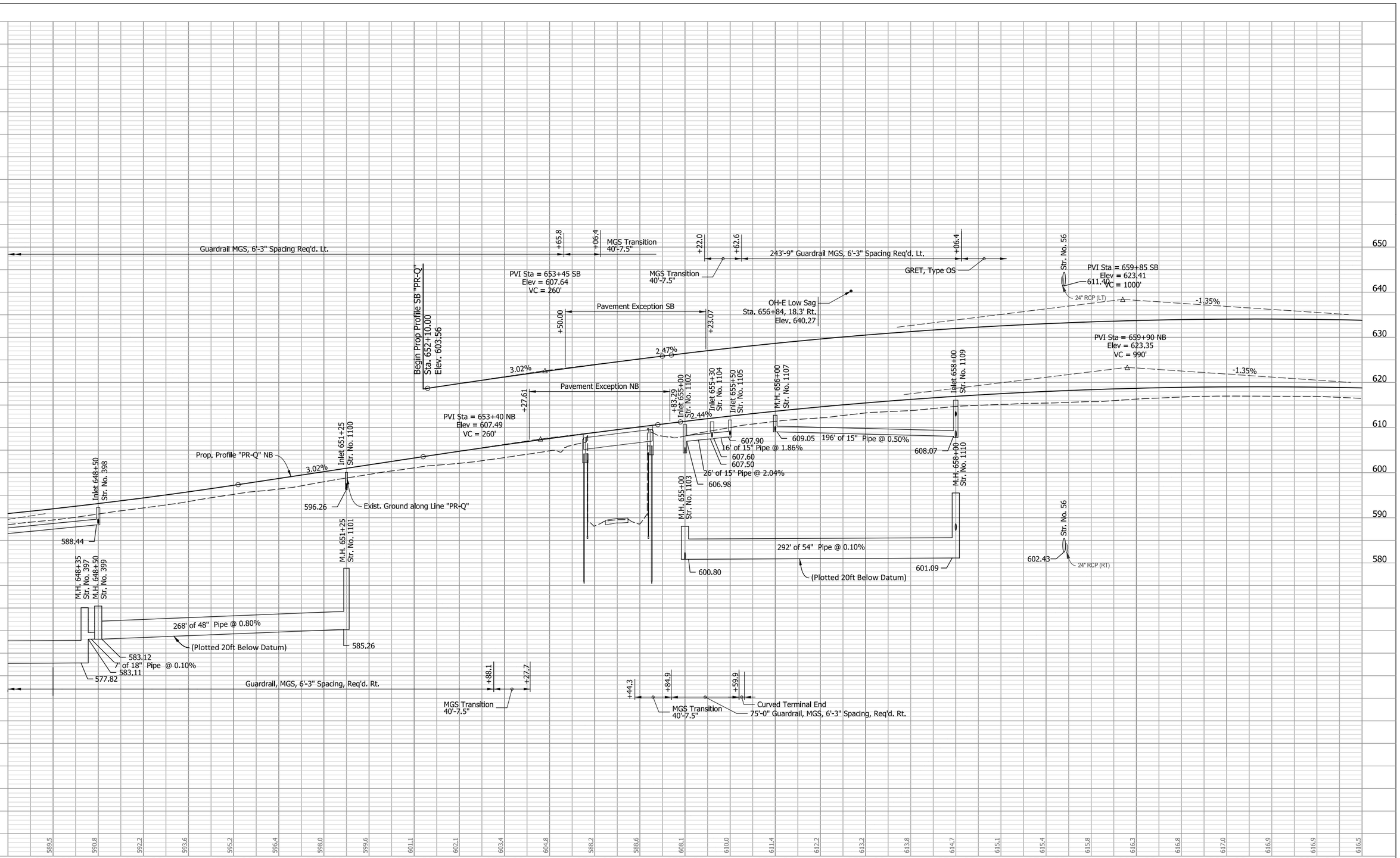

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 647+50.00 TO STA. 662+50.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	23 of 25
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 57
0.021 ac
68.0 cys Clean Earthen Fill

Survey 31 of the Illinois Grant

Survey 30 of the Illinois Grant

665+00

670+00

675+00

Smallwood Brenda C & Robertson Dale S

Smallwood Brenda C & Robertson Dale S

Hester Devin W & Kalah N

App. Pl.

App. Section Line

App. EX. L.A. R/W

Const. Limits

C.P. 802

C.P. 801

SB I-65

NB I-65

N0°03'50"E "PR-Q"

Line "PR-Q"

Grass

Blacktop

24" CMP

30" RCP

12" RCP

24" RCP

Str. No. 57

Str. No. 1112

Str. No. 1113

Str. No. 1114

Str. No. 1115

Str. No. 1116

Str. No. 1117

Str. No. 1118

Str. No. 1119

Str. No. 1120

Str. No. 1121

Str. No. 58

Str. No. 1122

Str. No. 1123

Str. No. 1124

Str. No. 1127

Str. No. 225

Str. No. 1126

Str. No. 59

Str. No. 1128

Str. No. 1129

Str. No. 1130

Str. No. 1131

Str. No. 1132

White Thomas W.

EX. R/W

Wetland 57
Permanent Impact
0.021 ac
68.0 cys Clean Earthen Fill
(108' x 8.5' x 2.0')

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".

802 — Northing: 272382.8033, Easting: 736211.4218
LINE "Q" STA. 716+90.31 OFFSET 61.59 LT

801 — Northing: 272909.2138, Easting: 736213.0228
LINE "Q" STA. 722+16.72 OFFSET 61.15 LT

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 662+00.00 TO STA. 677+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	24 of 25
CONTRACT	PROJECT
R-41529	1700135

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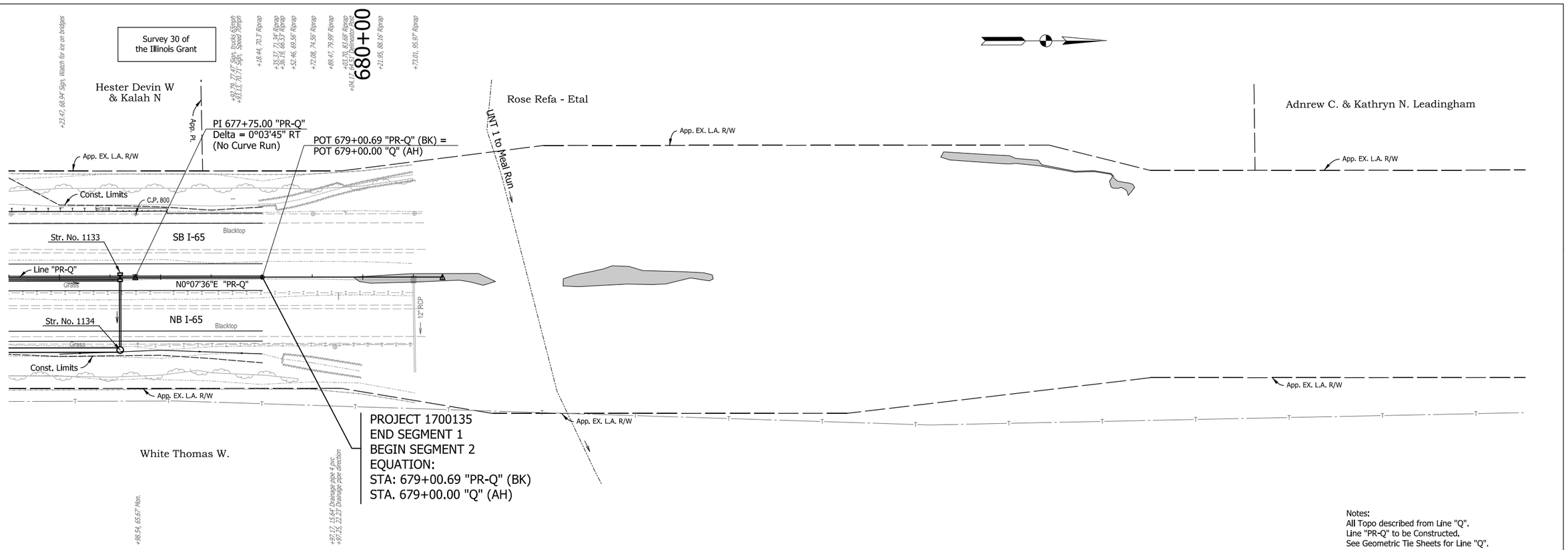
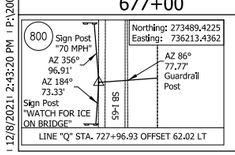




Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: AMD DRAWN: JJP	PLAN AND PROFILE STA. 676+50.00 TO STA. 679+00.69
CHECKED: DJG CHECKED: DJG	

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	25 of 25
CONTRACT	PROJECT
R-41529	1700135

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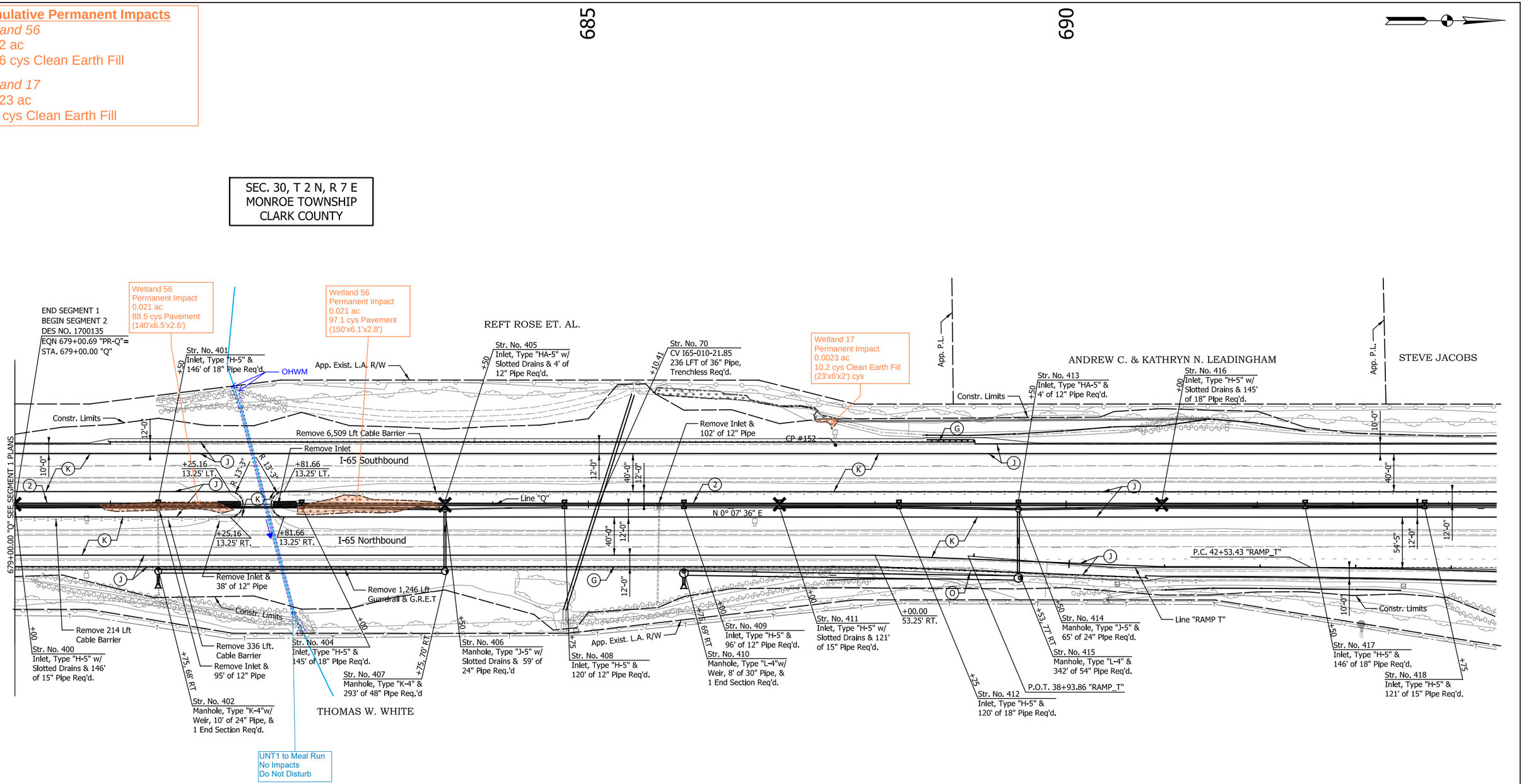
Cumulative Permanent Impacts

Wetland 56
0.042 ac
185.6 cys Clean Earth Fill

Wetland 17
0.0023 ac
10.2 cys Clean Earth Fill



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	26 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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Cumulative Permanent Impacts
Wetland 55
0.042 ac
141 cys Clean Earth Fill

Cumulative Temporary Impacts
Wetland 78
0.009 ac
Temporary access

Cumulative Impacts to Wheel Run
Permanent Impact due to installation of new 42" Pipe and pipe end sections
268 lft (0.025 ac.)
26.1 Cys

Cumulative Impacts to Wheel Run
Temporary Impact due to cofferdam and site access
28 lft (0.0042 ac.)
1.2 Cys Sand Bags

705

SEC. 30, T 2 N, R 7 E
TOWNSHIP
COUNTY

STEVE JACOBS

TINA M. GOODE

THOMAS W. WHITE

Wetland 18
No Impacts
Do Not Distrub

Meal Run
No Impacts
Do Not Disturb

Wheel Run
Temp Impact
4-lft
0.0006 ac
0.6 cys Sandbag Cofferdam
(4'x6'x0.67')

Wheel Run
Structure Replacement
236-lft
0.019-ac
20.50-cys of 42" Type 1
(236' x 3.5' x 0.67')

Wheel Run
End Section Removal
16-lft
0.003-ac
2.8-cys Clean Earth Fill
(16' x 7' x 0.67')

Wheel Run
End Section Removal
16-lft
0.003-ac
2.8-cys Clean Earth Fill
(16' x 7' x 0.67')

Wetland 55
Permanent Impact
0.042 ac
141 cys Clean Earth Fill
(136'x14'x2') cys

Wheel Run
Temp Access
20-lft (0.003 ac)
0.0-cys Fill
(20'x6')
Sandbag Cofferdam
4-lft (0.0006 ac)
0.6 cys Sandbag Cofferdam
(4'x6'x0.67')

Wetland 78
Temporary Impact
0.009 ac
Temporary Access
(29'x19'x2')

Wetland 19. See next CD sheet.

Wetland 54. See next CD sheet.

Str. No. 419
Inlet, Type "H-5" w/ Slotted Drains & 121' of 12" Pipe Req'd.

Str. No. 420
Manhole, Type "L-4"w/ Weir, 32' of 24" Pipe, & 1 End Section Req'd.

Str. No. 421
Inlet, Type "H-5" & 146' of 15" Pipe Req'd.

Str. No. 424
Manhole, Type "J-5" w/ Slotted Drains & 97' of 18" Pipe Req'd.

Str. No. 425
Manhole, Type "L-4" & 342' of 54" Pipe Req'd.

Str. No. 428
Inlet, Type "H-5" w/ Slotted Drains & 121' of 15" Pipe Req'd.

Str. No. 429
Inlet, Type "H-5" & 121' of 12" Pipe Req'd.

Str. No. 430
Manhole, Type "K-4"w/ Weir, 28' of 24" Pipe, & 1 End Section Req'd.

Str. No. 431
Inlet, Type "H-5" & 146' of 12" Pipe Req'd.

Str. No. 433
Inlet, Type "H-5" w/ Slotted Drains & 63' of 18" Pipe Req'd.

Str. No. 434
Manhole, Type "K-4" & 193' of 48" Pipe Req'd.

Str. No. 435
Inlet, Type "H-5" & 146' of 15" Pipe Req'd.

Str. No. 71
CV I65-010-22.23
234 LFT of 42" Pipe, Type 1, Req'd.

P.O.T. 94+79.02 "RAMP_S"
P.T. 91+78.78 "RAMP_S"
Line "RAMP_S"
P.T. 0+00.00 "RAMP_A"
P.C. 46+35.20 "RAMP_T"
P.C. 50+00.01 "RAMP_T"
P.C. 1+50.12 "RAMP_A"
P.I. 44+44.34 "RAMP_T"
P.T. 52+37.79 "RAMP_T"
P.T. 54+37.51 "RAMP_T"
Line "Q"
Line "RAMP_T"
Line "RAMP A"
CP #307
CP #148

S 2° 07' 07" E
N 0° 07' 36" E
S 0° 01' 19" W

I-65 Northbound
I-65 Southbound
Rest Area Exit Ramp

Remove 6,509 Lft. Cable Barrier
Existing Culvert to Remain
Remove Inlet & 136' of 12" Pipe

END FULL DEPTH RECONSTRUCTION
BEGIN MILL & RESURFACE
0+31.29 "RAMP_A"

BEGIN MILL & RESURFACE
20+28.54 "RAMP_A"

END MILL & RESURFACE
9+18.72 "Ramp A"

END MILL & RESURFACE
BEGIN FULL DEPTH RECONSTRUCTION
23+64.40 "RAMP_A"

Constr. Limits
App. Exist. L.A. R/W
App. P.L.
OHWM
Farm Fence
Wooden Post With Electric
Possible End Structure??
121' of 18" Pipe Req'd.
427 ype "H-5" & 18" Pipe Req'd.

+65.47
77.53' RT.
+02.62
88.21' RT.
+75.10' RT.
+75.68' RT.
+75.70' RT.
+75.105' RT.
+73.28' RT.
R 450'-6"
R 716'-2"
R 734'-2"
20'-0"
18'-0"
4'-0"
+28.61
12'-0"
40'-0"
52'-0"
10'-0"

LEGEND

(K) Full Depth HMA Pavement (See Typical Sections)	(R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
(J) Full Depth HMA Pavement, Shoulders (See Typical Sections)	(2) Concrete Median Barrier, 45"
(G) MGS W-Beam Guardrail	(27) Seed Mixture, R
(G1) Cable Barrier System, Type TL-4	
(M) Milling, Asphalt, X.X"	
(O) Compacted Aggregate, No. 53	

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	27 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy+Ref_alerts
Indiana_Shade.tbl

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Cumulative Permanent Impacts

Wetland 54
0.034 ac
154.9 cys Clean Earth Fill

Wetland 19
0.0896 ac
353.2 cys Clean Earth Fill

Wetland 79
0.009 ac
89.8 cys Clean Earth Fill

SEC. 30, T 2 N, R 7 E
MONROE TOWNSHIP
CLARK COUNTY

Wheel Run
Structure Replacement
See Previous CD sheet.

Wetland 19
Permanent Impact
0.0896 ac
353.2 cys Clean Earth Fill
(596'x8'x2') cys

Wetland 54
Permanent Impact
0.034 ac
154.9 cys Clean Earth Fill
(123'x17'x2') cys

Wetland 78
Permanent Impact
See Previous CD Sheet.

Wetland 79
Permanent Impact
0.009 ac
89.8 cys Clean Earth Fill
(97'x5'x5') cys

710
715
P.T. 69+2.98 "RAMP_S"
P.C.C. 17+08.61 "RAMP_B"
P.C. 70+65.23 "RAMP_S"
P.R.C. 18+70.40 "RAMP_B"
P.T. 72+38.11 "RAMP_S"
P.C. 72+62.11 "RAMP_S"
END MILL & RESURFACE
19+75.59 "RAMP_B"
BEGIN MILL & RESURFACE
9+11.66 "RAMP_B"
P.T. 9+25.13 "RAMP_B"
P.I. 20+45.40 "RAMP_B"
P.I. 74+13.11 "RAMP_S"
P.T. 54+21.72 "RAMP_S"
P.C.C. 74+99.30 "RAMP_S"
P.C.C. 21+45.29 "RAMP_B"
END FULL DEPTH RECONSTRUCTION
BEGIN MILL & RESURFACE
23+41.13 "RAMP_B"
P.T. 77+52.94 "RAMP_S"
P.C. 77+68.70 "RAMP_S"
P.C. 24+20.18 "RAMP_B"
P.I. 82+18.78 "RAMP_S"
P.T. 79+18.71 "RAMP_S"
P.T. 76+58.55 "RAMP_S"
P.I. 23+20.29 "RAMP_B"
P.I. 52+29.10 "RAMP_S"
P.C. 72+15.46 "RAMP_T"
P.C. 71+91.46 "RAMP_T"
P.C. 18+70.39 "RAMP_A"
P.I. 71+06.60 "RAMP_T"
P.I. 17+90.97 "RAMP_A"
P.C. 70+18.58 "RAMP_T"
P.I. 73+66.46 "RAMP_T"
P.I. 20+45.39 "RAMP_A"
P.C. 74+52.65 "RAMP_T"
P.C. 77+22.06 "RAMP_T"
P.C. 77+06.30 "RAMP_T"
P.C. 78+72.07 "RAMP_T"
P.I. 76+11.90 "RAMP_T"
20+00
+96.68
+96.66
+102.70 RT
N 0° 07' 36" E
Line "Q"
I-65 Southbound
I-65 Northbound
Rest Area Entrance Ramp
Rest Area Exit Ramp
5°-00 Rest Area Exit Ramp
Constr. Limits
Remove 6509 Lft. Cable Barrier
Remove 1151' Guardrail & GRET
CP #148
CP #311
App. Exist. L.A. R/W
App. P.L.
R 435'-0"
R 734'-2"
R 183'-7"
R 165'-7"
Str. No. 71
CV I65-010-22.23
234 LFT of 42" Pipe, Type 1, Req'd.
Skew 31.5^ Rt.
Remove Inlet & 13' of 12" Pipe
Str. No. 429
Inlet, Type "H-5" & 121' of 12" Pipe Req'd.
Str. No. 431
Inlet, Type "H-5" & 146' of 12" Pipe Req'd.
Str. No. 435
Inlet, Type "H-5" & 146' of 15" Pipe Req'd.
Str. No. 436
Inlet, Type "H-5" & 121' of 15" Pipe Req'd.
Str. No. 438
Inlet, Type "H-5" & 171' of 15" Pipe Req'd.
Str. No. 439
Inlet, Type "H-5" & 170' of 18" Pipe Req'd.
Str. No. 441
Manhole, Type "J-5" w/ Slotted Drains & 119' of 24" Pipe Req'd.
Str. No. 430
Manhole, Type "K-4" w/ Weir, 28' of 12" Pipe, & 1 End Section Req'd.
Str. No. 433
Inlet, Type "H-5" w/ Slotted Drains & 63' of 18" Pipe Req'd.
Str. No. 434
Manhole, Type "K-4" & 193' of 48" Pipe Req'd.
Str. No. 437
Inlet, Type "H-5" w/ Slotted Drains & 171' of 15" Pipe Req'd.
Str. No. 442
Inlet, Type "HA-5" w/ Slotted Drains & 4' of 12" Pipe Req'd.
LINDA MARIE OSTERTAG
COUNTRY LAKE INC.
NTRY LAKE INC.

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	28 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Ptf.pltcfg
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Cumulative Permanent Impacts

Wetland 53
0.02 ac
66.7 cys Clean Earth Fill

Wetland 20
0.0067 ac
20.7 cys Clean Earth Fill

Wetland 80
0.0019 ac
8.3 cys Clean Earth Fill

Wetland 21.1
0.0159 ac
10.4 cys Clean Earth Fill

Wetland 21.2
0.0007 ac
0.6 cys Clean Earth Fill

Wetland 22
0.0139 ac
45 cys Clean Earth Fill

Wetland 52
0.03 ac
109.6 cys Clean Earth Fill

Cumulative Impacts to West Fork Silver Creek
Permanent Impact due to abandonment of existing 72" Pipe and new riprap
291 lft (0.04 ac.)
39.1 Cys

Cumulative Impacts to West Fork Silver Creek
Temporary Impact due to cofferdam and site access
55 lft (0.0068 ac.)
0.6 Cys Sand Bags

725

730

SEC. 30, T 2 N, R 7 E
DE TOWNSHIP
RK COUNTY

SEC. 19, T
MONROE
CLARK COUNTY

West Fork Silver Creek
Temporary Access
18 lft
0.002 ac
No Fill
(18'x6')
Temporary Cofferdam
3 lft
0.0004 ac
0.3 cys Sandbags
(3'x6'x0.4')

West Fork Silver Creek
Permanent Impact
22 lft
0.003 ac
10 cys Class 1 Riprap
(22'x6'x2')

STEVENSON TOMES
&
SUSAN L. MCCOSKEY

CONNIE JO
STRINGER

CHARLES J. CARLSON

Wetland 20
Permanent Impact
0.0067 ac
20.7 cys Clean Earth Fill
(70'x4'x2') cys

END MILL & RESURFACE
BEGIN FULL DEPTH RECONSTRUCTION
0+62.58 "RAMP_B"

Str. No. 447
Manhole, Type "L-4"w/
Weir, 16' of 24" Pipe, &
1 End Section Req'd.

Wetland 21.1
Permanent Impact
0.0159 ac
10.4 cys Clean Earth Fill
(94'x72'x6") cys

Wetland 21.2
Permanent Impact
0.0007 ac
0.6 cys Clean Earth Fill
(8'x4'x6") cys

6509 Lft. Cable Barrier

Str. No. 456
Inlet, Type "H-5" w/
Slotted Drains & 36'
of 18" Pipe Req'd.

Wetland 22
Permanent Impact
0.0139 ac
45 cys Clean Earth Fill
(19'x32'x2') cys

Str. No. 441
Manhole, Type "J-5" w/
Slotted Drains & 119' of
24" Pipe Req'd.

P.C. 1+50.12 "RAMP_B"

P.C. 50+00.02 "RAMP_S"

P.O.T. 0+00.00 "RAMP_B"

Str. No. 443
Manhole, Type "L-4" &
391' of 54" Pipe Req'd.

Str. No. 446
Inlet, Type "H-5" &
145' of 12" Pipe Req'd.

Constr. Limits

App. Exist. L/A R/W

App. Exist. R/W

UNT to West Fork Silver Creek
No Impacts
Do Not Disturb

Str. No. 462
Manhole, Type "F-4"

Str. No. 465
Inlet, Type "HA-5" &
121' of 15" Pipe Req'd.

App. Exist. L.A. R/W

Rest Area Exit Ramp

P.T. 45+97.52 "RAMP_S"

P.I. 44+06.66 "RAMP_S"

CP #144

TBM #27

P.I. 40+06.65 "RAMP_S"

P.O.T. 38+56.17 "RAMP_S"

Wetland 52
Permanent Impact
0.03 ac
109.6 cys Clean Earth Fill
(148'x10'x2') cys

Str. No. 444
Manhole, Type "J-5" &
93' of 24" Pipe Req'd.

Existing Culvert
Abandon & Grout Fill

Str. No. 72
Des. 2001597
255 LFT of 72" Pipe,
Trenchless Req'd
Skew 26.5° Lt.

I-65 Southbound

Existing Culvert to Remain

Str. No. 73
Des. 2001595
234 LFT of 72" Pipe,
Type 1 Req'd
Skew 13° Rt.

Line "Q"

Wetland 53
Permanent Impact
0.02 ac
66.7 cys Clean Earth Fill
(150'x6'x2')cys

Str. No. 448
Inlet, Type "H-5" w/
Slotted Drains & 95'
of 15" Pipe Req'd.

I-65 Northbound

Constr. Limits

Str. No. 445
Inlet, Type "HA-5" &
4' of 12" Pipe Req'd.

Remove Inlet &
108' of 12" Pipe

P.O.T. 91+32.13 "RAMP_T"
△= 02° 17' 26" (LT)
(No Curve Run)

Remove 1151'
Guardrail & GRET

Str. No. 449
Inlet, Type "H-5" &
146' of 15" Pipe Req'd.
P.O.T. 94+32.37 "RAMP_T"

Str. No. 450
Inlet, Type "H-5" &
71' of 18" Pipe Req'd.

OHWM

Remove Inlet &
107' of 12" Pipe

Str. No. 453
Inlet, Type "H-5" w/
Slotted Drains & 66'
of 24" Pipe Req'd.

Str. No. 460
Inlet, Type "H-5" &
121' of 15" Pipe Req'd.

Str. No. 458
Manhole, Type "H-5" &
46' of 18" Pipe Req'd.

Str. No. 461
Inlet, Type "H-5" w/
Slotted Drains & 96'
of 12" Pipe Req'd.

Remove Inlet &
131' of 12" Pipe

Str. No. 463
Inlet, Type "H-5" &
36' of 18" Pipe Req'd.

Str. No. 464
Manhole, Type "K-4" &
143' of 48" Pipe Req'd.

Str. No. 451
Manhole, Type "M-4"w/
Weir, 21' of 30" Pipe, &
1 End Section Req'd.

Str. No. 454
Manhole, Type "M-4" &
176' of 72" Pipe Req'd.

Wetland 80
Permanent Impact
0.0019 ac
8.3 cys Clean Earth Fill
(14'x8'x2') cys

OHWM

App. Exist. L.A. R/W

App. P.L.

LINDA MARIE OSTERTAG

PHILLIP & JEANNIE R.
SMALLWOOD

West Fork Silver Creek
Stream Relocation
Existing - 291 lft (255-lft of 72" Encapsulation/36-lft Open Channel)
Proposed - 298 lft (255-lft of 72" Encapsulation/43-lft Class 1 Riprap)

Impacts below OHWM
Existing Pipe Abandonment
255 lft existing 72" pipe abandonment
0.035 ac
22.6 cys flowable fill (concrete to backfill existing pipe)
(255'x6'x0.4')
Riprap
36 lft
0.005 ac
16.5 cys Class 1 Riprap
(36'x6'x0.4')
*See Individual Callouts for Breakdown of Inlet/Outlet Impacts

West Fork Silver Creek
Permanent Impact
14 lft
0.002 ac
6.5 cys Class 1 Riprap
(14'x6'x2')

West Fork Silver Creek
Temporary Access
31 lft
0.004 ac
No Fill
(31'x6')
Temporary Cofferdam
3 lft
0.0004 ac
0.3 cys Sandbags
(3'x6'x0.4')

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	29 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Ptf.dfcfg
Indiana_Shade.tbl

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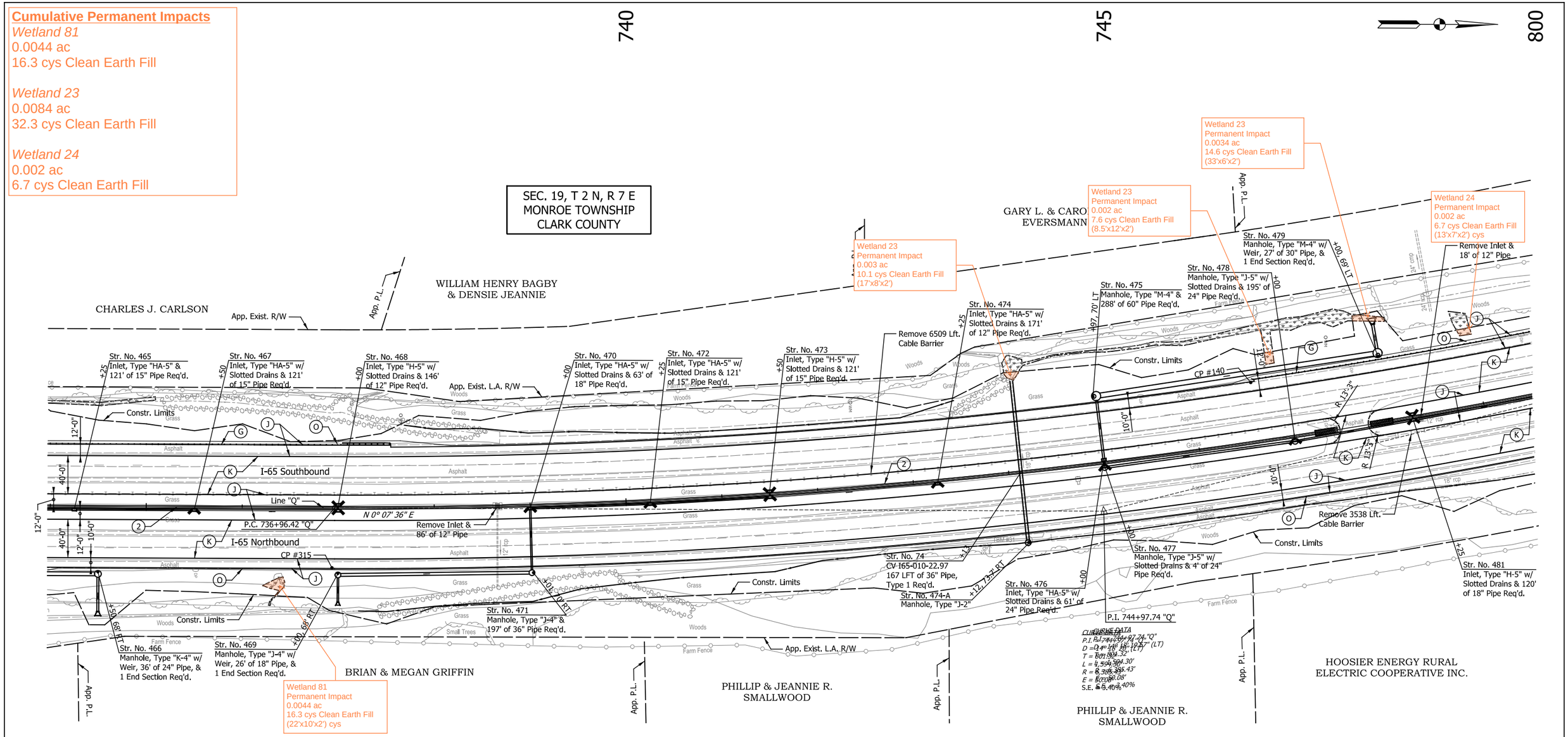
Cumulative Permanent Impacts

Wetland 81
0.0044 ac
16.3 cys Clean Earth Fill

Wetland 23
0.0084 ac
32.3 cys Clean Earth Fill

Wetland 24
0.002 ac
6.7 cys Clean Earth Fill



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

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DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	30 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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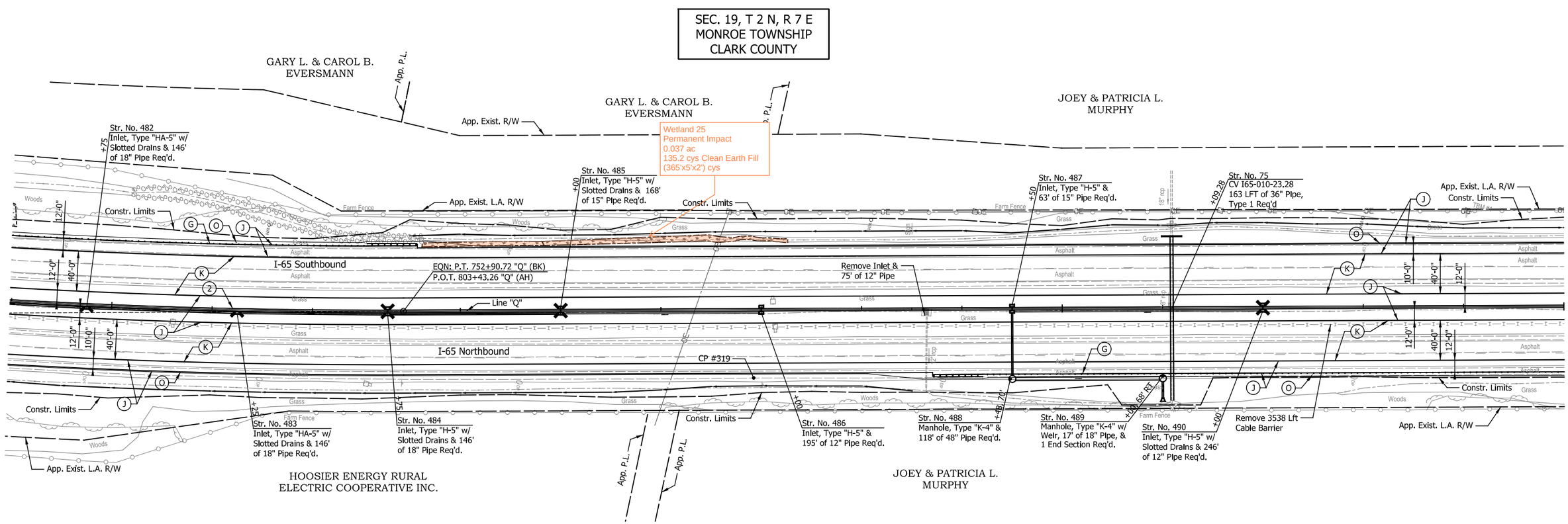
Cumulative Permanent Impacts
Wetland 25
0.037 ac
135.2 cys Clean Earth Fill

805 810 815

SEC. 19, T 2 N, R 7 E
MONROE TOWNSHIP
CLARK COUNTY



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

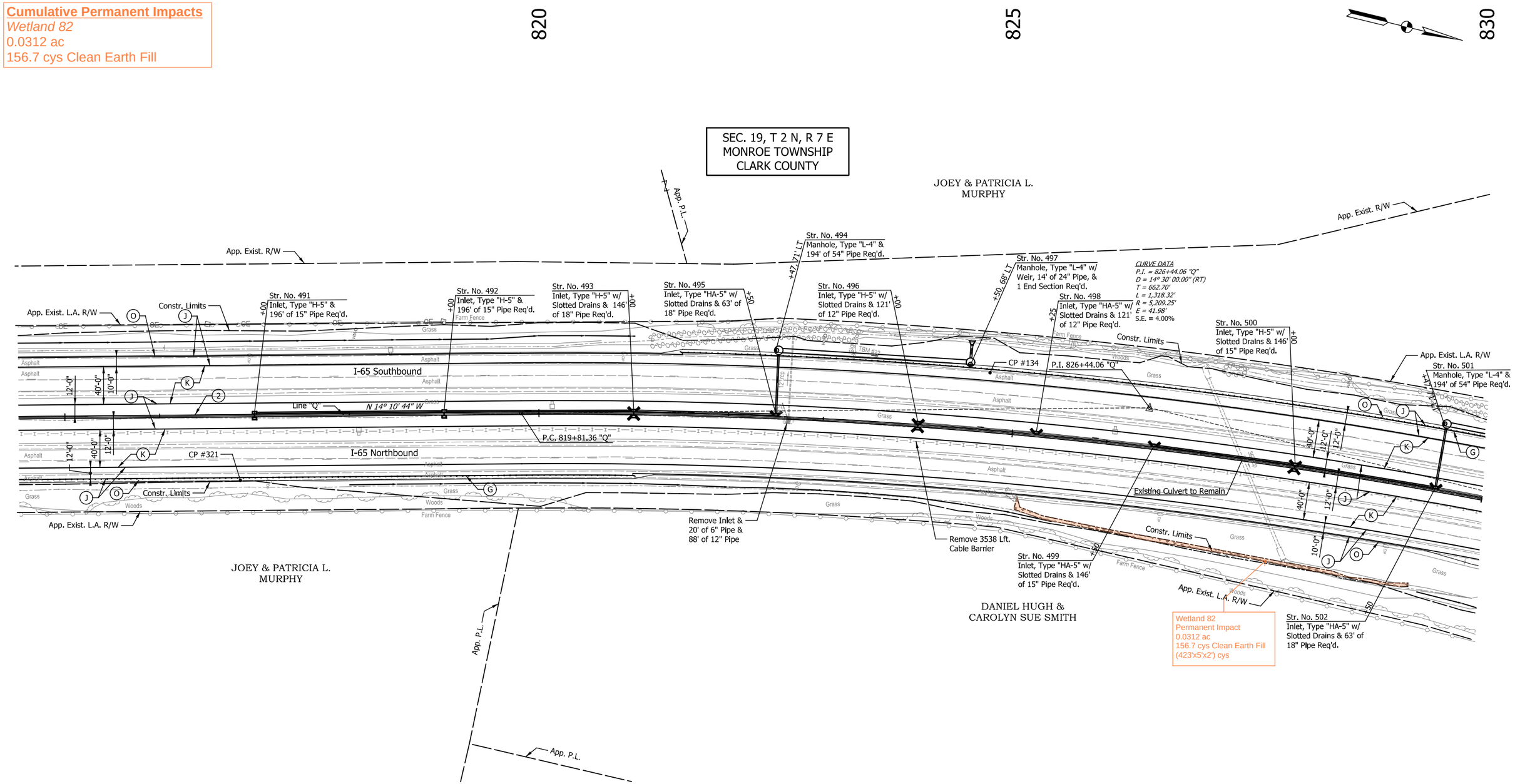
CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	31 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-ref_dtl.ctg
Indiana_Shade.tbl

hwilliamson 11/29/2021 10:56:17 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.06.dgn

Cumulative Permanent Impacts
Wetland 82
0.0312 ac
156.7 cys Clean Earth Fill



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	32 of 174
CONTRACT	PROJECT
R-41529	1700135

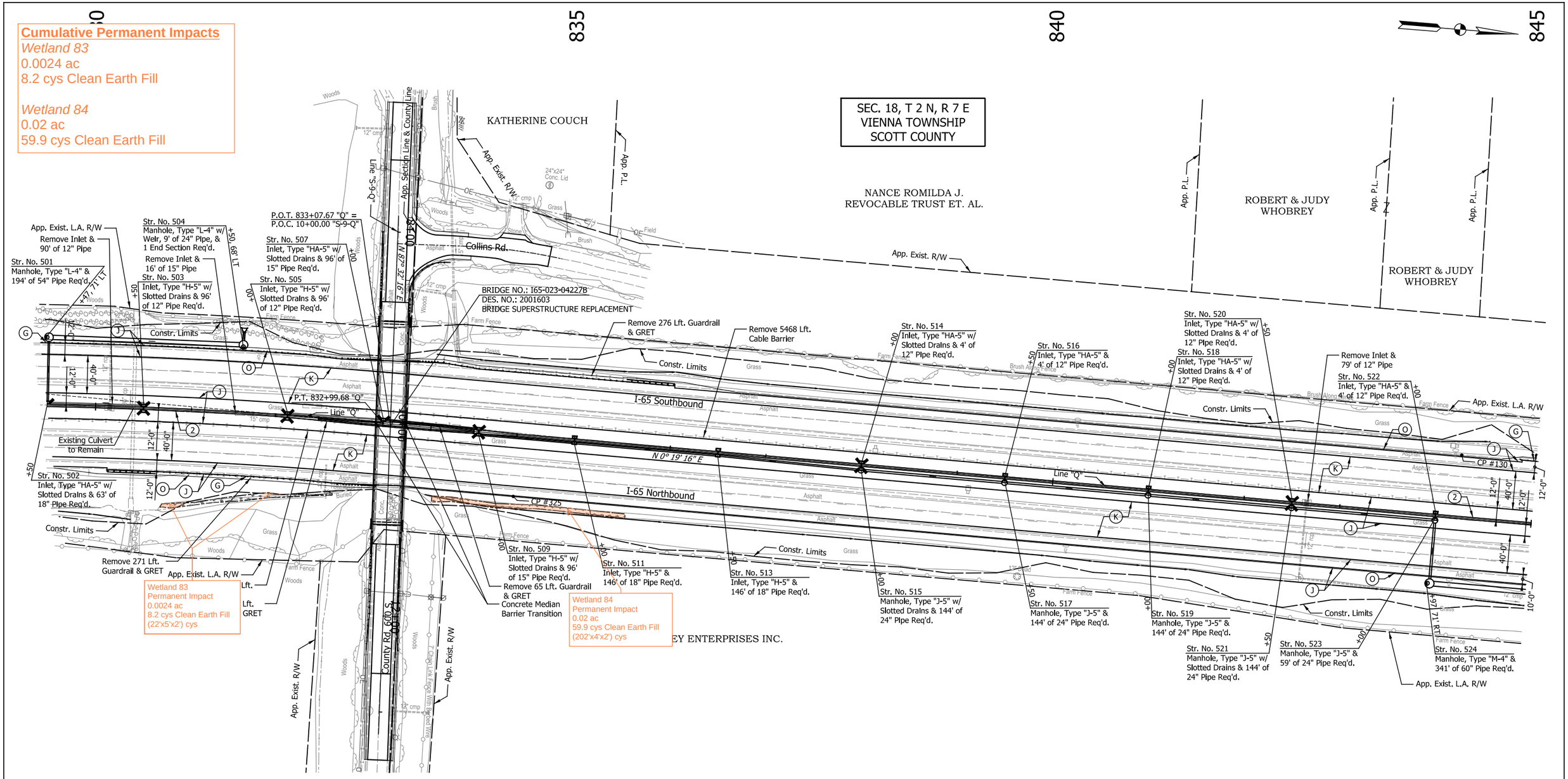
Indy-Pdf.pltcfg
Indiana_Shade.tbl

hwilliamson 11/29/2021 10:56:17 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.07.dgn

Cumulative Permanent Impacts

Wetland 83
0.0024 ac
8.2 cys Clean Earth Fill

Wetland 84
0.02 ac
59.9 cys Clean Earth Fill



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Line "Q" to be Constructed.

All Topographic Information Described From Line "Q", Except as Noted.

See Bridge Plans for additional information for County Line Road.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	33 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dftcfg
Indiana_Shade.tbl

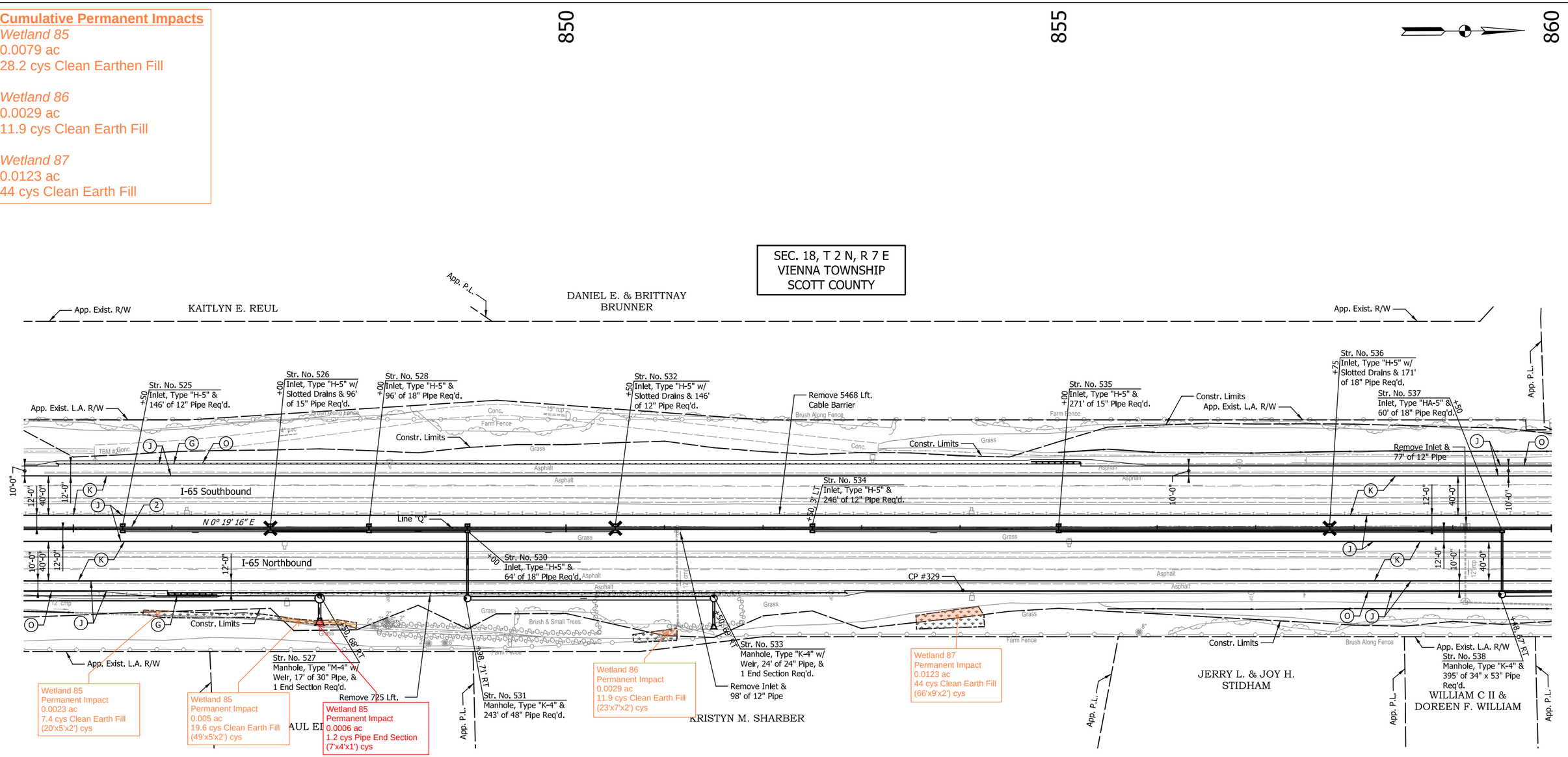
hwilliamson 11/29/2021 10:56:18 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.08.dgn

Cumulative Permanent Impacts

Wetland 85
0.0079 ac
28.2 cys Clean Earthen Fill

Wetland 86
0.0029 ac
11.9 cys Clean Earth Fill

Wetland 87
0.0123 ac
44 cys Clean Earth Fill



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	34 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

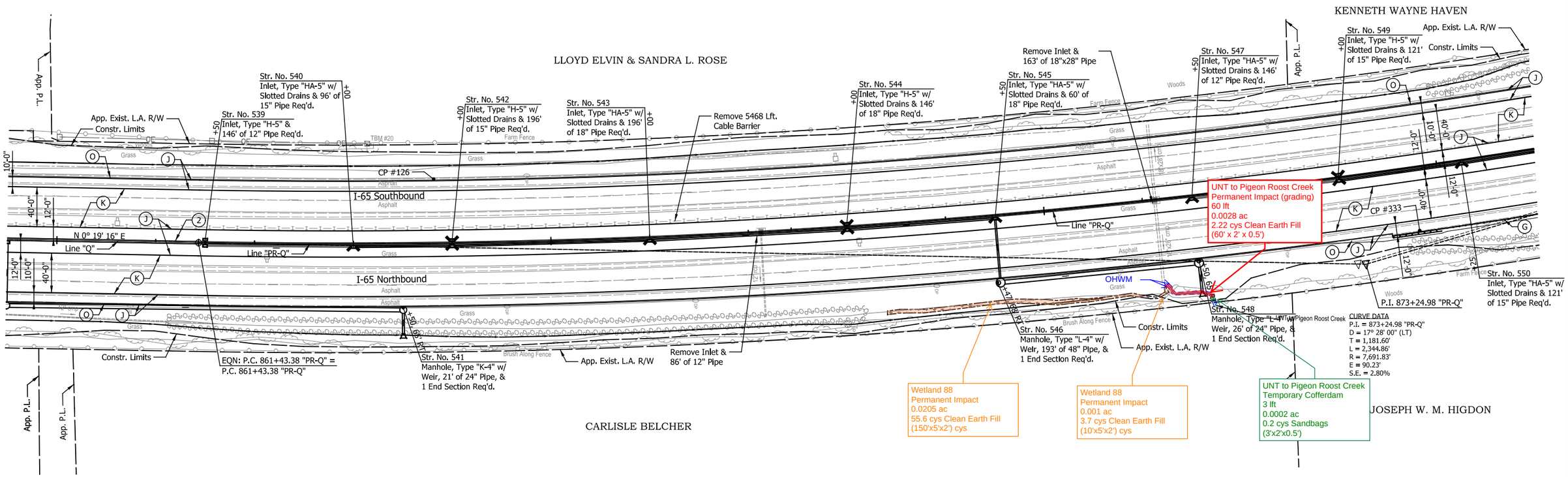
hwilliamson 11/29/2021 10:56:19 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.09.dgn

Cumulative Permanent Impacts
Wetland 88
0.0215 ac
59.3 cys Clean Earth Fill

Cumulative Impacts to UNT to Pigeon Roost Creek
Permanent Impact due to grading
60 lft (0.0028 ac)
2.22 cys

Cumulative Impacts to UNT to Pigeon Roost Creek
Temporary Impact due to cofferdam
3 lft (0.0028 ac)
2.22 cys

SEC. 18, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY


LLOYD ELVIN & SANDRA L. ROSE
KENNETH WAYNE HAVEN
CARLISLE BELCHER
JOSEPH W. M. HIGDON
App. P.L.
App. Exist. L.A. R/W
Constr. Limits
Str. No. 539
Inlet, Type "H-5" & 146' of 12" Pipe Req'd.
Str. No. 540
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 15" Pipe Req'd.
Str. No. 541
Manhole, Type "K-4" w/ Weir, 21' of 24" Pipe, & 1 End Section Req'd.
Str. No. 542
Inlet, Type "H-5" w/ Slotted Drains & 196' of 15" Pipe Req'd.
Str. No. 543
Inlet, Type "HA-5" w/ Slotted Drains & 196' of 18" Pipe Req'd.
Str. No. 544
Inlet, Type "H-5" w/ Slotted Drains & 146' of 18" Pipe Req'd.
Str. No. 545
Inlet, Type "HA-5" w/ Slotted Drains & 60' of 18" Pipe Req'd.
Str. No. 546
Manhole, Type "L-4" w/ Weir, 193' of 48" Pipe, & 1 End Section Req'd.
Str. No. 547
Inlet, Type "HA-5" w/ Slotted Drains & 146' of 12" Pipe Req'd.
Str. No. 548
Manhole, Type "L-4" w/ Weir, 26' of 24" Pipe, & 1 End Section Req'd.
Str. No. 549
Inlet, Type "H-5" w/ Slotted Drains & 121' of 15" Pipe Req'd.
Str. No. 550
Inlet, Type "HA-5" w/ Slotted Drains & 121' of 15" Pipe Req'd.
CP #126
CP #333
I-65 Southbound
I-65 Northbound
Line "Q"
Line "PR-Q"
Line "PR-O"
N 0° 19' 16" E
EQN: P.C. 861+43.38 "PR-Q" = P.C. 861+43.38 "PR-Q"
P.I. 873+24.98 "PR-Q"
Remove 5468 Lft. Cable Barrier
Remove Inlet & 86' of 12" Pipe
TBM #20
OHWM
Woods
Farm Fence
Brush Along Fence
Grass
Asphalt
Concrete
Gravel
870
875
40'-0"
12'-0"
10'-0"
12'-0"
40'-0"
12'-0"
10'-0"
40'-0"
12'-0"
10'-0"
40'-0"
12'-0"
10

Cumulative Permanent Impacts

Wetland 26
0.0536 ac
211.9 cys Clean Earth Fill
11 cys Class 2 Riprap

Wetland 89
0.0091 ac
42 cys Clean Earth Fill
0.7 cys Pipe End Section

880 885 890

SEC. 18, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

SEC. 7, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

KENNETH WAYNE HAVEN

JOSEPH W.

Wetland 26
Permanent Impact
0.0446 ac
191.9 cys Clean Earth Fill
(470'x5.5'x2') cys

Wetland 26
Permanent Impact
0.006 ac
20 cys Clean Earth Fill
(47'x5.5'x2') cys

Wetland 26
Permanent Impact
0.003-ac
11-cys Class 2 Riprap
(30.5'x3.75'x2.5')

Pigeon Roost Creek
Permanent Impact
80 lft
0.009 ac
55 cys Class 2 Riprap
See Structure Detail
for More Details

Wetland 89
Permanent Impact
0.007 ac
23 cys Clean Earth Fill
(80'x4'x2') cys

Wetland 89
Permanent Impact
0.0004 ac
0.7 cys Pipe End Section
(4'x4'x1') cys

Wetland 89
Permanent Impact
0.0017 ac
19 cys Clean Earth Fill
(60'x4'x2') cys

END PAVING EXCEPTION
888+42.00 "PR-Q"
BRIDGE NO.: I65-024-04229CSBL
DES. NO.: 2001605
BRIDGE WIDENING &
SUPERSTRUCTURE REPLACEMENT

BEGIN PAVING EXCEPTION
887+02.00 "PR-Q"
BRIDGE NO.: I65-024-04229CNBL
DES. NO.: 2001604
BRIDGE WIDENING &
SUPERSTRUCTURE REPLACEMENT

Remove Inlet & 98' of 12" Pipe
Remove Inlet & 66' of 12" Pipe
Remove Inlet & 67' of 12" Pipe
Concrete Median Barrier Transition
Remove Inlet & 24' of 12" Pipe
Remove 93 Lft. Guardrail
Concrete Median Barrier Transition
Remove 5468 Lft. Cable Barrier
Remove 491 Lft. Guardrail & GRET
Remove Inlet & 90' of 12" Pipe
Remove Inlet & 29' of 12" Pipe
Remove Inlet & 29' of 12" Pipe
Remove 502 Lft. Guardrail & GRET
Remove 350 Lft. Guardrail & GRET
Remove 7878 Lft. Cable Barrier
Remove 91 Lft. Guardrail

Str. No. 552
Inlet, Type "H-5" w/ Slotted Drains & 64' of 18" Pipe Req'd.
Str. No. 553
Manhole, Type "K-4" & 170' of 48" Pipe Req'd.

Str. No. 554
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 12" Pipe Req'd.

Str. No. 555
Manhole, Type "K-4" w/ Weir, 13' of 24" Pipe, & 1 End Section Req'd.

Str. No. 556
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 12" Pipe Req'd.

Str. No. 557
Inlet, Type "H-5" w/ Slotted Drains & 71' of 15" Pipe Req'd.

Str. No. 558
Inlet, Type "H-5" w/ Slotted Drains & 85' of 15" Pipe Req'd.

Str. No. 559
Inlet, Type "HA-5" w/ Slotted Drains & 4' of 12" Pipe Req'd.

Str. No. 560
Manhole, Type "J-5" w/ Slotted Drains & 60' of 24" Pipe Req'd.

Str. No. 561
Manhole, Type "K-4" & 382' of 48" Pipe Req'd.

Str. No. 562
Inlet, Type "HA-5" w/ Slotted Drains & 4' of 12" Pipe Req'd.

Str. No. 563
Manhole, Type "J-5" w/ Slotted Drains & 55' of 24" Pipe Req'd.

Str. No. 564
Inlet, Type "HA-5" w/ Slotted Drains & 4' of 12" Pipe Req'd.

Str. No. 565
Manhole, Type "J-5" w/ Slotted Drains & 70' of 24" Pipe Req'd.

Str. No. 566
Inlet, Type "HA-5" w/ Slotted Drains & 95' of 18" Pipe Req'd.

Str. No. 567
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 18" Pipe Req'd.

Str. No. 568
Manhole, Type "K-4" w/ Weir, 20' of 30" Pipe, & 1 End Section Req'd.

Str. No. 569
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 18" Pipe Req'd.

Str. No. 570
Inlet, Type "H-5" w/ Slotted Drains & 96' of 15" Pipe Req'd.

Str. No. 571
Inlet, Type "HA-5" w/ Slotted Drains & 41' of 12" Pipe Req'd.

Str. No. 572
Inlet, Type "H-5" w/ Slotted Drains & 141' of 12" Pipe Req'd.

Str. No. 573
Inlet, Type "H-5" w/ Slotted Drains & 96' of 12" Pipe Req'd.

Str. No. 574
Manhole, Type "M-4" w/ Weir, 12' of 24" Pipe, & 1 End Section Req'd.

Str. No. 575
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 15" Pipe Req'd.

P.T. 884+88.24 "PR-Q"
P.C. 889+51.31 "PR-Q"
CP #122
N 17° 08' 44" W
Line "PR-Q"
App. Exist. L.A. R/W
Constr. Limits
I-65 Southbound
I-65 Northbound
Pigeon Roost Creek
OHWM
App. P.L.
App. Section Line
+48.72' RT
+13.73' RT
+50.71' RT

CURVE DATA
P.I. = 873+24.98 "PR-Q"
D = 17° 28' 00" (LT)
T = 1,181.60'
L = 2,344.86'
R = 7,691.83'
E = 90.23'
S.E. = 2.80%

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "PR-Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	36 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-ePlotCfg
Indiana_Shade.tbl

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Cumulative Permanent Impacts
Wetland 27
0.0036 ac
13.5 cys Clean Earth Fill

Wetland 90
0.015 ac
53.3 cys Clean Earth Fill

Wetland 91
0.0309 ac
42.4 cys Clean Earth Fill

Cumulative Impacts to UNT to Underwood Run
Permanent Impact due to abandonment of existing 60" Pipe, pipe end sections, new riprap and channel grading
245 lft (0.028 ac.)
23.01 Cys

Cumulative Impacts to UNT to Underwood Run
Temporary Impact due to cofferdam
6 lft (0.0008 ac.)
0.44 Cys Sand Bags

SEC. 7, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

895 900 905

Wetland 27
Permanent Impact
0.0036 ac
13.5 cys Clean Earth Fill
(7'x26'x2') cys

UNT to Underwood Run
Permanent Impact
Channel Grading
15 lft
0.002 ac
1.1 cys clean earthen fill
(15'x6.0'x0.33')

UNT to Underwood Run
Permanent Impact
(End Section Removal)
18 lft
0.002 ac
1.32-cys clean earthen fill
(18'x6.0'x0.33')

UNT to Underwood Run
Temporary Cofferdam
3 lft
0.0004 ac
0.22 cys Sandbags
(3'x6'x0.33')

Str. No. 576
Inlet, Type "HA-5" w/ Slotted Drains & 2' of 15" Pipe Req'd.

Remove 502 Lft. Guardrail & GRET
Remove 350 Lft. Guardrail & GRET

Str. No. 583
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 18" Pipe Req'd.

Str. No. 584
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 18" Pipe Req'd.

Str. No. 585
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 15" Pipe Req'd.

Str. No. 586
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 15" Pipe Req'd.

P.I. 898+48.53 "PR-Q"

Str. No. 587
Inlet, Type "HA-5" w/ Slotted Drains & 96' of 12" Pipe Req'd.

Str. No. 77
CV I65-072-24.97
166 LFT of 36" Pipe, Type 1 Req'd
Skew 15° Lt.

Str. No. 588
Inlet, Type "H-5" w/ Slotted Drains & 61' of 18" Pipe Req'd.

Str. No. 593
Inlet, Type "HA-5" w/ Slotted Drains & 146' of 12" Pipe Req'd.

ADAM & CARLY GRAY

OHWM

Str. No. 78
Des. 2001594
192 LFT of 60" Pipe, Trenchless Req'd
Skew 11.5° Lt.

Existing Culvert
Abandon & Grout Fill

Str. No. 594
Inlet, Type "H-5" w/ Slotted Drains & 3' of 18" Pipe Req'd.

I-65 Southbound
I-65 Northbound
Line "PR-Q"
Constr. Limits
App. Exist. L.A. R/W
Farm Fence
Woods
Grass
Asphalt
Buried
Ditch
15" Quad
Road Along Fence
Broken Stone
Ws
BM #17
CP #337
CP #118
12'-0"
10'-0"
40'-0"

Str. No. 577
Manhole, Type "J-4" & 61' of 18" Pipe Req'd.

Str. No. 578
Manhole, Type "M-4" & 190' of 66" Pipe Req'd.

JOSEPH W. M. HIGDON

Wetland 90
Permanent Impact
0.015 ac
53.3 cys Clean Earth Fill
(80'x9'x2') cys

Str. No. 580
Inlet, Type "H-5" w/ Slotted Drains & 95' of 18" Pipe Req'd.

Str. No. 76
CV I65-072-24.80
163 LFT of 36" Pipe, Type 1 Req'd
Skew 15° Rt.

Str. No. 582
Inlet, Type "H-5" w/ Slotted Drains & 96' of 18" Pipe Req'd.

KENNETH WAYNE HAV

Remove Inlet & 79' of 12" Pipe

Wetland 91
Permanent Impact
0.0309 ac
42.4 cys Clean Earth Fill
(143'x4'x2') cys

CURVE DATA
P.I. = 898+48.53 "PR-Q"
D = 17° 57' 00" (RT)
T = 897.21'
L = 1,779.72'
R = 5,680.82'
E = 70.42'
S.E. = 3.60%

Str. No. 589
Manhole, Type "J-4" & 143' of 36" Pipe Req'd.

Str. No. 590
Inlet, Type "HA-5" w/ Slotted Drains & 121' of 15" Pipe Req'd.

App. P.I.

Str. No. 591
Manhole, Type "J-4" & 17' of 24" Pipe Req'd.

Str. No. 592
Inlet, Type "H-5" w/ Slotted Drains & 146' of 15" Pipe Req'd.

Remove 7878 Lft. Cable Barrier

BRETT LEE & TERESA M. SMITH

Str. No. 596
Manhole, Typ
191' of 48"

UNT to Underwood Run
Permanent Impact
(End Section Removal)
18 lft
0.001 ac
0.59-cys clean earthen fill
(18'x2.7'x0.33')
Note 12 lft of Scour placement overlaps with end section removal as shown

UNT to Underwood Run
Permanent Impact (Scour)
20 lft
0.002 ac
8-cys Class 1 Riprap
(20'x5.2'x2.0')
Note 12 lft of Scour placement overlaps with end section removal as shown

UNT to Underwood Run
Stream Relocation
Existing - 245 lft (186-lft of 60" Encapsulation/18-lft inlet end section/20-lft outlet end section/21-lft open channel)
Proposed - 251 lft (192-lft of new 60" pipe/24-lft riprap outlet/35-lft open channel)

Impacts below OHWM
Existing Pipe Abandonment
186 lft of existing 60" pipe
0.021 ac
12-cys flowable fill (concrete backfill existing pipe)
(186'x5.0'x0.33')
Existing end sections removal
44 lft
0.005 ac (0.003 ac clean fill/0.002 ac Class 1 Riprap)
8-cys Class 1 Riprap and 1.91-cys clean earthen fill
(Clean Fill 36'x6.0'x0.33'/ Class 1 Riprap 20'x5.2'x2.0')
Channel Grading (inlet)
15 lft
0.002 ac
1.1 cys clean earthen fill
(15'x6.0'x0.33')

*See individual callouts for breakdown of inlet/outlet impacts

UNT to Underwood Run
Temporary Cofferdam
3 lft
0.0004 ac
0.22 cys Sandbags
(3'x6'x0.33')

LEGEND

(K) Full Depth HMA Pavement (See Typical Sections)
(J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
(G) MGS W-Beam Guardrail
(G1) Cable Barrier System, Type TL-4
(M) Milling, Asphalt, X.X"
(O) Compacted Aggregate, No. 53
(R) xxx lb
(2) Concr
(27) Seed

"PR-Q" to be Constructed.
Described from Line "PR-Q",
ted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135

SURVEY BOOK	SHEETS
N/A	37 of 174
CONTRACT	PROJECT
R-41529	1700135

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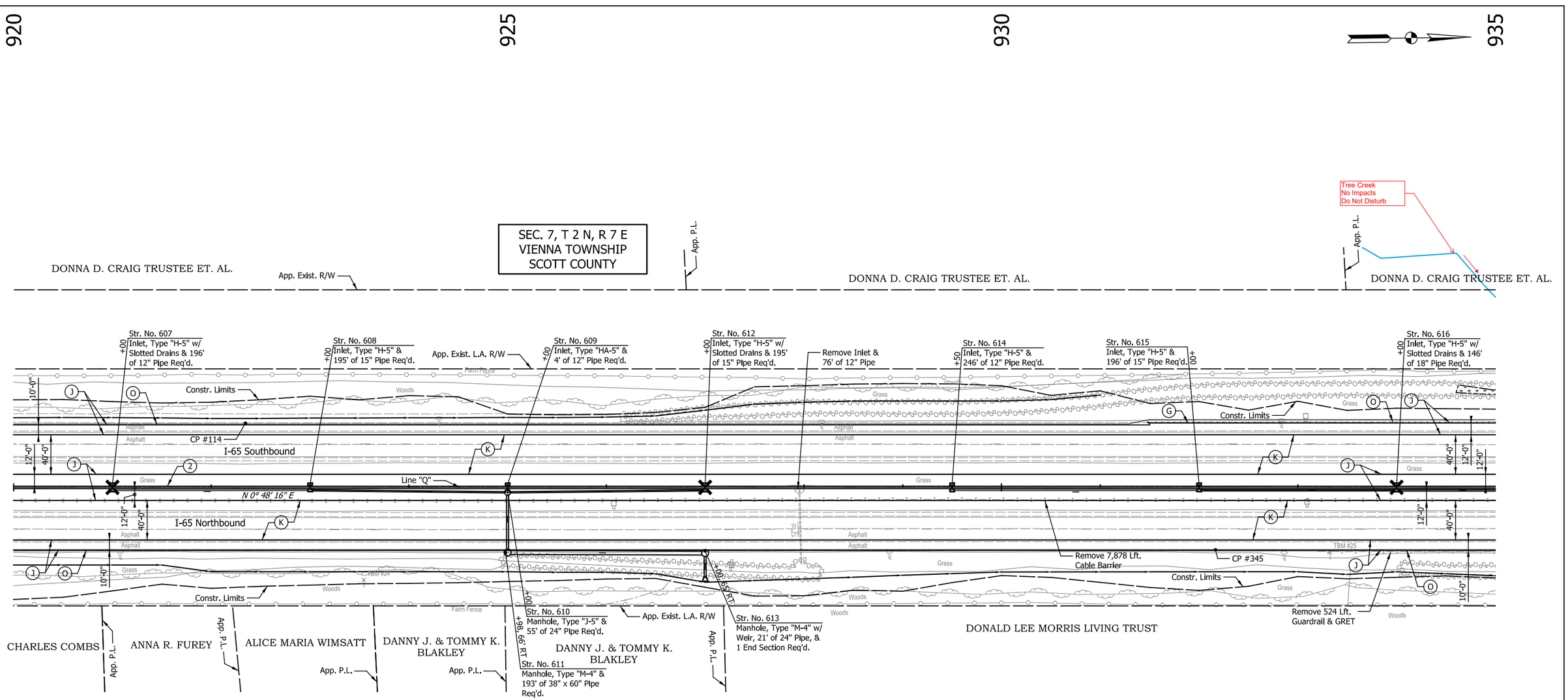

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	38 of 174
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 51
0.012 ac
57 cys Clean Earth Fill

Wetland 29
0.0007 ac
2.7 cys Clean Earth Fill

Cumulative Impacts to UNT to Tree Creek
Permanent Impact due to abandonment of existing 48" Pipe, pipe end sections, new riprap and channel grading
238 lft (0.0337 ac.)
31.85 Cys

Cumulative Impacts to UNT to Tree Creek
Temporary Impact due to cofferdam
6 lft (0.001 ac.)
0.78 Cys Sand Bags

SEC. 7, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

935 940 945 950

Wetland 28
No Impacts
Do Not Disturb

Tree Creek
No Impacts
Do Not Disturb

App. Exist. R/W
App. Exist. L.A. R/W
Farm Fence
Tree Creek
15" cmp

DONNA D. CRAIG TRUSTEE ET. AL.

EVERITT CEMETERY

Str. No. 620
Inlet, Type "H-5" & 96' of 12" Pipe Req'd.

Str. No. 621
Inlet, Type "H-5" w/ Slotted Drains & 71' of 12" Pipe Req'd.

Str. No. 623
Inlet, Type "H-5" w/ Slotted Drains & 81' of 15" Pipe Req'd.

Str. No. 625
Inlet, Type "H-5" w/ Slotted Drains & 61' of 18" Pipe Req'd.

Str. No. 626
Inlet, Type "H-5" w/ Slotted Drains & 71' of 18" Pipe Req'd.

Wetland 51
Permanent Impact
0.012 ac
57 cys Clean Earth Fill
(110'x7'x2') cys

Str. No. 630
Inlet, Type "H-5" & 96' of 15" Pipe Req'd.

Str. No. 631
Inlet, Type "H-5" w/ Slotted Drains & 96' of 12" Pipe Req'd.

Str. No. 79
Des. 2001596
172 LFT of 48" Pipe, Trenchless Req'd.
Skew 0.5° Rt.

Wetland 29
Permanent Impact
0.0007 ac
2.7 cys Clean Earth Fill
(12'x3'x2') cys

UNT to Tree Creek
Temporary Cofferdam
3 lft
0.0005 ac
0.39 cys Sandbags
(3'x7'x0.5')

Existing Culvert
Abandon & Grout Fill

Str. No. 635
Inlet, Type "HA-5" w/ Slotted Drains & 4' of 12" Pipe Req'd.

Str. No. 634
Inlet, Type "H-5" & 195' of 15" Pipe Req'd.

UNT to Tree Creek
Permanent Impacts
Channel Grading
18-lft
0.003 ac
2.3 cys clean fill
(18'x7'x0.5')
Class 1 Riprap Inlet
10 lft
0.0003 ac
0.8 cys Class 1 Riprap
(10'x1.1'x2')
completely overlaps with channel grading length
End Section Removal
16 lft
0.003 ac
2.1 cys clean fill
(16'x7'x0.5')

UNT to Tree Creek
Stream Relocation
Existing - 238-lft (172-lft of 48" Encapsulation/32-lft end sections/34-lft open channel)
Proposed - 245-lft (172-lft of 48" Encapsulation/32-lft end sections/41-lft Class 1 Riprap)

Impacts below OHWM
Existing Pipe Abandonment
172 lft existing 48" pipe abandonment
0.022 ac
18.1 cys flowable fill (concrete to backfill existing pipe)
(172'x4'x0.5')
Channel Grading
24-lft to realign channel south
0.0034 ac
2.65 cys clean earthen fill
Class 1 Riprap (Inlet and Outlet)
26 lft
0.0023 ac
6.9 cys Class 1 Riprap
End Section Removals (Inlet and Outlet)
32-lft remove existing end sections for abandonment
0.006 ac
4.2 cys clean earthen fill

**See individual callouts for complete breakdown of impacts*

Line "Q"
N 0° 48' 16" E
I-65 Southbound
I-65 Northbound
CP #110
Remove Inlet & 75' of 12" Pipe
Remove 7,878 Lft. Cable Barrier
Str. No. 632
Inlet, Type "H-5" & 96' of 12" Pipe Req'd.
Remove Inlet & 105' of 12" Pipe
Constr. Limits
Grass
Woods
Asphalt
Farm Fence

Str. No. 619
Manhole, Type "L-4" & 241' of 54" Pipe Req'd.
Str. No. 618
Inlet, Type "H-5" & 64' of 18" Pipe Req'd.
Remove Inlet & 83' of 12" Pipe
App. Exist. L.A. R/W
Remove 524 Lft. Guardrail & GRET

Str. No. 622
Manhole, Type "L-4" w/ Weir, 12' of 24" Pipe, & 1 End Section Req'd.
META LYNN CLARK

Str. No. 624
Manhole, Type "M-4" w/ Weir, 19' of 24" Pipe, & 1 End Section Req'd.
NORMANDA J. & META LYNN CLARK

Str. No. 628
Inlet, Type "H-5" & 63' of 18" Pipe Req'd.
Str. No. 629
Manhole, Type "M-4" & 141' of 60" Pipe Req'd.
NORMANDA J. & META LYNN CLARK

UNT to Tree Creek
Permanent Impacts
End Section Removal
16 lft
0.003 ac
2.1 cys clean fill
(16'x7'x0.5')
Channel Grading
6-lft
0.0004 ac
0.35 cys clean fill
(6'x3.2'x0.5')
completely overlaps with Class 1 Riprap length
Class 1 Riprap Outlet
16 lft
0.002 ac
6.1 cys Class 1 Riprap
(16'x5.4'x2')

UNT to Tree Creek
Temporary Cofferdam
3 lft
0.0005 ac
0.39 cys Sandbags
(3'x7'x0.5')

DAVID GEORGE & CINDY L. CLARK

OHWM

Str. No. 633
Manhole, Type "M-4" w/ 16' of 30" Pipe & 1 End Section Req'd

Str. No. 637
Manhole, Type "M-4" & 261' of 60" Pipe Req'd.

Str. No. 636
Manhole, Type "J-5" w/ Slotted Drains & 58' of 24" Pipe Req'd.

BILLY DEAN & DEBORAH A. MULLINS

App. P.L.
App. Section Line
App. Exist. L.A. R/W

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: PKW CHECKED: PKW

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	39 of 174
CONTRACT	PROJECT
R-41529	1700135

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Cumulative Permanent Impacts
Wetland 50
0.019 ac
91.1 cys Clean Earth Fill

Cumulative Impacts to Sycamore Run
Permanent Impact due to abandonment of existing 72" Pipe, and new riprap
271 lft (0.038 ac.)
43.6 Cys

Cumulative Impacts to Sycamore Run
Temporary Impact due to cofferdam
6 lft (0.0006 ac.)
1.23 Cys Sand Bags

Sycamore Run
Stream Relocation
Existing - 278-lft (259 lft of 72" Encapsulation/2-lft concrete lined channel/17-lft existing riprap at outlet)
Proposed - 283-lft (221 lft of 72" Encapsulation/42-lft riprap at outlet/20 lft open channel at inlet)

Impacts below OHWM
Existing Pipe Abandonment
254 lft existing 72" pipe abandonment (224-lft to be filled, 20-lft to be open channel, 10-lft channel grading)
0.036 ac (0.032 ac flowable fill/0.003 ac lined with Riprap/0.001 ac channel grading)
23.1 cys flowable fill (concrete to backfill existing pipe)/11.1 cys Class 1 Riprap/4 cys clean earth fill
(Flowable Fill - 224'x6'x0.5'/ Class 1 Riprap 20'x6'x0.5'/ Clean Earth Fill 10'x6'x0.5')
Existing Riprap Supplemented at Outlet
17 lft
0.002 ac
5.4 cys
(17'x4.3'x2')
**See callouts for additional impact details at outlet*

SEC. 6, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

950 955 960 965

CHRISTOPHER G. & APRIL DARLAGE
CANDACE J.
CHRISTOPHER G. & APRIL DARLAGE
JEFFERY A. CAUDELL
BOWLING
App. P.L.
App. Exist. R/W

Str. No. 640 Inlet, Type "H-5" & 196' of 15" Pipe Req'd. +00
App. Exist. L.A. R/W
Farm Fence
Str. No. 641 Inlet, Type "H-5" w/ Slotted Drains & 246' of 12" Pipe Req'd. +50
Stru. No. 80 CV I65-072-26.04 174 LFT of 36" Type 1 Pipe Req'd. +08.54
Str. No. 643 Inlet, Type "H-5" & 245' of 15" Pipe Req'd. +00
Remove 7,878 Lft. Cable Barrier
Str. No. 644 Inlet, Type "HA-5" & 4' of 12" Pipe Req'd. +50
Str. No. 647 Inlet, Type "H-5" w/ Slotted Drains & 195' of 12" Pipe Req'd. +50
Str. No. 649 Inlet, Type "H-5" & 146' of 12" Pipe Req'd. +00
Remove 927 Lft. Guardrail & GRET
Wetland 50
Permanent Impact
0.019 ac
91.1 cys Clean Earth Fill
(246'x5'x2')cys
Existing culvert will remain in place (5-lft of 72" CMP)
Sycamore Run
Temporary Cofferdam
3 lft
0.0004 ac
0.9 cys Sandbags
(3'x6'x0.5')
Des. 2001593
221 LFT of 72" Pipe, Trenchless Req'd
Skew 8° Lt. +44.84
Existing Culvert Abandon & Grout Fill
2-lft concrete lined channel
Open Channel post relocation
Constr. Limits
Woods
Grass
Asphalt
Conc.
Stone
Farm Fence
I-65 Southbound
I-65 Northbound
Line "Q"
CP #106
N 0° 48' 16" E
TBM #26
Remove Inlet & 102' of 12" Pipe
Remove Inlet & 77' of 12' Pipe
CP #349
Str. No. 642 Manhole, Type "J-4" w/ Weir, 24' of 24" Pipe, & 1 End Section Req'd. +50.69 RT
App. Exist. L.A. R/W
Str. No. 646 Manhole, Type "J-4" & 294' of 36" Pipe Req'd. +52.70' RT
Str. No. 645 Manhole, Type "J-5" & 59' of 18" Pipe Req'd. +50
Remove 1,801 Lft. Guardrail & GRET
Str. No. 648 Manhole, Type "K-4" w/ Weir, 19' of 24" Pipe, & 1 End Section Req'd. +35.38 RT
Str. No. 651 Inlet, Type "H-5" & 63' of 18" Pipe Req'd. +55
Str. No. 652 Manhole, Type "K-4" & 208' of 48" Pipe Req'd. +53.+ 20.08 RT
Sycamore Run
Culvert Removal and Channel Grading
10 lft
0.001 ac
4 cys Clean Earth Fill
(10'x6'x0.5')
Sycamore Run
Permanent Impact
Existing Riprap Supplemented
17 lft
0.002 ac
5.4 cys Class 1 Riprap
(17'x4.3'x2')
Pipe Removal and New Riprap
20 lft existing 72" pipe removed
0.003 ac
11.1 cys Class 1 Riprap
(25'x6'x0.5')
Sycamore Run
Temporary Cofferdam
3 lft
0.0002 ac
0.33 cys Sandbags
(3'x3.5'x0.5')
OHWM
BILLY DEAN & DEBORAH A. MULLINS
DONALD LEE MORRIS LIVING TRUST
App. P.L.

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	40 of 174
CONTRACT	PROJECT
R-41529	1700135

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965 970 975 980

Cumulative Permanent Impacts
Wetland 50
Continued from previous sheet

Cumulative Impacts to UNT 1 to Sycamore Run
Permanent Impact due to installation of new 36" Pipe and pipe end sections
198 lft (0.0146 ac.)
8.38 Cys

Cumulative Impacts to UNT 1 to Sycamore Run
Temporary Impact due to cofferdam and temporary access
17 lft (0.0006 ac.)
0.25 Cys Sand Bags

SEC. 6, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

TRACY & BEVERLY BOWLING
SCOTT DEWAYNE BOWLING
LOUELLA SIMS
CHRISTOPHER DARLAGE
App. P.L.

Wetland 50
Permanent Impact
0.019 ac
91.1 cys Clean Earth Fill
(246'x5'x2')cys
(Con't. from previous sheet)

UNT1 to Sycamore Run
Structure Replacement
183-lft
0.0126 ac
5.08 cys of 36" Type 1 Pipe
(183' x 3' x 0.25')

UNT1 to Sycamore Run
Temporary Access
8lft
0.0003 ac
No Fill
(8' x 1.5')
Temporary Cofferdam
3 lft
0.0001 ac
0.15 cys Sandbags
(3'x1.5'x0.25')

UNT1 to Sycamore Run
Permanent Impact
Pipe End Section
15 lft
0.002 ac
3.3 cys
(15' x 4' x 1.5')

UNT1 to Sycamore Run
Temporary Access
3lft
0.0001 ac
No Fill
(3' x 1.5')
Temporary Cofferdam
3 lft
0.0001 ac
0.1 cys Sandbags
(3'x1.5'x0.25')

Remove 7,878 Lft. Cable Barrier
Str. No. 653 Inlet, Type "H-5" w/ Slotted Drains & 146' of 15" Pipe Req'd.
Constr. Limits
Str. No. 654 Inlet, Type "H-5" & 146' of 12" Pipe Req'd.
Str. No. 656 Inlet, Type "H-5" & 146' of 12" Pipe Req'd.
Remove 927 Lft. Guardrail & GRET
Remove 2,563 Lft. Guardrail & GRET
App. Exist. L.A. R/W
Str. No. 82 CV 165-072-26.41 183 LFT of 36" Pipe, Type 1 Req'd. Skew 15° Rt.
Str. No. 663 Inlet, Type "H-5" & 195' of 15" Pipe Req'd.
App. Exist. L.A. R/W
Constr. Limits
Str. No. 664 Inlet, Type "HA-5" & 4' of 12" Pipe Req'd.

I-65 Southbound
I-65 Northbound
Inlet & 78' of 12" Pipe, Remove
Line "Q"
N 0° 48' 16" E
+40.75 13.25' LT.
+97.25 13.25' LT.
+40.75 13.25' RT.
+97.25 13.25' RT.
R 13'-3"

Str. No. Des. 2001593 307 LFT of Pipe Lining (66" Dia.) Req'd.
Constr. Limits
App. P.L.
Str. No. 655 Manhole, Type "K-4" w/ Weir, 28' of 24" Pipe, & 1 End Section Req'd.
Remove 1,801 Lft. Guardrail & GRET
App. Exist. L.A. R/W
Str. No. 658 Inlet, Type "H-5" w/ Slotted Drains & 63' of 18" Pipe Req'd.
Str. No. 659 Manhole, Type "K-4" & 218' of 48" Pipe Req'd.
Str. No. 660 Inlet, Type "H-5" & 146' of 15" Pipe Req'd.
Constr. Limits
CP #352
Str. No. 661 Inlet, Type "H-5" & 146' of 15" Pipe Req'd.
Str. No. 662 Inlet, Type "H-5" w/ Slotted Drains & 146' of 12" Pipe Req'd.
OHWM
Constr. Limits
Str. No. 665 Manhole, Type "J-5" & 59' of 18" Pipe Req'd.
Str. No. 666 Manhole, Type "K-4" & 218' of 42" Pipe Req'd.

DONALD LEE MORRIS LIVING TRUST
DONALD LEE MORRIS LIVING TRUST

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	41 of 174
CONTRACT	PROJECT
R-41529	1700135

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Indiana_Shade.tbl

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Cumulative Permanent Impacts
Wetland 49
0.018 ac
45.3 cys Clean Earth Fill

Wetland 92
0.0022 ac
8.9 cys Clean Earth Fill

Cumulative Impacts to UNT 2 to Sycamore Run
Permanent Impact due to installation of new 36" Pipe, new rip rap, and channel grading
190 lft (0.0145 ac.)
8.63 Cys

Cumulative Impacts to UNT 2 to Sycamore Run
Temporary Impact due to cofferdam
6 lft (0.0002 ac.)
0.2 Cys Sand Bags

990

995

SEC. 31, T 3 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

SEC. 6, T 2 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

UNT2 to Sycamore Run
Structure Replacement
163-lft
0.011 ac
4.53 cys of 36" Type 1 Pipe
(163' x 3' x 0.8')

UNT2 to Sycamore Run
Temporary Cofferdam
3 lft
0.0001 ac
0.1 cys Sandbags
(3' x 1.5' x 0.8')

UNT2 to Sycamore Run
Permanent Impact
Channel Grading
15 lft
0.0005 ac
3.1 cys Clean Earth Fill
(15' x 1.5' x 0.8')

CHRISTOPHER DARLAGE

BRIAN K. GAFFNEY &
ANGELA M. KIDD

MICHAEL REED

CHRISTOPHER STEPHEN &
BRENDA & MICHAEL HANCOCK

CHRISTOPHER
STEPHEN
ET AL

App. Exist. R/W

App. P.L.

C.R. 50 W

App. Section Line

"20"-27-9525"S, Line

S 89° 30' 15" E

8+00

P.O.T. 992+96.58 "Q" =
P.O.C. 10+04.17 "S356-IC-2Q"
BRIDGE NO.: I65-26-07253
NO WORK REQUIRED
P.I. 10+04.20 "S356-IC-2Q"

Str. No. 667
Inlet, Type "H-5" w/
Slotted Drains & 195'
of 15" Pipe Req'd.

Remove Inlet &
81' of 12" Pipe

Constr. Limits

Str. No. 669
Inlet, Type "H-5" &
196' of 12" Pipe Req'd.

Remove 2,563 Lft.
Cable Barrier

App. Exist. L.A. R/W

Str. No. 672
Inlet, Type "H-5" &
245' of 18" Pipe Req'd.

Remove Inlet &
82' of 15" Pipe

Str. No. 673
Manhole, Type "J-5" &
194' of 24" Pipe Req'd.

Str. No. 675
Manhole, Type "J-5" w/
Slotted Drains & 44' of
24" Pipe Req'd.

Str. No. 677
Manhole, Type "M-4" &
341' of 66" Pipe Req'd.

Str. No. 678
Manhole, Type "J-5" &
54' of 30" Pipe Req'd.

I-65 Southbound

I-65 Northbound

Line "Q"

N 0° 48' 16" E

Wetland 49
Permanent Impact
0.018 ac
45.3 cys Clean Earth Fill
(68'x9'x2') cys

Wetland 92
Permanent Impact
0.0022 ac
8.9 cys Clean Earth Fill
(40'x3'x2') cys

Str. No. 668
Mod. Manhole, Type "K-4"
w/ Weir, 20" of 24" Pipe, 2 to
1 End Section Req'd.

OHWM

Str. No. 83
CV-065-072-26.54
163 LFT of 36" Pipe,
Type 1 & 2 End Sections

UNT2 to Sycamore Run
Permanent Impact
Revetment Riprap
Supplemented at Outlet
12-lft
0.003 ac
1.0 cys Revetment Riprap
(12' x 1.5' x 1.5')

UNT2 to Sycamore Run
Temporary Cofferdam
3 lft
0.0001 ac
0.1 cys Sandbags
(3' x 1.5' x 0.8')

Str. No. 670
Inlet, Type "H-5" &
196' of 15" Pipe Req'd.

Str. No. 671
Inlet, Type "H-5" w/
Slotted Drains & 246'
of 18" Pipe Req'd.

Str. No. 674
Inlet, Type "HA-5" &
4' of 12" Pipe Req'd.

Concrete Median Barrier Transition Req'd.
991+75.00 to 994+18.00 "Q"
See Misc. Details for Information.

Str. No. 676
Inlet, Type "HA-5" w/
Slotted Drains & 4' of
12" Pipe Req'd.

Str. No. 679
Inlet, Type "HA-5" &
4' of 12" Pipe Req'd.

Remove 5,776 Lft. Cable
Barrier Req'd. 992+23 to
1050+00 "Q"

S 88° 52' 45" E
12+00
W. Leota Rd.

DONALD LEE MORRIS LIVING TRUST

RALPH GILBERT III &
BRENDA K. PARSON

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD

CHECKED: PKW | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	42 of 174
CONTRACT	PROJECT
R-41529	1700135

Cumulative Permanent Impacts
Wetland 93
0.0114 ac
53.3 cys Clean Earth Fill

Cumulative Impacts to UNT 1 to Nest Run
Permanent Impact due to riprap
12 lft (0.003 ac)
8 cys

Cumulative Impacts to UNT 3 to Nest Run
Permanent Impact due to ditch grading
125 lft (0.003 ac.)
1.1 Cys

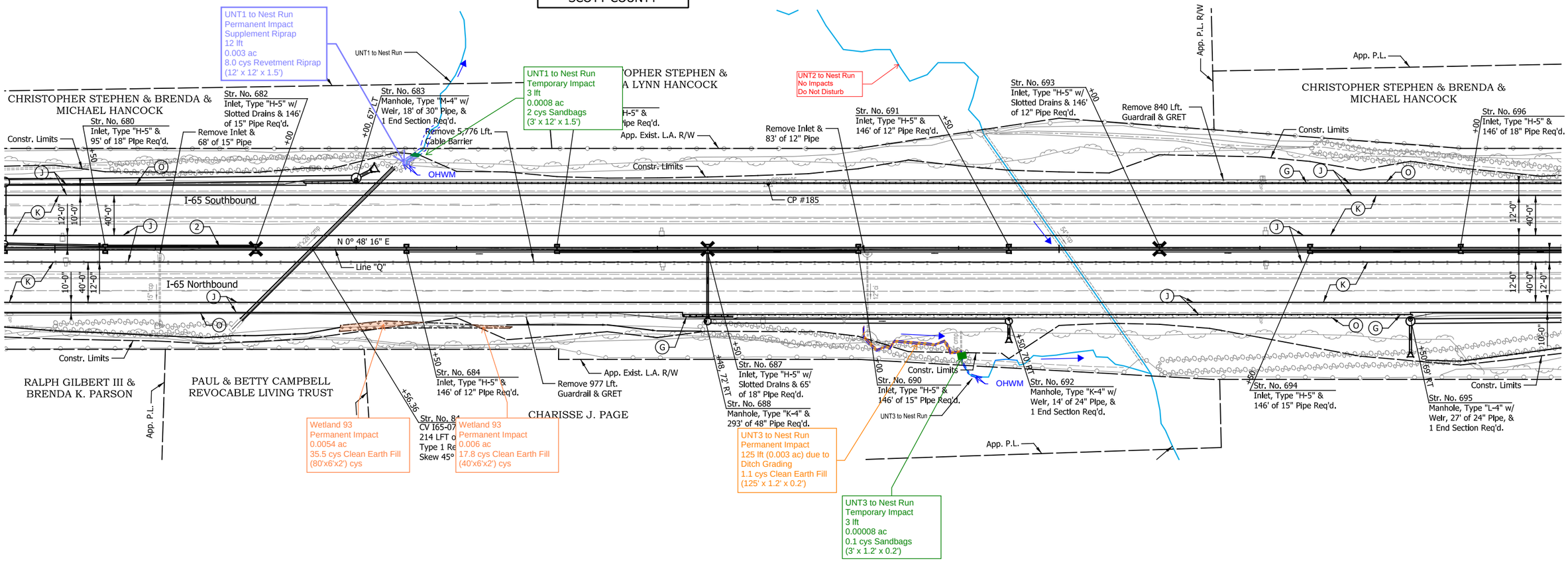
Cumulative Impacts to UNT 1 to Nest Run
Temporary Impact due to cofferdam
3 lft (0.0008 ac.)
2 Cys Sand Bags

Cumulative Impacts to UNT 3 to Nest Run
Temporary Impact due to cofferdam
3 lft (0.00008 ac.)
0.1 Cys Sand Bags

1005

1010

SEC. 31, T 3 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

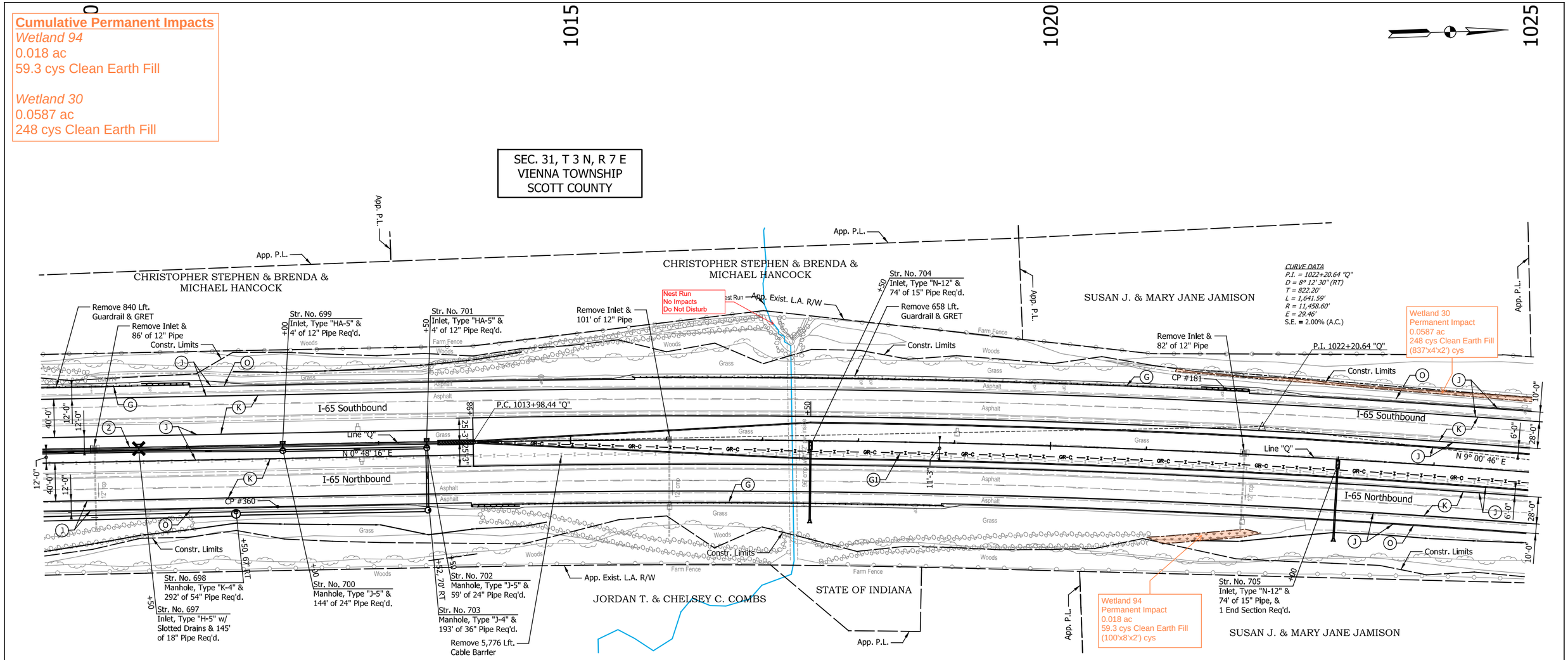
HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	43 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy+Ref.dfcfg
Indiana_Shade.tbl

hwilliamson 11/29/2021 10:56:25 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.19.dgn

Cumulative Permanent Impacts
Wetland 94
0.018 ac
59.3 cys Clean Earth Fill

Wetland 30
0.0587 ac
248 cys Clean Earth Fill



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	44 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

hwilliamson 11/29/2021 10:56:26 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.20.dgn

Cumulative Permanent Impacts
Wetland 95
0.0807 ac
308.4 cys Clean Earth Fill

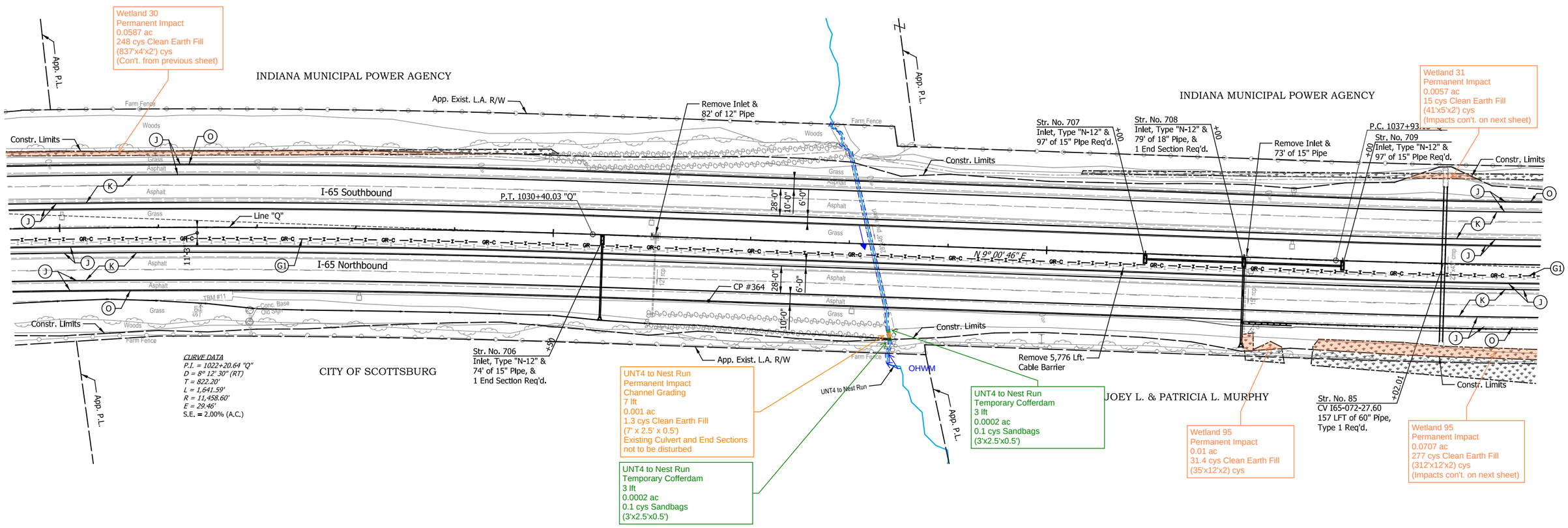
Wetland 31
0.0077 ac
20.7 cys Clean Earth Fill

Wetland 30
Continued from previous sheet

Cumulative Impacts to UNT 4 to Nest Run
Permanent Impact due to channel grading
7 lft (0.001 ac.)
1.3 Cys

Cumulative Impacts to UNT 4 to Nest Run
Temporary Impact due to cofferdams
6 lft (0.0004 ac.)
0.2 Cys Sand Bags

SEC. 31, T 3 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	45 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

hwilliamson 11/29/2021 10:56:26 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.21.dgn

1040 1045 1050 1055

Cumulative Permanent Impacts
Wetland 95
Continued from previous sheet

Wetland 31
Continued from previous sheet

Wetland 32
0.0002 ac
0.4 cys Pipe End Section

Cumulative Impacts to Elm Branch
Permanent Impact due to installation of new 36" Pipe, pipe end section, removal of existing 30" Pipe, and channel grading
246 lft (0.0172 ac.)
14.25 Cys

Cumulative Impacts to Elm Branch
Temporary Impact due to cofferdam and site access
36 lft (0.0027 ac.)
1.4 Cys Sand Bags

SEC. 31, T 3 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

SEC. 30, T 3 N, R 7 E
VIENNA TOWNSHIP
SCOTT COUNTY

INDIANA MUNICIPAL POWER AGENCY

KEVIN W. & SANDY LYNN VERNON

JESSICA LETURGEZ

SPRAGUE RENTALS LLC.

MARK & PAUL E. THOMAS

JOEY L. & PATRICIA L. MURPHY

Wetland 31
Permanent Impact
0.002 ac
5.7 cys Clean Earth Fill
(15'x5'x2')
(Con't. from previous sheet)

Wetland 95
Permanent Impact
0.0707 ac
277 cys Clean Earth Fill
(312'x12'x2) cys
(Impacts con't. on next sheet)

Elm Branch
Temp Access
30 lft (0.0007 ac)
No Fill
(30'x 1')
Sandbag Cofferdam
3 lft (0.001 ac)
0.7 cys Sand Bags
(3' x 3' x 2')

Elm Branch
Permanent Impact
7 lft
0.001 ac
1.2 cys Pipe End Section
(7' x 3' x 1.5')

Elm Branch
Permanent Impacts
Structure Removal
70 lft
0.004 ac
3.25 cys clean fill
(70 'x 2.5' x 0.50')
Channel Grading
4 lft
0.0001 ac
0.08 cys clean fill
(4' x 1' x 0.50')

Elm Branch
Sandbag Cofferdam
3-lft (0.0007 ac)
0.7 cys Sandbags
(3' x 3' x 2')

Wetland 32
Temporary Impact
0.02 ac
Temporary Access
(150' x 6' x 2')

Wetland 32
Permanent Impact
0.0002 ac
0.4 cys Pipe End Section
2.5' x 3' x 1.5')

Elm Branch
Structure Replacement
165-lft
0.0121 ac
9.72 cys of 36" Type 1 Pipe
(165' x 3' x 0.50')

Existing "V" Ditch spans from proposed outlet to existing stream

Elm Branch
Stream Relocation
Existing - 77-lft (70-lft of 30" Encapsulation/7-lft open channel)
Proposed - 78-lft (10-lft of 36" Encapsulation/12-lft Class 1 Riprap/56-lft open channel)

*See individual callouts for complete breakdown of impacts.

Remove 5,776 Lft. Cable Barrier
Remove Inlet & 84' of 12" Pipe
Str. No. 710
Inlet, Type "N-12" & 77' of 15" Pipe, & 1 End Section Req'd.

Constr. Limits
App. Exist. L.A. R/W
App. Exist. R/W
App. P.L.
App. Section Line
OHWM
I-65 Southbound
I-65 Northbound
Line "Q"
N 9° 00' 46" E
CP #177
CP #368
TBM #12
Base Only
Farm Fence
Woods
Grass
Asphalt
30" cmp
42"

CURVE DATA
P.I. = 1062+56.83 "Q"
D = 33° 30' 00" (LT)
T = 2,463.70'
L = 4,786.22'
R = 8,185.98'
E = 362.71'
S.E. = 2.60%

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (G1) Cable Barrier System, Type TL-4
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm
- (2) Concrete Median Barrier, 45"
- (27) Seed Mixture, R

NOTES:
Lines "Q" and "PR-Q" to be Constructed.

All Stationing Described from Line "Q", Except as Noted.

All Topographic Information Described from Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: PKW CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

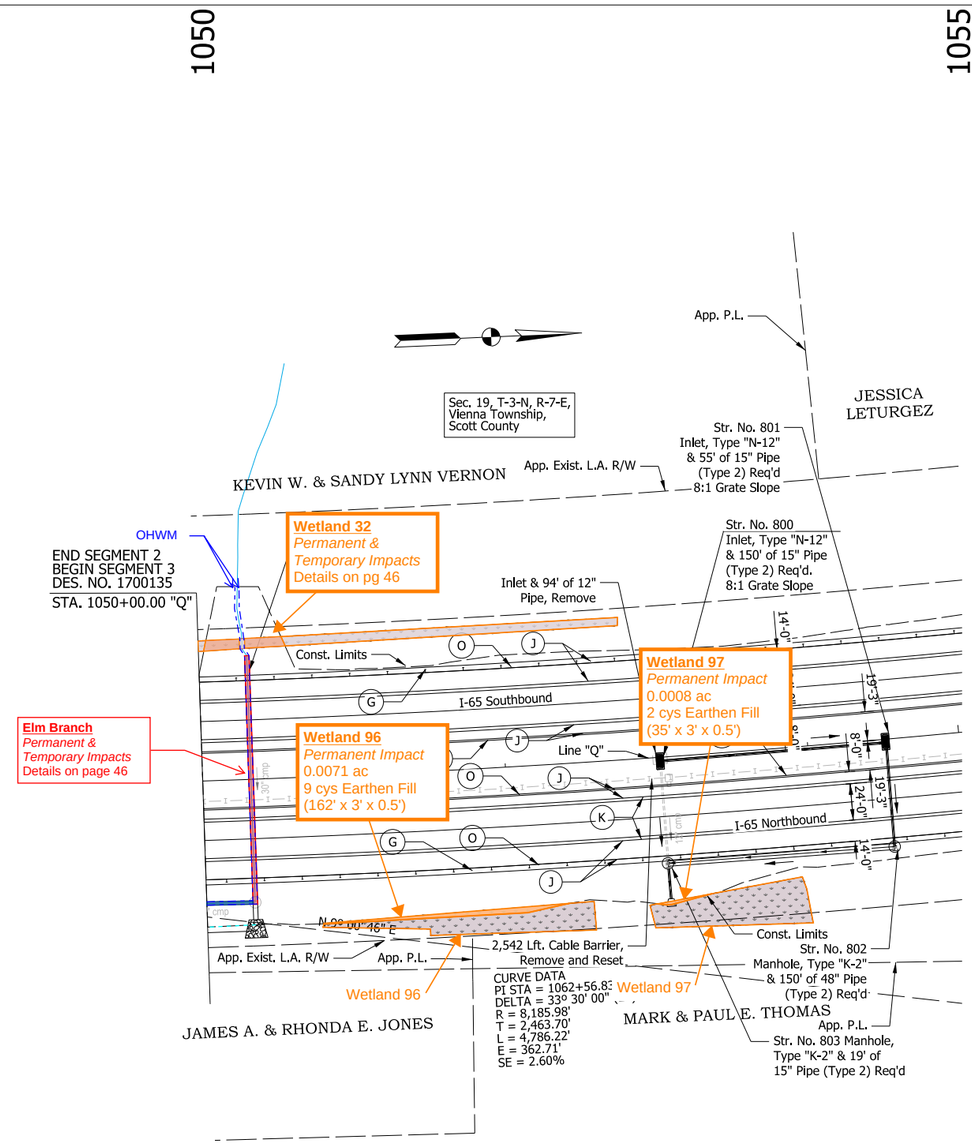
HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	1700135
SURVEY BOOK	SHEETS
N/A	46 of 174
CONTRACT	PROJECT
R-41529	1700135

Indy-Rdf.dwtg
Indiana_Shade.tbl

zmurphy 2/7/2022 12:14:04 PM P:\2019\00172\D. Drawings\201900172.0001.RD.CD.22.dgn

Cumulative Permanent Impacts
Wetland 96
0.0071 ac
9 cys Clean Earthen Fill

Wetland 97
0.0008
2 cys Clean Earthen Fill



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (27) Seed Mixture, R
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm

NOTES:
Line "Q" to be Constructed.

All Topographic Information Described From Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: $DESBY$ | DRAWN: $DWNBY$

CHECKED: $DESCHKBY$ | CHECKED: $DWNCHKBY$

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 1050+00.00 TO STA. 1055+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	$BRIDGE_FILE$
VERTICAL SCALE	DESIGNATION
N/A	DES_NO
SURVEY BOOK	SHEETS
SRV_BK	47 of
CONTRACT	PROJECT
CON_NO	$PROJ_NO$

2/1/2022 9:14:29 AM

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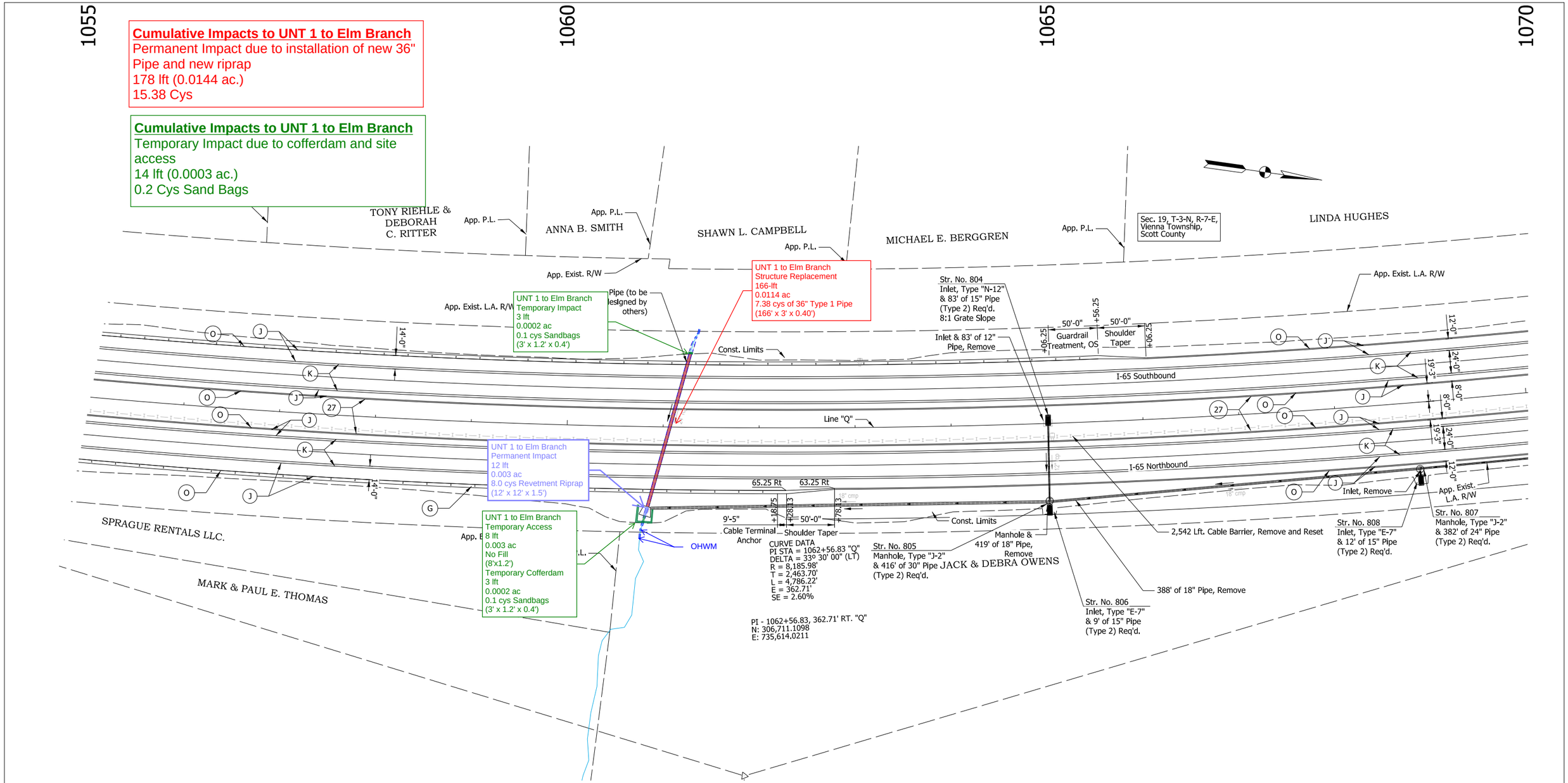

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (27) Seed Mixture, R
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm

NOTES:
Line "Q" to be Constructed.

All Topographic Information Described From Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: $DESBY$ DRAWN: $DWNBY$
CHECKED: $DESCHKBY$ CHECKED: $DWNCHKBY$

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 1055+00.00 TO STA. 1070+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	$BRIDGE_FILE$
VERTICAL SCALE	DESIGNATION
N/A	DES_NO
SURVEY BOOK	SHEETS
SRV_BK	48 of
CONTRACT	PROJECT
CON_NO	$PROJ_NO$

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2/1/2022

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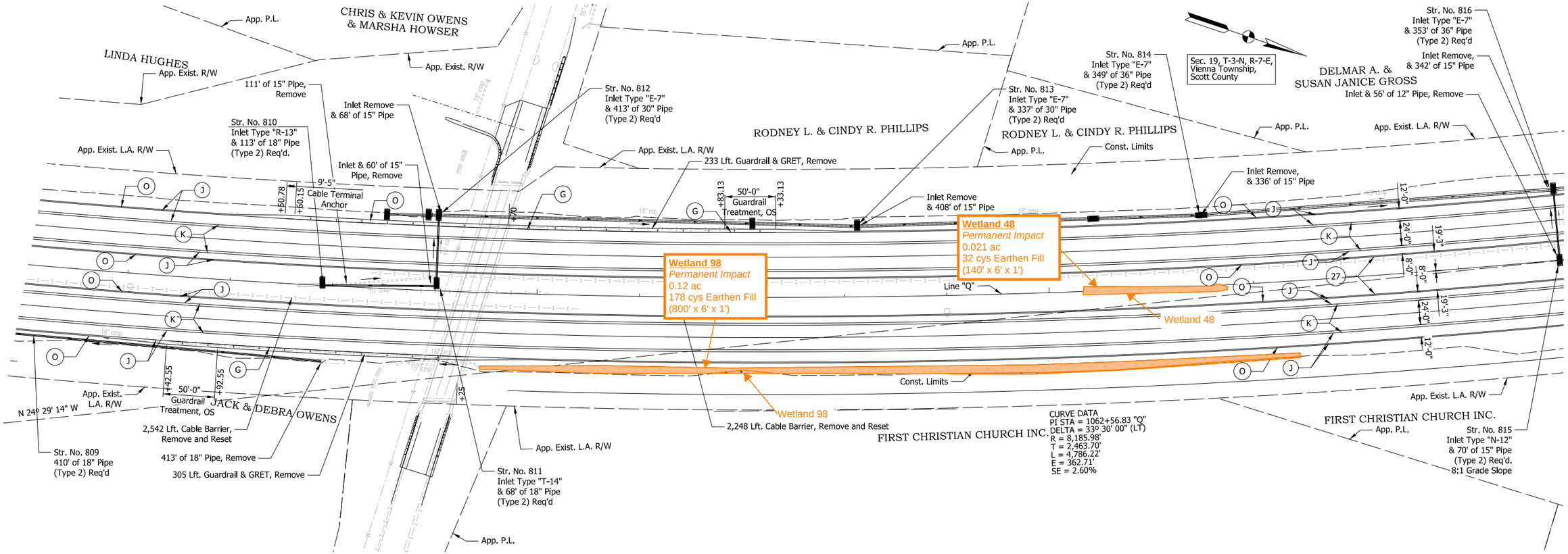
Cumulative Permanent Impacts
Wetland 48
0.021 ac
32 cys Clean Earthen Fill

Wetland 98
0.12
178 cys Clean Earthen Fill

1070 1075 1080 1085



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (27) Seed Mixture, R
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm

NOTES:
Line "Q" to be Constructed.

All Topographic Information Described From Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: $DESBY$ DRAWN: $DWNBY$

CHECKED: $DESCHKBY$ CHECKED: $DWNCHKBY$

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 1070+00.00 TO STA. 1085+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	$BRIDGE_FILE$
VERTICAL SCALE	DESIGNATION
N/A	DES_NO
SURVEY BOOK	SHEETS
SRV_BK	49 of
CONTRACT	PROJECT
CON_NO	$PROJ_NO$

2/1/2022 9:14:56 AM

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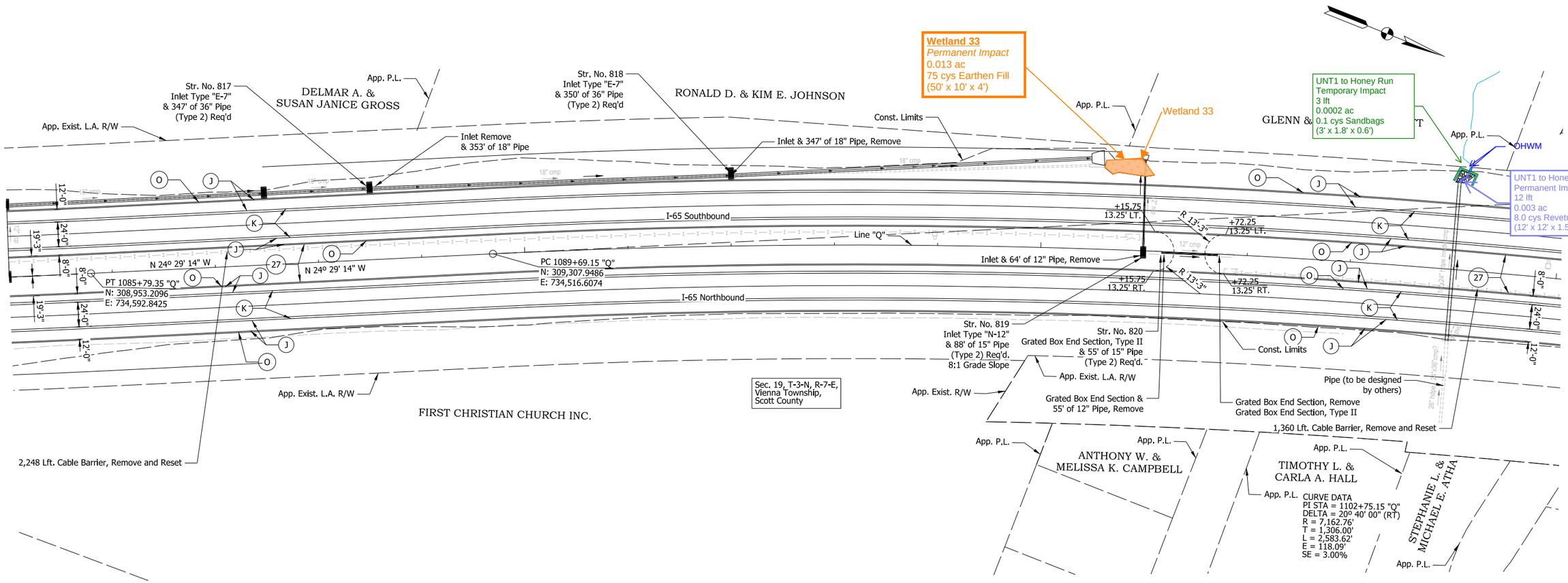
1085 1090 1095 1100

Cumulative Permanent Impacts
Wetland 33
0.013 ac
75 cys Clean Earthen Fill

Cumulative Impacts to UNT 1 to Honey Run
Permanent Impact due to new riprap
12 lft (0.003 ac.)
8 Cys

Cumulative Impacts to UNT 1 to Honey Run
Temporary Impact due to cofferdam
3 lft (0.0002 ac.)
0.1 Cys Sand Bags



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (27) Seed Mixture, R
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm

NOTES:
Line "Q" to be Constructed.

All Topographic Information Described From Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: $DESBY$ | DRAWN: $DWNBY$

CHECKED: $DESCHKBY$ | CHECKED: $DWNCHKBY$

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 1085+00.00 TO STA. 1100+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	$BRIDGE_FILE$
VERTICAL SCALE	DESIGNATION
N/A	DES_NO
SURVEY BOOK	SHEETS
SRV_BK	50 of
CONTRACT	PROJECT
CON_NO	$PROJ_NO$

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2/1/2022

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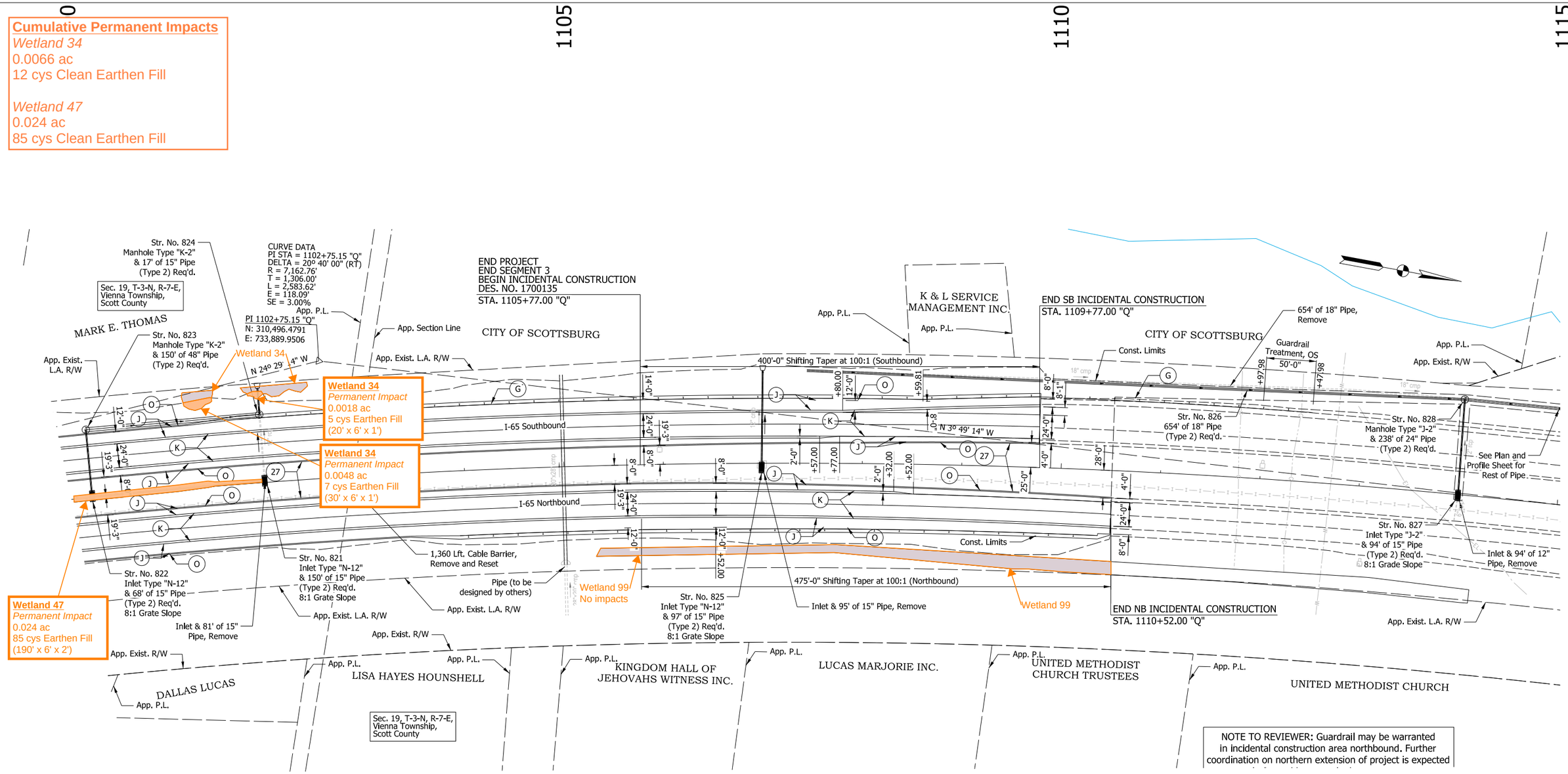
Cumulative Permanent Impacts

Wetland 34
0.0066 ac
12 cys Clean Earthen Fill

Wetland 47
0.024 ac
85 cys Clean Earthen Fill



NOTE TO REVIEWER: Guardrail may be warranted in incidental construction area northbound. Further coordination on northern extension of project is expected

LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (27) Seed Mixture, R
- (R) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm

NOTES:
Line "Q" to be Constructed.

All Topographic Information Described From Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: $DESBY$ DRAWN: $DWNBY$
CHECKED: $DESCHKBY$ CHECKED: $DWNCHKBY$

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 1100+00.00 TO STA. 1115+00.00

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	$BRIDGE_FILE$
VERTICAL SCALE	DESIGNATION
N/A	DES_NO
SURVEY BOOK	SHEETS
SRV_BK	51 of
CONTRACT	PROJECT
CON_NO	$PROJ_NO$

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2/1/2022

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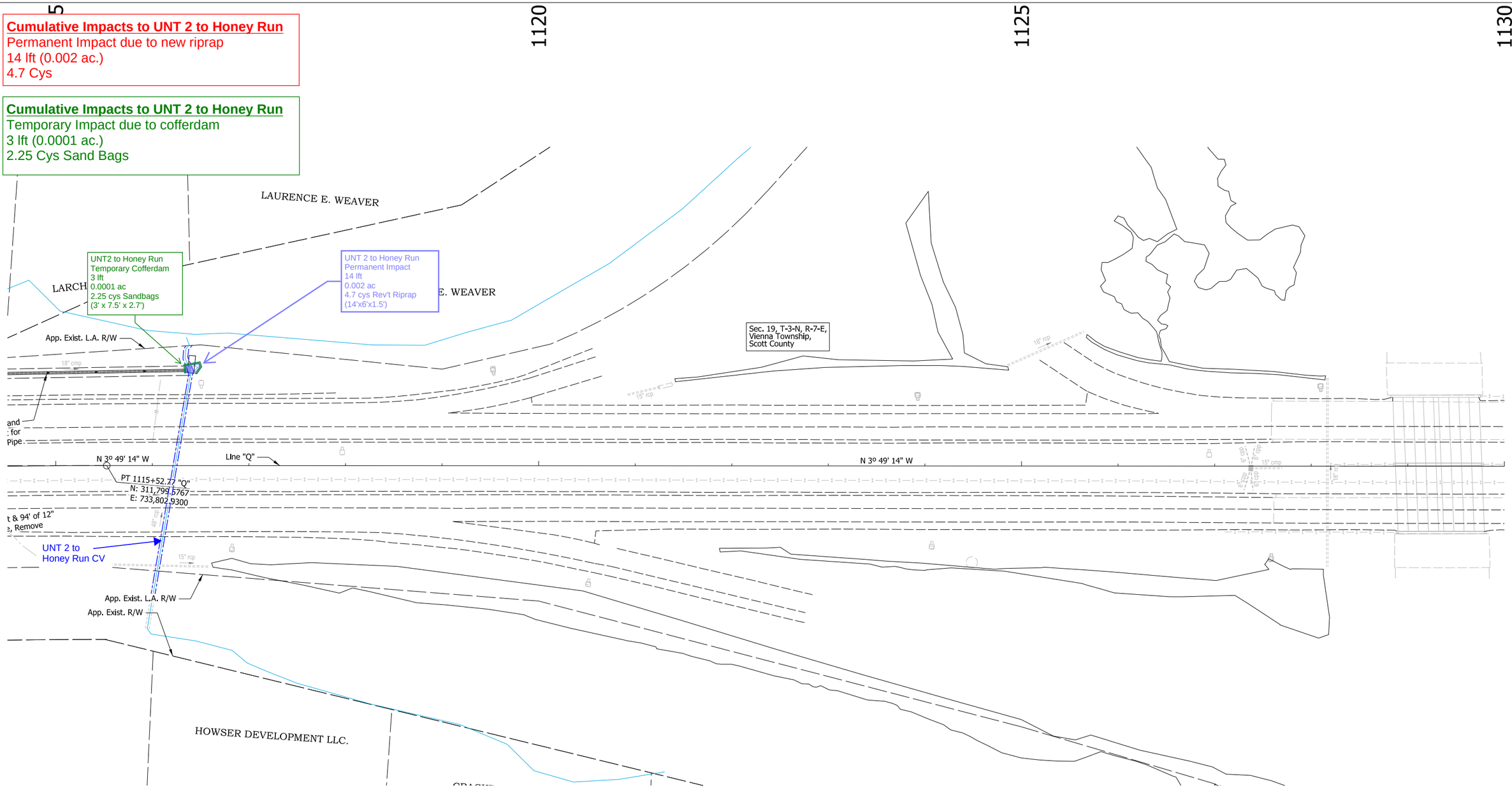
Cumulative Impacts to UNT 2 to Honey Run
Permanent Impact due to new riprap
14 lft (0.002 ac.)
4.7 Cys

Cumulative Impacts to UNT 2 to Honey Run
Temporary Impact due to cofferdam
3 lft (0.0001 ac.)
2.25 Cys Sand Bags



LEGEND

- (K) Full Depth HMA Pavement (See Typical Sections)
- (J) Full Depth HMA Pavement, Shoulders (See Typical Sections)
- (G) MGS W-Beam Guardrail, 6'-3" Spacing
- (M) Milling, Asphalt, X.X"
- (O) Compacted Aggregate, No. 53
- (K) Concrete Median Barrier, 45"
- (J) Seed Mixture, R
- (G) xxx lbs/sys QC/QA-HMA, x, xx, Surface, x.x mm

NOTES:
Line "Q" to be Constructed.

All Topographic Information Described From Line "Q", Except as Noted.

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: $DESBY$ | DRAWN: $DWNBY$

CHECKED: $DESCHKBY$ | CHECKED: $DWNCHKBY$

INDIANA
DEPARTMENT OF TRANSPORTATION

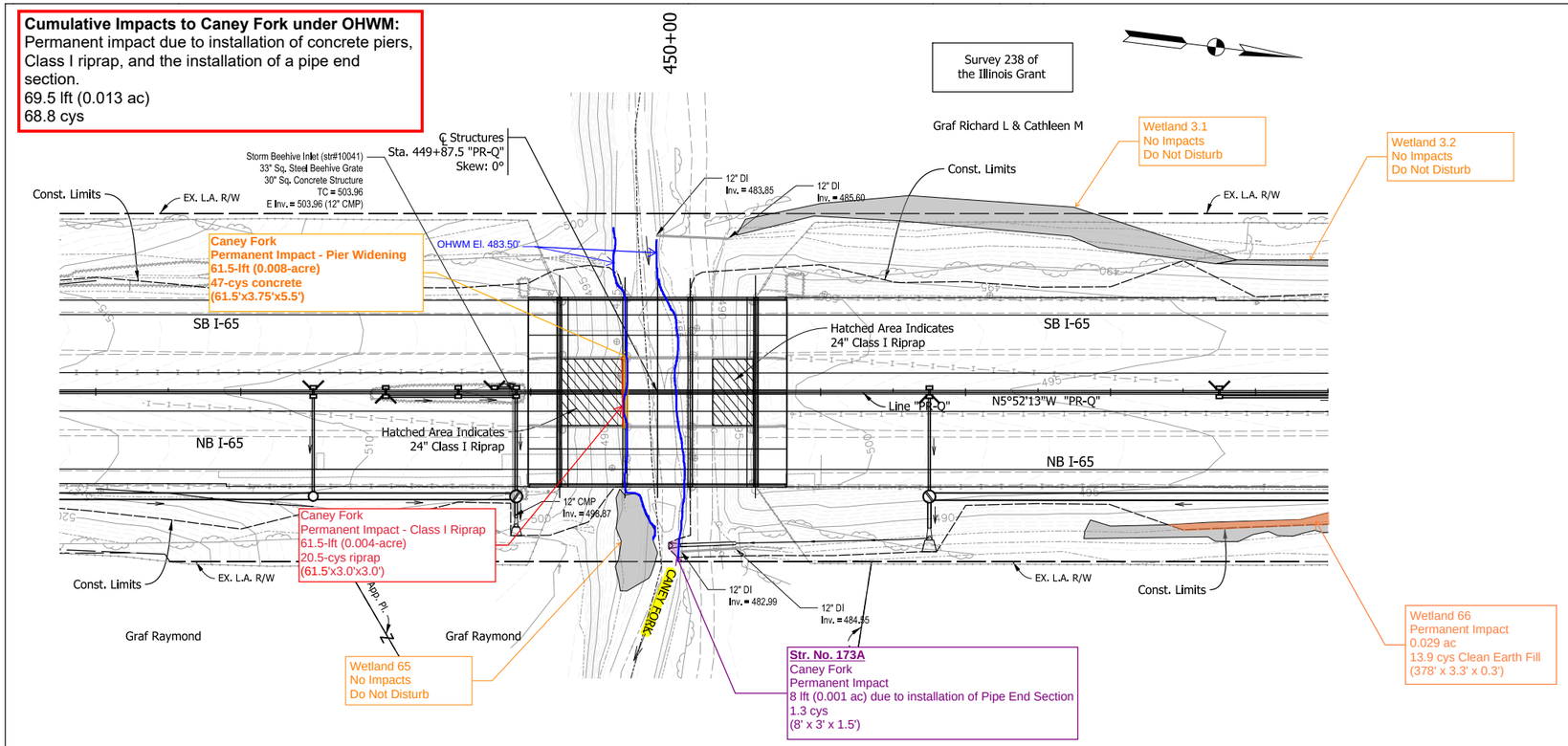
CONSTRUCTION DETAILS
STA. 1114+50.00 TO STA. 1130+00.00

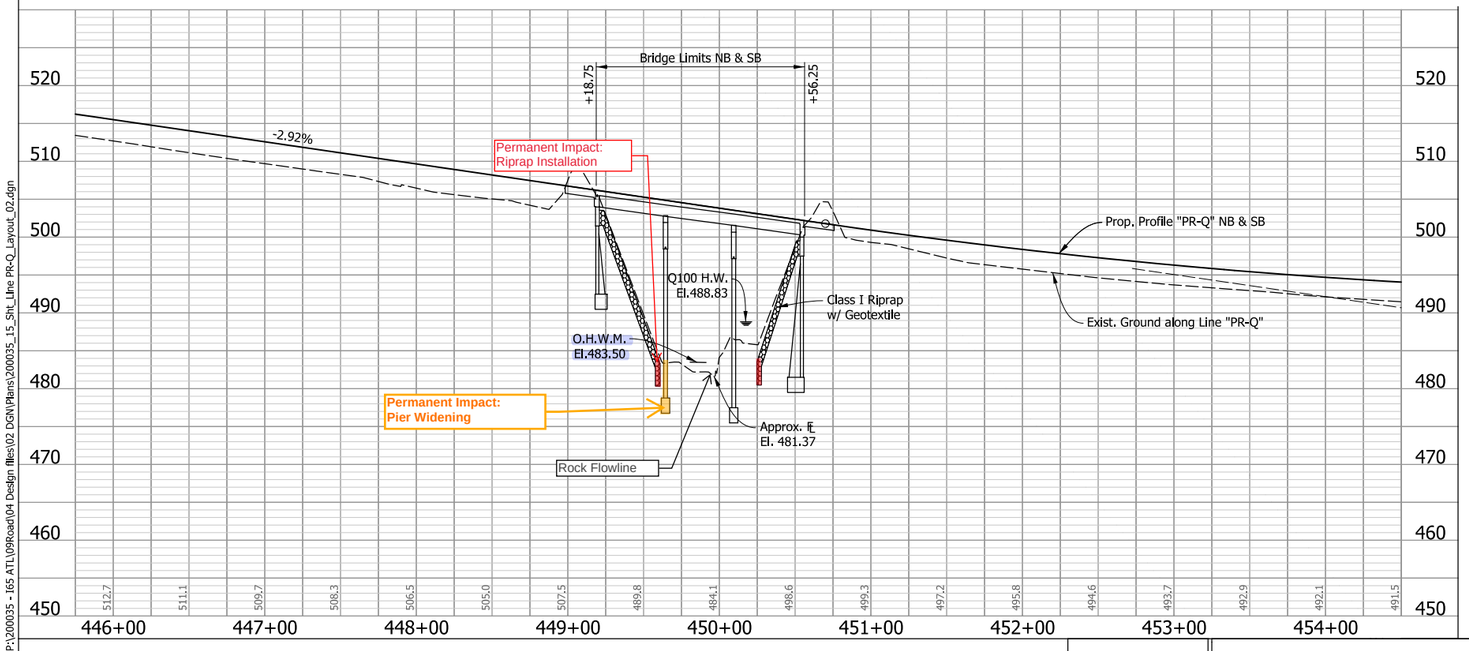
HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	$BRIDGE_FILE$
VERTICAL SCALE	DESIGNATION
N/A	DES_NO
SURVEY BOOK	SHEETS
SRV_BK	52 of
CONTRACT	PROJECT
CON_NO	$PROJ_NO$

9:15:28 AM
2/1/2022

pw:\\cdmsmith-az02-pw.bentley.com:PW_PL1\Documents\905811\258950\10 Transportation\02 Engineering Services NM_50pct\01 Roadway Design\10 CADD\02 Details\Drainage - Wetlands Sheets\Sht Wetlands_Q_50_06.dgn

Cumulative Impacts to Caney Fork under OHWM:
Permanent impact due to installation of concrete piers, Class I riprap, and the installation of a pipe end section.
69.5 lft (0.013 ac)
68.8 cys





EXISTING STRUCTURE

The existing structures (I65-017-04220 DNBL & DSBL) are twin three span concrete girder structures (45'-0", 45'-0", 45'-0") with 39'-6" clear roadway width built circa 1958. (To Be Rehabilitated)

HYDRAULIC SCOUR DATA

DRAINAGE AREA	7.67	sq. mi.
Q100 Discharge	3600	cfs.
Q100 Elevation	488.83	ft.
Q100 Contraction Scour	8.14	ft.
Q100 Total Scour	13.89	ft.
Flowline Elevation	481.37	ft.
Q100 Low Scour Elevation	467.48	ft.
Q100 Max Velocity	11.76	ft/s
Q100 Avg Velocity	9.24	ft/s

TWIN CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BOX BEAM BRIDGES
3 SPANS: 45'-0", 45'-0", 45'-0"
62'-7" CLEAR ROADWAY SKEW: 0° SQUARE
I-65 OVER CANEY FORK
CLARK COUNTY

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".
See Plan and Profile Sheets for Reference Points.

I65 NB & SB over Caney Fork
401/401 Permit Disturbed Area Drawings
Applicant: Indiana Department of Transpc
Agent: American Structurepoint, Inc.

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT SHEET
Permanent Impacts

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I65-017-04222 ENBL & ESBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1600729(NB) & 1600733 (SB)
SURVEY BOOK	SHEETS
Electronic	6 of 25
CONTRACT	PROJECT
R-41529	1700135

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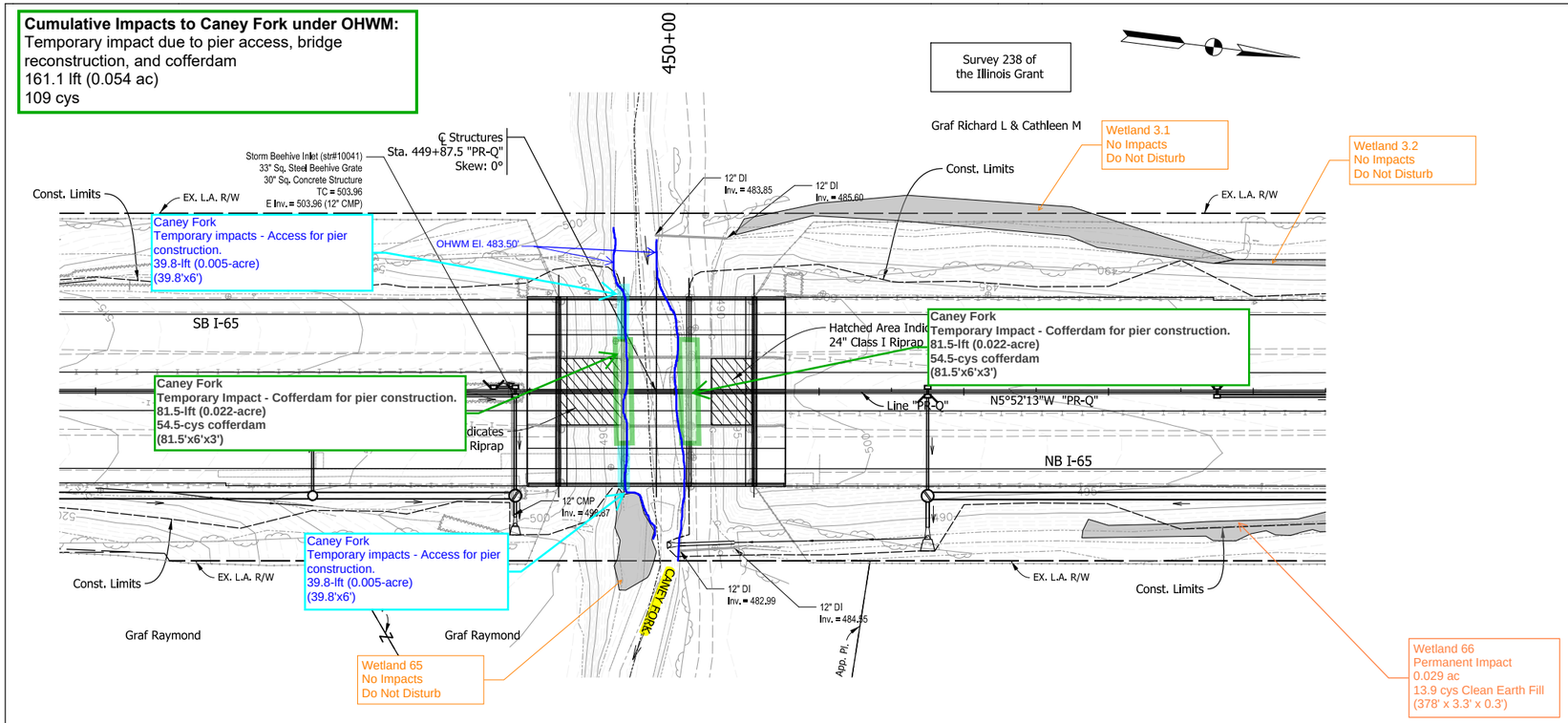
Cumulative Impacts to Caney Fork under OHWM:
Temporary impact due to pier access, bridge reconstruction, and cofferdam
161.1 lft (0.054 ac)
109 cys

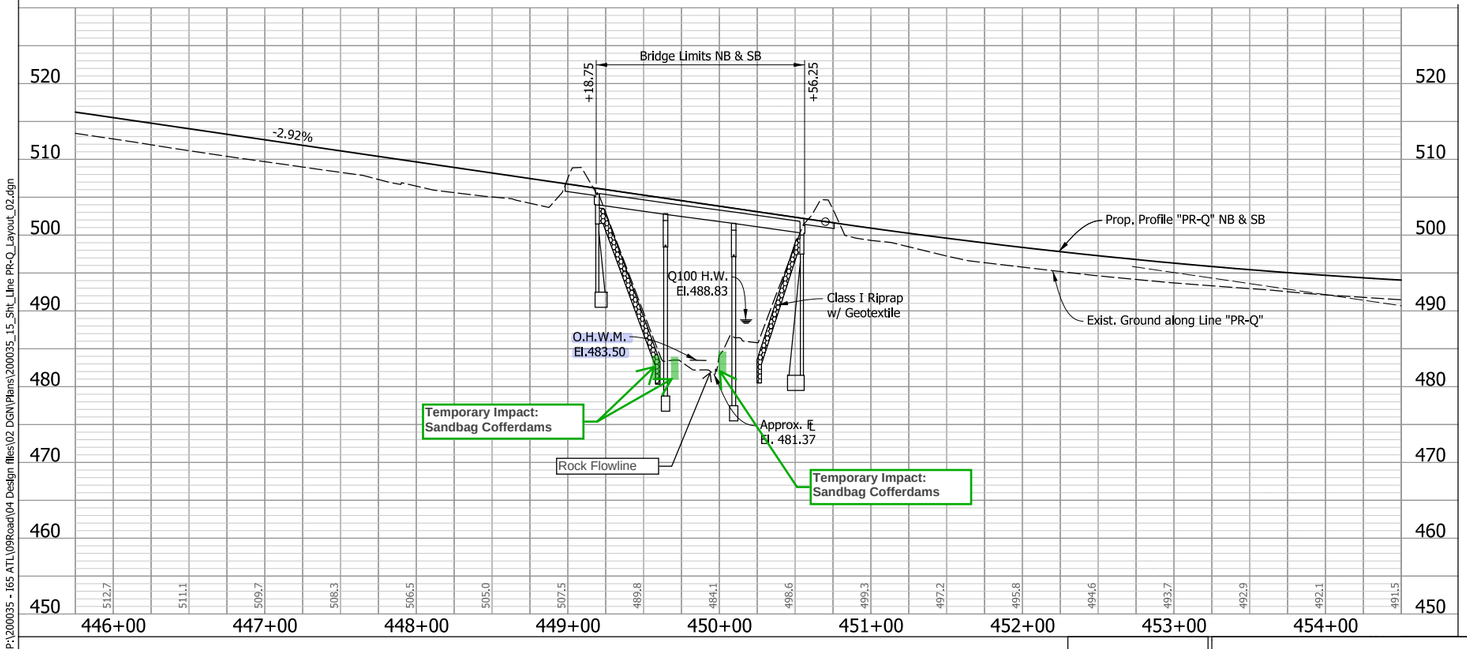


EXISTING STRUCTURE

The existing structures (I65-017-04220 DNBL & DSBL) are twin three span concrete girder structures (45'-0", 45'-0", 45'-0") with 39'-6" clear roadway width built circa 1958. (To Be Rehabilitated)

HYDRAULIC SCOUR DATA

DRAINAGE AREA	7.67	sq. mi.
Q100 Discharge	3600	cfs.
Q100 Elevation	488.83	ft.
Q100 Contraction Scour	8.14	ft.
Q100 Total Scour	13.89	ft.
Flowline Elevation	481.37	ft.
Q100 Low Scour Elevation	467.48	ft.
Q100 Max Velocity	11.76	ft/s
Q100 Avg Velocity	9.24	ft/s



TWIN CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BOX BEAM BRIDGES
3 SPANS: 45'-0", 45'-0", 45'-0"
62'-7" CLEAR ROADWAY SKEW: 0° SQUARE
I-65 OVER CANEY FORK
CLARK COUNTY

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".
See Plan and Profile Sheets for Reference Points.

I65 NB & SB over Caney Fork
401/401 Permit Disturbed Area Drawings
Applicant: Indiana Department of Transpc
Agent: American Structurepoint, Inc.

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT SHEET
Temporary Impacts

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I65-017-04222 ENBL & ESBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1600729(NB) & 1600733 (SB)
SURVEY BOOK	SHEETS
Electronic	6 of 25
CONTRACT	PROJECT
R-41529	1700135

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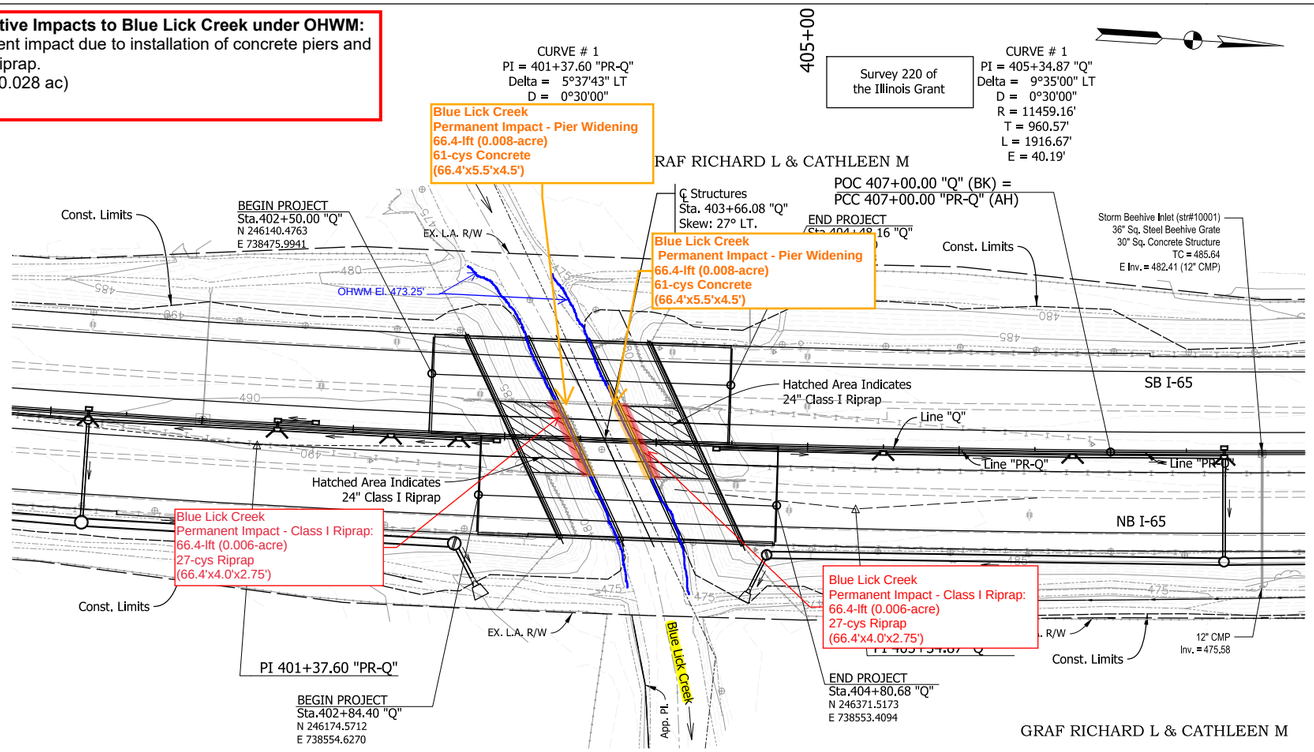
Cumulative Impacts to Blue Lick Creek under OHWM:
Permanent impact due to installation of concrete piers and Class I riprap.
66.4 lft (0.028 ac)
176 cys

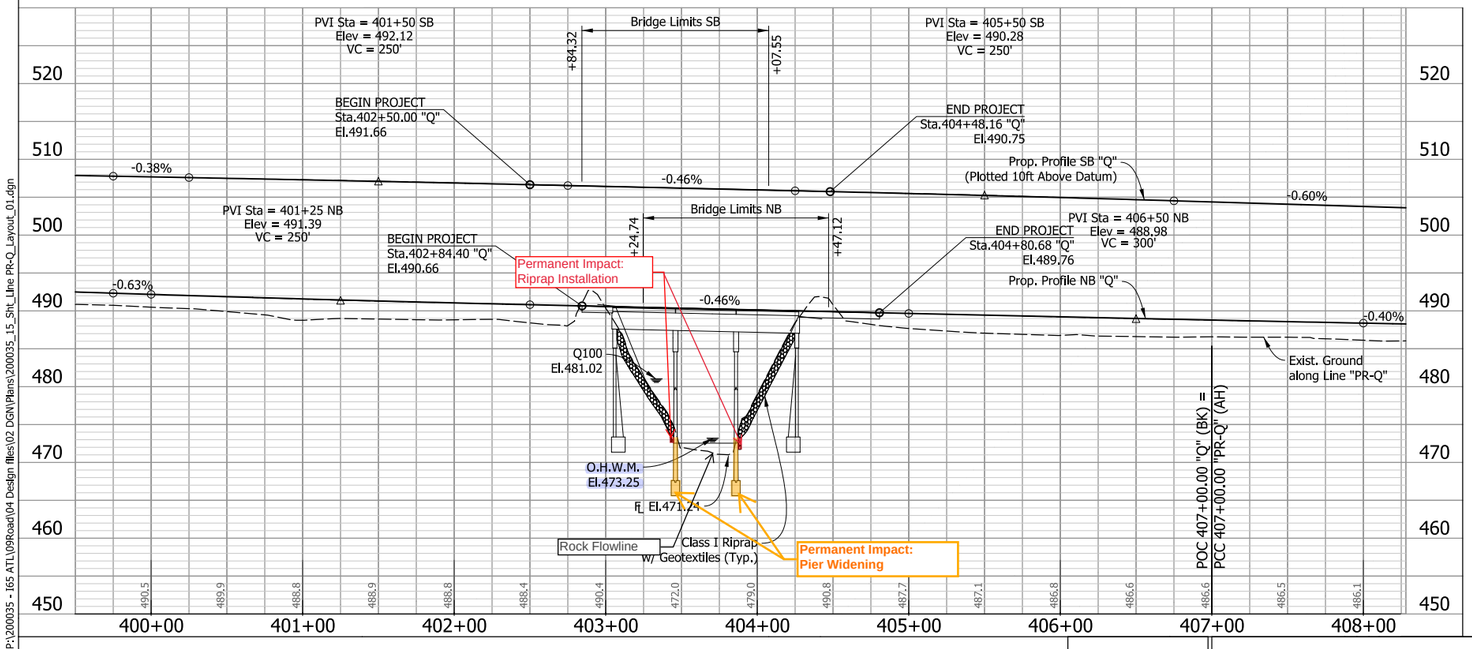


EXISTING STRUCTURE

The existing structures (I65-016-04220 DNBL & DSBL) are twin three span concrete girder structures (40'-0", 40'-0", 40'-0") with 39'-6" clear roadway width built circa 1958. (To Be Rehabilitated)

HYDRAULIC SCOUR DATA

DRAINAGE AREA	15.30 sq. mi.
Q100 Discharge	5,540 cfs.
Q100 Elevation	481.02 ft.
Q100 Contraction Scour	15.88 ft.
Q100 Total Scour	21.77 ft.
Flowline Elevation	471.24 ft.
Q100 Low Scour Elevation	449.47 ft.
Q100 Max Velocity	12.16 ft/s
Q100 Avg Velocity	8.69 ft/s



TWIN CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BOX BEAM BRIDGES
3 SPANS: 40'-0", 40'-0", 40'-0"
62'-7" CLEAR ROADWAY SKEW: 27° Lt.
I-65 OVER BLUE LICK CREEK
CLARK COUNTY

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".
See Plan and Profile Sheets for Reference Points.

I65 NB & SB over Blue Lick Creek
401/401 Permit Disturbed Area Drawings
Applicant: Indiana Department of Transpc
Agent: American Structurepoint, Inc.

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT SHEET
Permanent Impacts

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I65-016-04220 ENBL & ESBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1600744 (NB) & 1600750 (SB)
SURVEY BOOK	SHEETS
Electronic	8 of 26
CONTRACT	PROJECT
R-41529	1700135

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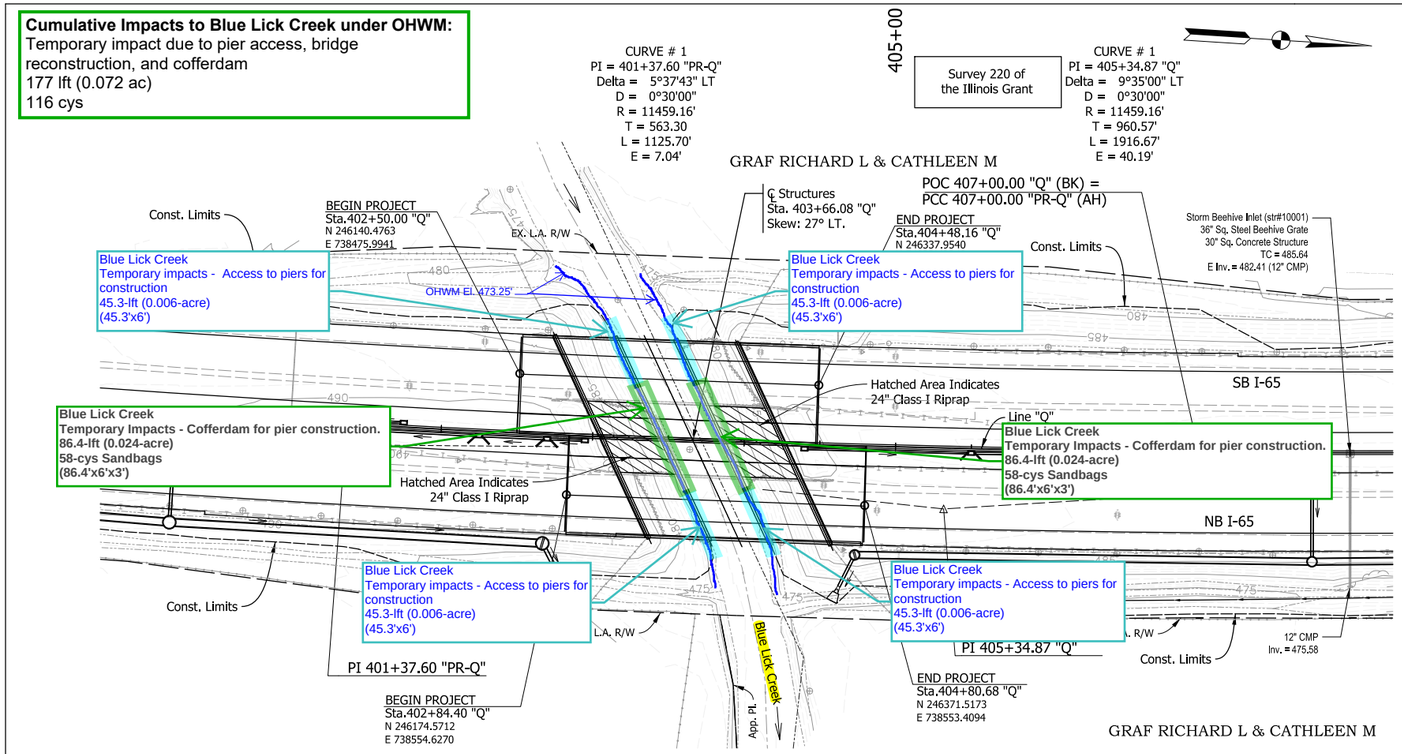
Cumulative Impacts to Blue Lick Creek under OHWM:
Temporary impact due to pier access, bridge reconstruction, and cofferdam
177 lft (0.072 ac)
116 cys

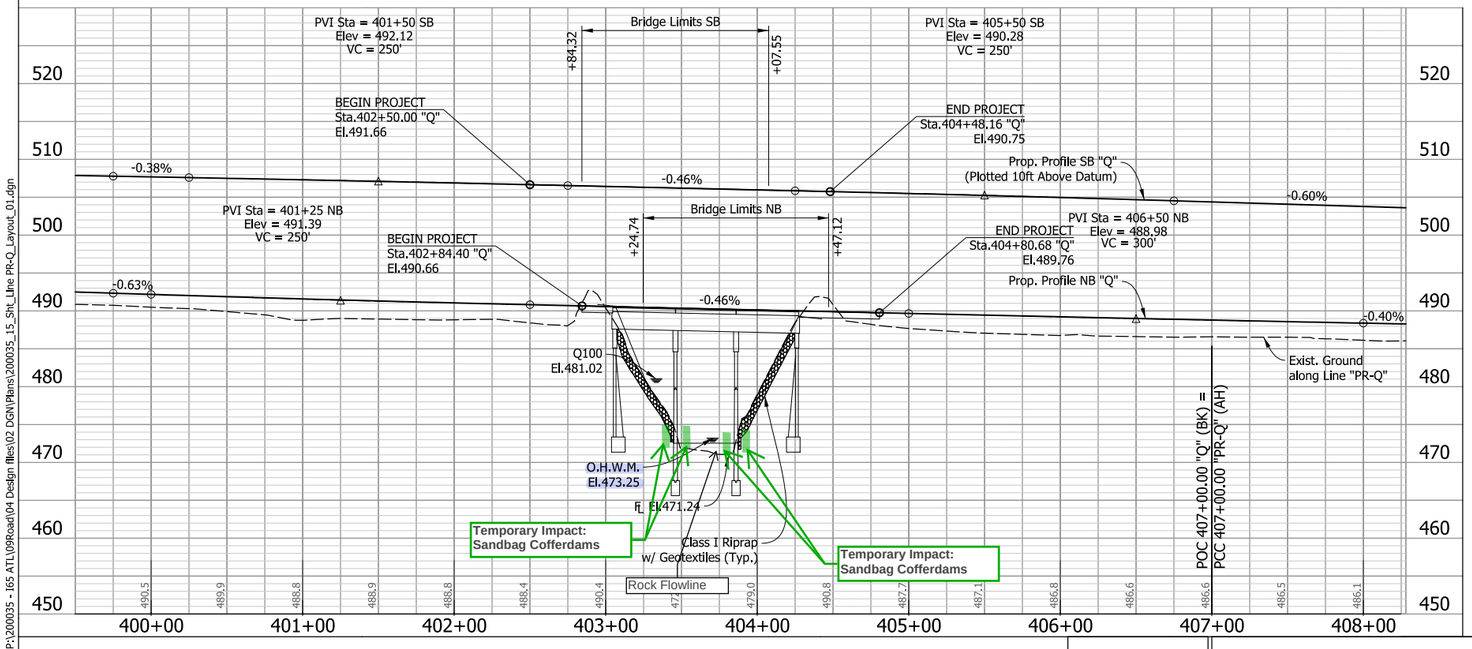


EXISTING STRUCTURE

The existing structures (I65-016-04220 DNBL & DSBL) are twin three span concrete girder structures (40'-0", 40'-0", 40'-0") with 39'-6" clear roadway width built circa 1958. (To Be Rehabilitated)

HYDRAULIC SCOUR DATA

DRAINAGE AREA	15.30	sq. mi.
Q100 Discharge	5,540	cfs.
Q100 Elevation	481.02	ft.
Q100 Contraction Scour	15.88	ft.
Q100 Total Scour	21.77	ft.
Flowline Elevation	471.24	ft.
Q100 Low Scour Elevation	449.47	ft.
Q100 Max Velocity	12.16	ft/s
Q100 Avg Velocity	8.69	ft/s



TWIN CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BOX BEAM BRIDGES
3 SPANS: 40'-0", 40'-0", 40'-0"
62'-7" CLEAR ROADWAY SKEW: 27° Lt.
I-65 OVER BLUE LICK CREEK
CLARK COUNTY

Notes:
All Topo described from Line "Q".
Line "PR-Q" to be Constructed.
See Geometric Tie Sheets for Line "Q".
See Plan and Profile Sheets for Reference Points.

I65 NB & SB over Blue Lick Creek
401/401 Permit Disturbed Area Drawings
Applicant: Indiana Department of Transpc
Agent: American Structurepoint, Inc.

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT SHEET
Temporary Impacts

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I65-016-04220 ENBL & ESBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1600744 (NB) & 1600750 (SB)

SURVEY BOOK	SHEETS
Electronic	8 of 26
CONTRACT	PROJECT
R-41529	1700135

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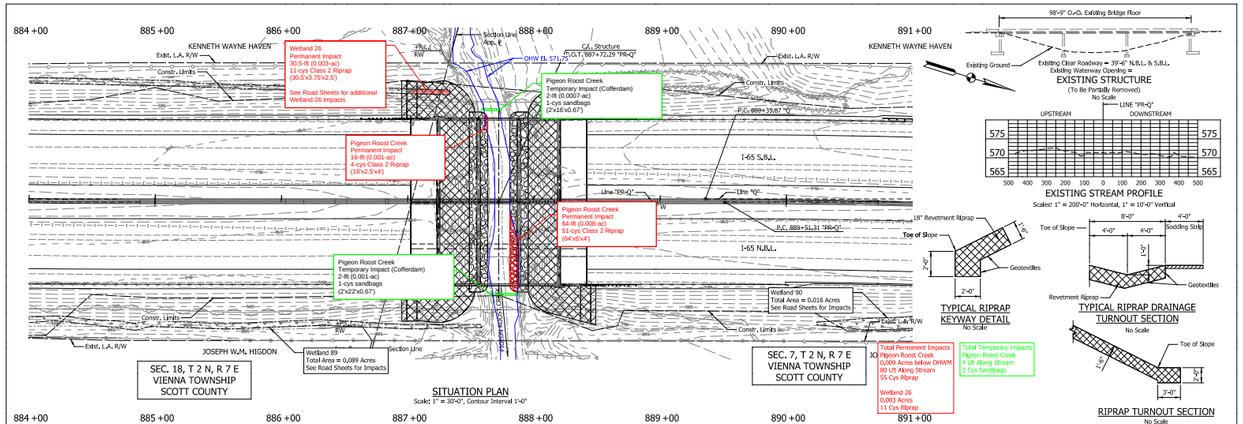
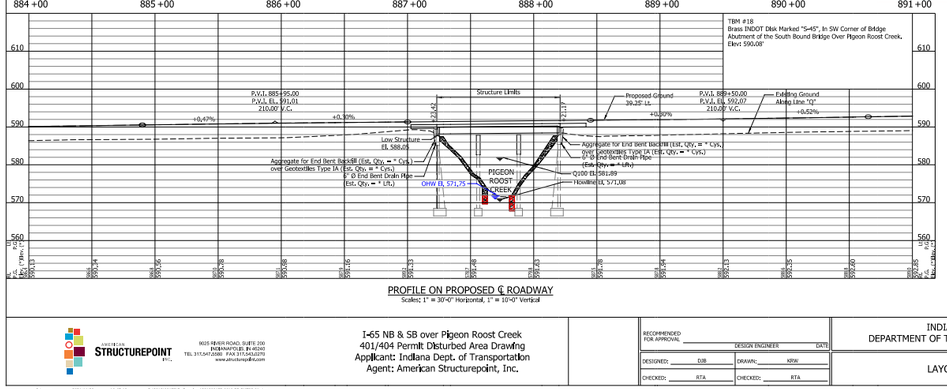


SITUATION PLAN

Scale: 1" = 30'-0", Contour Interval 1'-0"



PROFILE ON PROPOSED ℄ ROADWAY

Scales: 1" = 30'-0" Horizontal, 1" = 10'-0" Vertical

EXISTING STRUCTURE

(To Be Partially Removed)

No Scale

EXISTING STREAM PROFILE

Scales: 1" = 200'-0" Horizontal, 1" = 10'-0" Vertical

TYPICAL RIPRAP KEYWAY DETAIL

No Scale

TYPICAL RIPRAP DRAINAGE TURNOUT SECTION

No Scale

RIPRAP TURNOUT SECTION

No Scale

HYDRAULIC & SCOUR DATA

Drainage Area	=	8.95	Sq. Mi.
Discharge (Q100)	=	4000	Cfs.
Q100 Elevation	=	581.89	Ft.
Freeboard Provided (Above EL 581.89)	=	6.16	Ft.
Scour Velocity @ Q100	=	12.77	Ft./Sec.
Contraction Scour Depth	=	4.83	Ft.
Total Scour Depth	=	10.83	Ft.
Low Scour Elevation	=	560.25	Ft.

NOTES:

All R/W on this sheet is described from Line "Q".

Cross-Hatched areas indicate limits of 18" Revetment Riprap over Geotextiles, (Est. Qty. = * Tons of Revetment Riprap over * Sys. of Geotextiles)

Hatched areas indicate limits of 4' wide sodding strip. (Est. Qty. = * Sys.)

Indicates limits of Class II Riprap over Geotextiles, (Est. Qty. = * Tons of Class II Riprap over * Sys. of Geotextiles)

For Guardrail limits and side ditch grades, see Road Plan and Profile Sheet.

For Profile, additional alignment references, benchmarks, and topo references, see Road Plans.

TWIN CONTINUOUS COMPOSITE PRESTRESSED CONCRETE BOX BEAM BRIDGE

3 SPAN; 31'-9", 32'-0", 31'-9" SKEW: SQUARE CLEAR ROADWAY: 63'-6"

I-65 N.B.L. & S.B.L. OVER PIGEON ROOST CREEK

SCOTT COUNTY

STRUCTUREPOINT LLC
9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, IN 46240
TEL 317.547.5580 FAX 317.543.0270
www.structurepoint.com

I-65 NB & SB over Pigeon Roost Creek
401/404 Permit Disturbed Area Drawing
Applicant: Indiana Dept. of Transportation
Agent: American Structurepoint, Inc.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: DJB DRAWN: KRW

CHECKED: RTA CHECKED: RTA

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

	HORIZONTAL SCALE	BRIDGE FILE
	AS NOTED	105-024-04329 CNBL & CSBL
	VERTICAL SCALE	DESIGNATION
	AS NOTED	2001604 & 2001605
	SURVEY BOOK	SHEETS
	ELECTRONIC	1 of 17
	CONTRACT	PROJECT
	R-41529	17001.35

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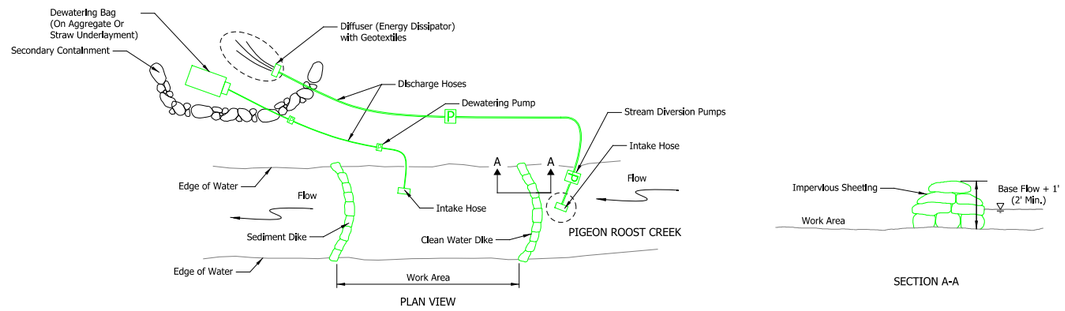
Attachment 14-1



TEMPORARY PUMP AROUND
No Scale

Approximate Duration for Temporary Impacts = 6 Months

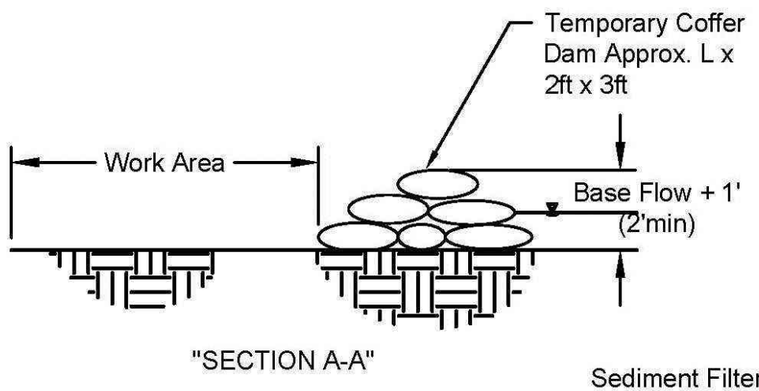
AMERICAN STRUCTUREPOINT INC.
9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, IN 46240
TEL 317.547.0080 FAX 317.547.0270
www.structurepoint.com

I-65 NB & SB over Pigeon Roost Creek
401/404 Permit Temporary Impact Details
Applicant: Indiana Dept. of Transportation
Agent: American Structurepoint, Inc.

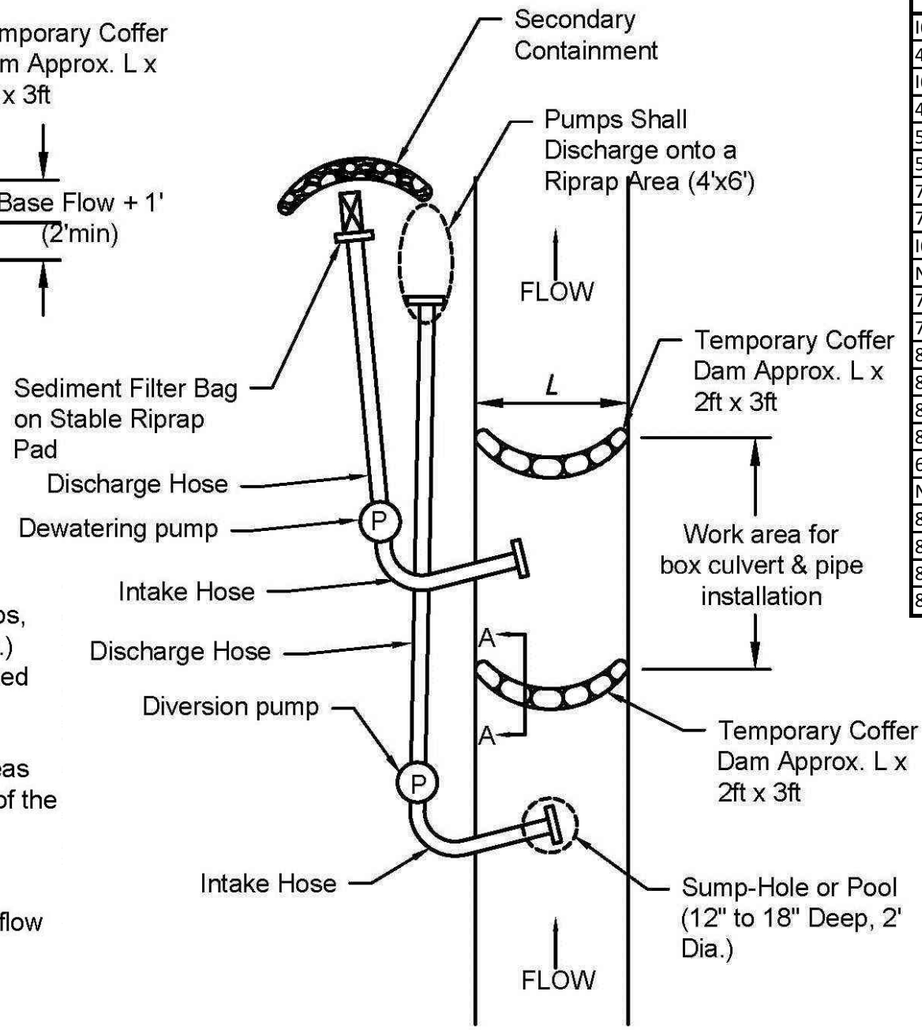
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: _____ DRAWN: _____
CHECKED: _____ CHECKED: _____

HORIZONTAL SCALE	BRIDGE FILE
	105-024-04229 CNBL & CSBL
VERTICAL SCALE	DESIGNATION
	2001604 & 2001605
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 17
CONTRACT	PROJECT
R-41529	1700135



"SECTION A-A"



General Notes:

No components of the pump around operation (pumps, hoses, discharge riprap area, dewatering device, etc.) shall be placed outside the construction limits indicated on the plans.

The location of the pumps, hoses, and discharge areas shall be adjusted accordingly based on the phasing of the new box culvert installation and the removal of the existing structure.

Pump around practice is not required when no base flow is present. The pump around equipment shall be available for immediate installation if needed as determined by the Engineer.

Pump around practice anticipated to be in use for approximately two months.

Dewatering for construction of piers shall be in use for approximately two months.

Water will be pumped around to the same stream.

Sandbag Table

STR. NO.	Length (lft)	Sandbags Below OHWM (cys)	Acres Below OHWM
I65-016-04220 (Blue Lick Creek)	86.4	116	0.048
41 (UNT to Blue Lick Creek)	6	1.4	0.002
I65-017-04220 (Caney Fork)	81.5	109	0.044
44 (Henry Brook)	12	1.6	0.003
50 (Wolf Run)	6	2.6	0.002
54 (UNT 1 to Miller Fork)	6	0.4	0.001
71 (Wheel Run)	8	1.2	0.0012
72 (West Fork Silver Creek)	6	0.6	0.0008
I65-024-04229 (Pigeon Roost Creek)	4	2	0.0017
N/A (UNT to Pigeon Roost Creek)	3	0.2	0.0002
78 (UNT to Underwood Run)	6	0.44	0.0008
79 (UNT to Tree Creek)	6	0.78	0.001
81 (Sycamore Run)	6	1.23	0.0006
82 (UNT 1 to Sycamore Run)	6	0.25	0.0002
83 (UNT 2 to Sycamore Run)	6	0.2	0.0002
84 (UNT 1 to Nest Run)	3	2	0.0008
691 (UNT 3 to Nest Run)	3	0.1	0.00008
N/A (UNT 4 to Nest Run)	6	0.2	0.0004
86 (Elm Branch)	6	1.4	0.002
87 (UNT 1 to Elm Branch)	6	0.2	0.0004
88 (UNT 1 to Honey Run)	3	0.1	0.0002
828 (UNT 2 to Honey Run)	3	2.25	0.0001

TEMPORARY PUMP DETAIL

Attachment 14-1

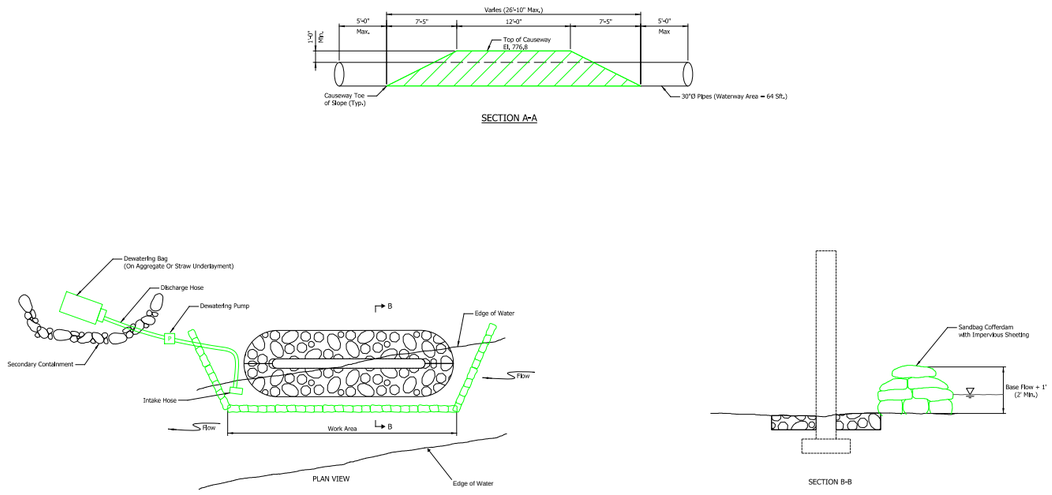
8440 Allison Pointe Boulevard, Suite 200
Indianapolis, IN 46250

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

INDIANA DEPARTMENT OF TRANSPORTATION

HORIZONTAL SCALE	
NONE	
VERTICAL SCALE	
NONE	

...C3D\14-402\Road\Dwg\Plans\Line DE\Temporary Pump Detail.dwg Plot Date: 10/24/2018 Plotted By: Wolka, Andy



Approximate Duration for Temporary Impacts= 2 months per crossing
*Water will be pumped around to the same stream

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 1'-0", U.N. / VERTICAL SCALE:
DESIGNED: KRW	DRAWN: KRW	TEMPORARY MISCELLANEOUS DETAILS	SURVEY BOOK / ELECTRONIC / CONTRACT
CHECKED: RMC	CHECKED: RMC		

BRIDGE FILE / DESIGNATION / SHEETS: 1 of 3 / PROJECT

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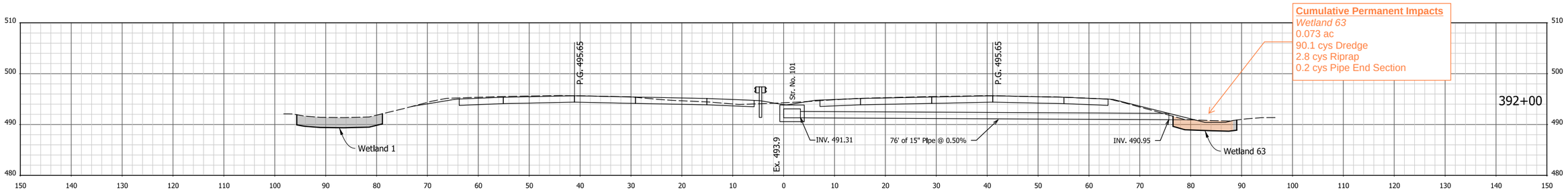
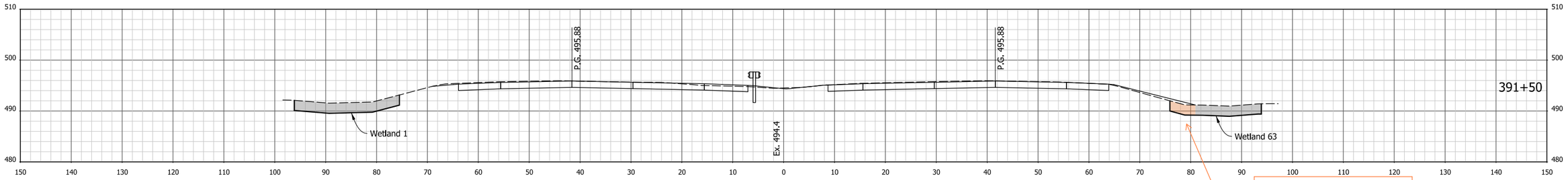
Attachment 14-1





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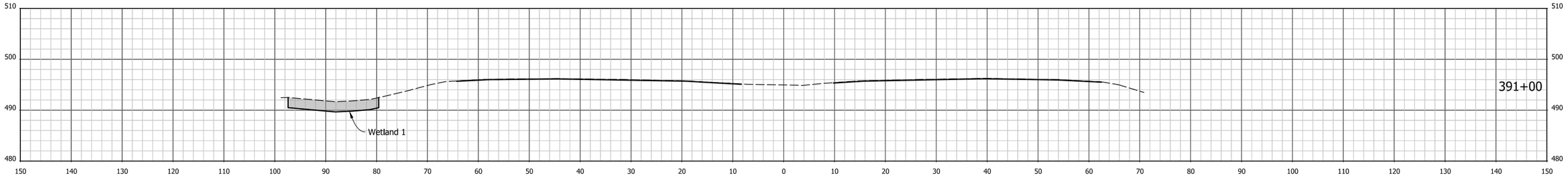
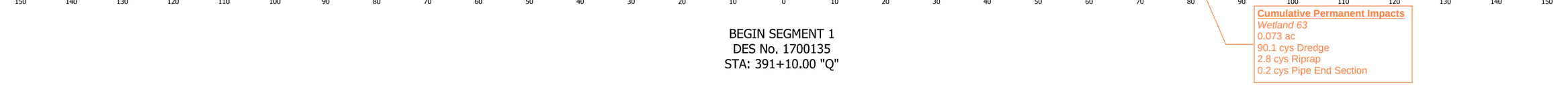
DES No. 1700135
STA: 391+10.00 "Q"





Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 391+00 TO STA. 392+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	1	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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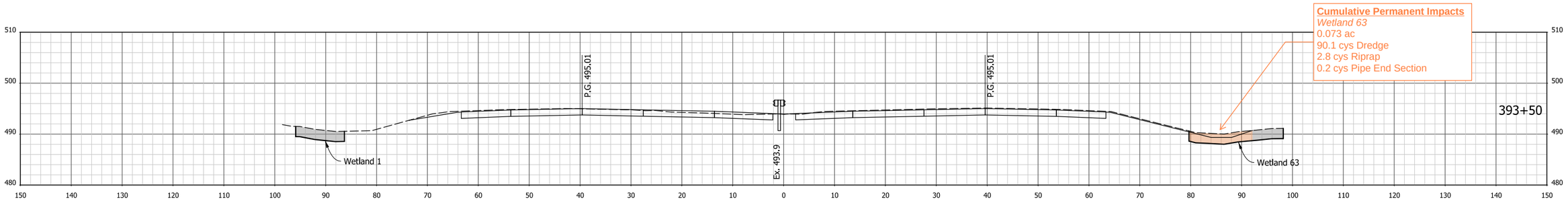
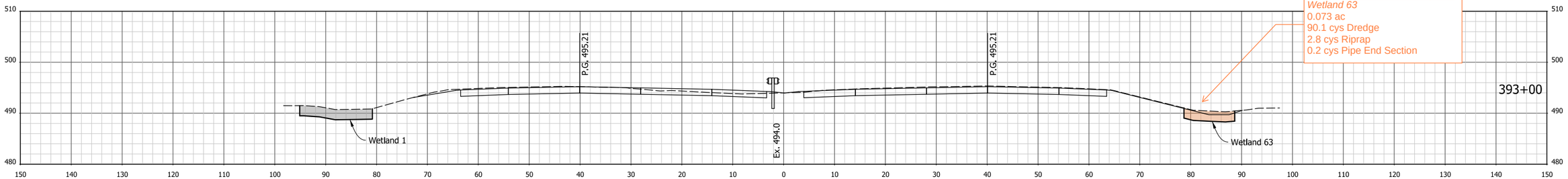
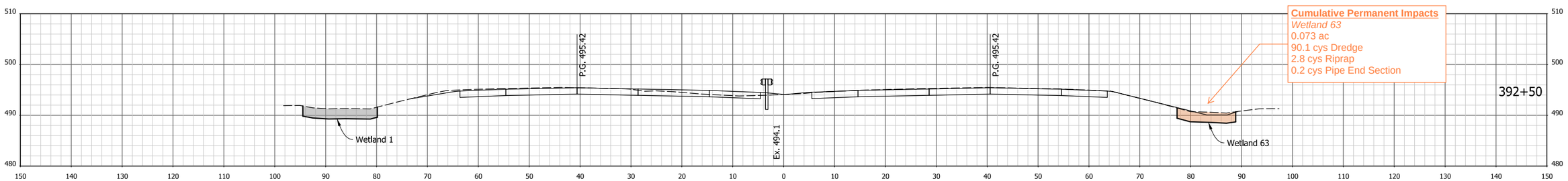






Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

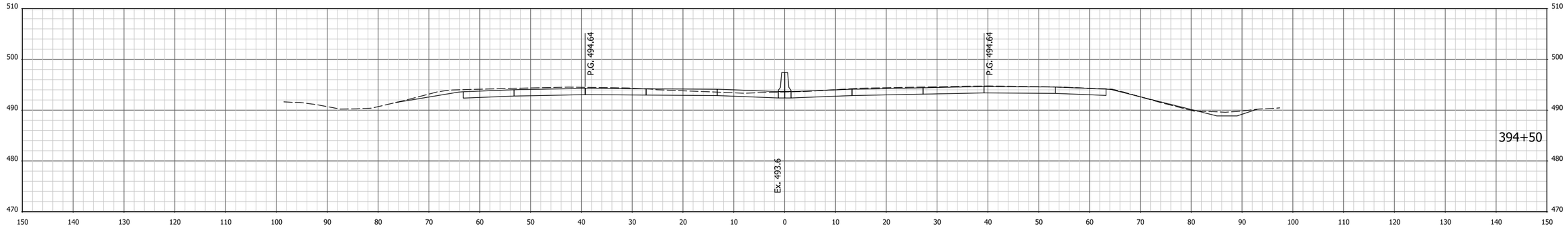
INDIANA
DEPARTMENT OF TRANSPORTATION

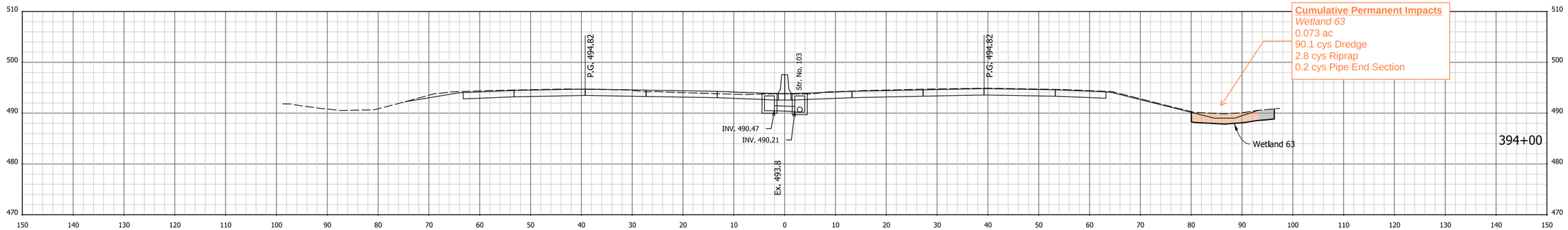
CROSS SECTIONS
STA. 392+50 TO STA. 393+50 "PR-Q"

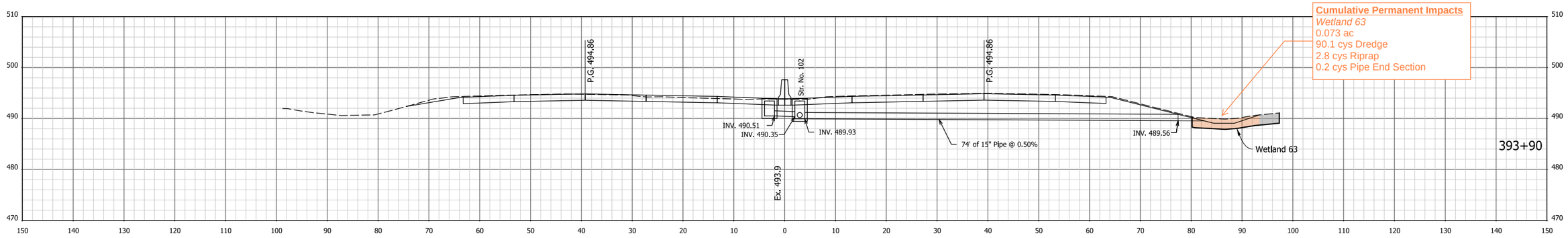
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	2	of	246
CONTRACT	PROJECT		
R-41529	1700135		

I 12/9/2021 5:08:49 PM I P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn







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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

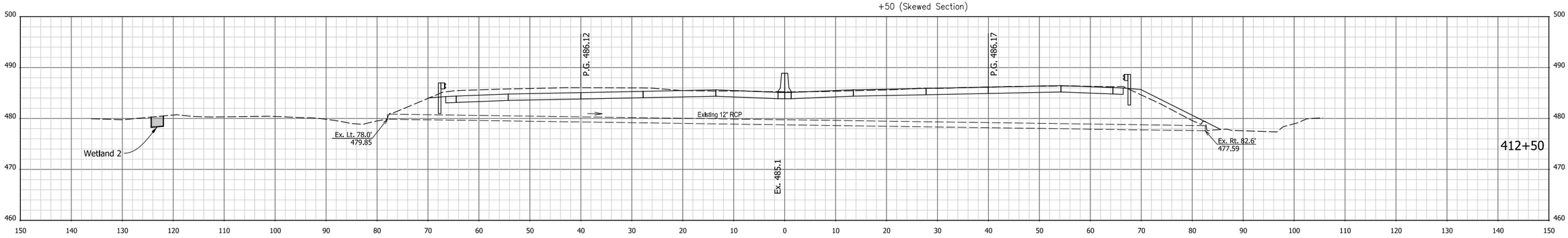
INDIANA
DEPARTMENT OF TRANSPORTATION

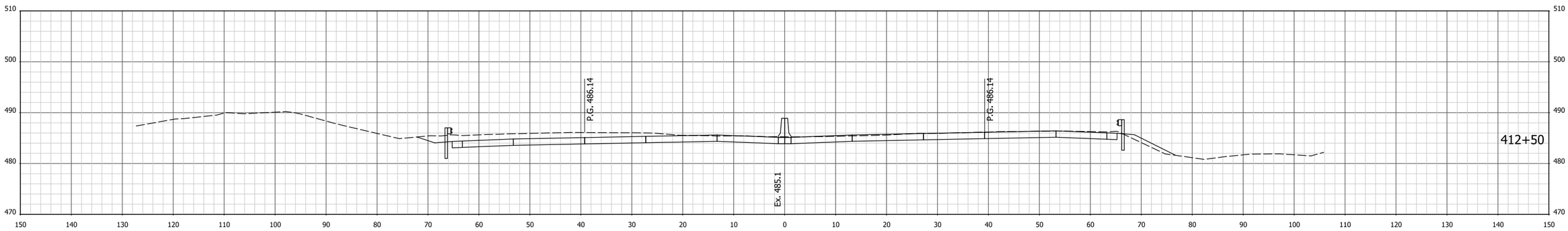
CROSS SECTIONS
STA. 393+90 TO STA. 394+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	3	of	246
CONTRACT	PROJECT		
R-41529	1700135		

+50 (Skewed Section)



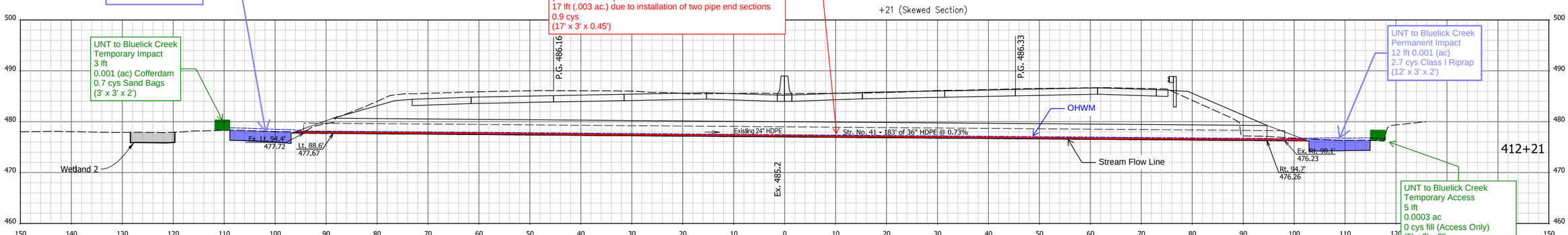


Str. No. 41
UNT to Bluelick Creek
Permanent Impact
183 lft (0.016 ac) due to installation of New 183 lft of 36" Pipe
9.2 cys
(183' x 3' x 0.45')
17 lft (.003 ac.) due to installation of two pipe end sections
0.9 cys
(17' x 3' x 0.45')

UNT to Bluelick Creek
Permanent Impact
12 lft (0.001 ac)
2.7 cys Class I Riprap
(12 x 3 x 2')

UNT to Bluelick Creek
Temporary Impact
3 lft
0.001 (ac) Cofferdam
0.7 cys Sand Bags
(3' x 3' x 2')

+21 (Skewed Section)



UNT to Bluelick Creek
Permanent Impact
12 lft 0.001 (ac)
2.7 cys Class I Riprap
(12' x 3' x 2')

UNT to Bluelick Creek
Temporary Access
5 lft
0.0003 ac
0 cys fill (Access Only)
(5' x 3' x 0')
Temporary Cofferdam
3 lft
0.001 (ac) Cofferdam
0.7 cys Sandbags
(3' x 3' x 2')

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

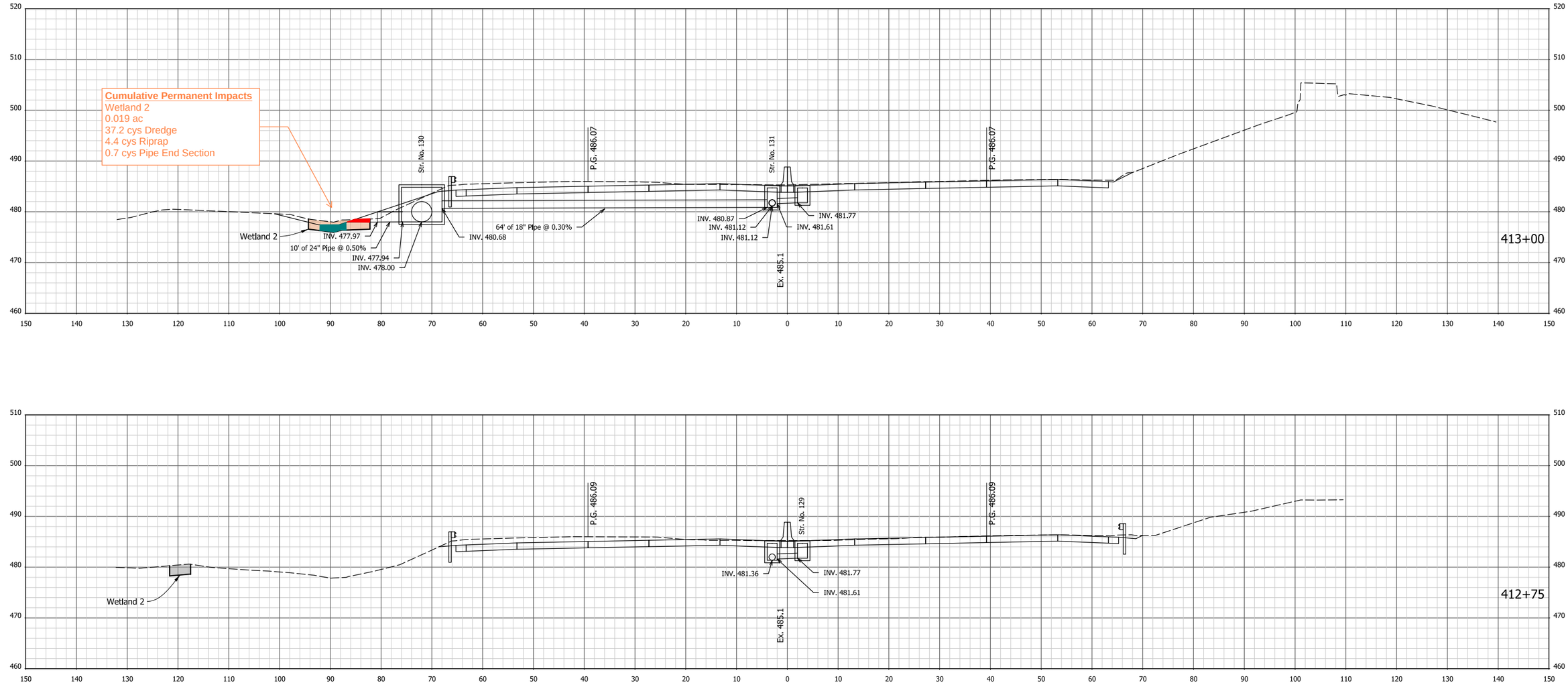
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 412+21 TO STA. 412+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	4 of 246
CONTRACT	PROJECT
R-41529	1700135

I 12/9/2021 4:57:33 PM I P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

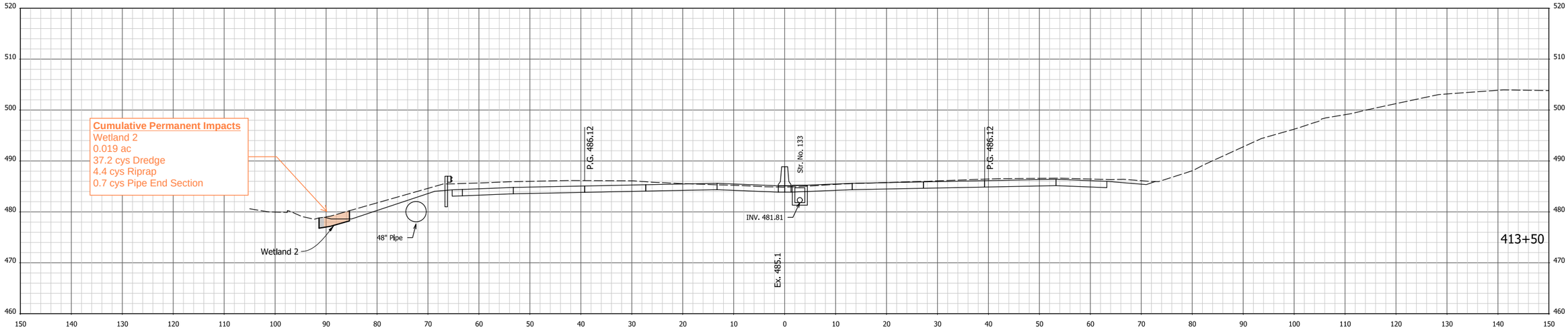
INDIANA
DEPARTMENT OF TRANSPORTATION

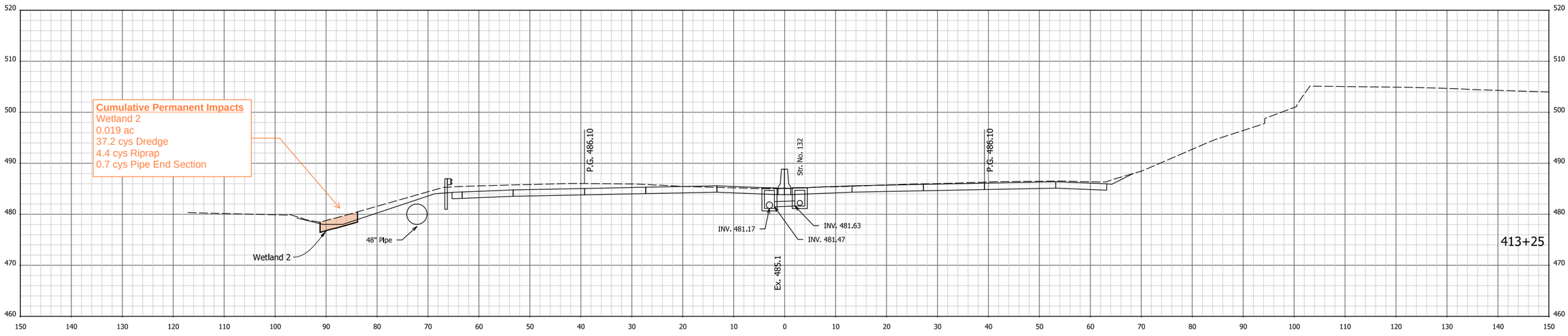
CROSS SECTIONS
STA. 412+75 TO STA. 413+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	5 of 246
CONTRACT	PROJECT
R-41529	1700135

I 12/9/2021 4:57:35 PM I P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn





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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

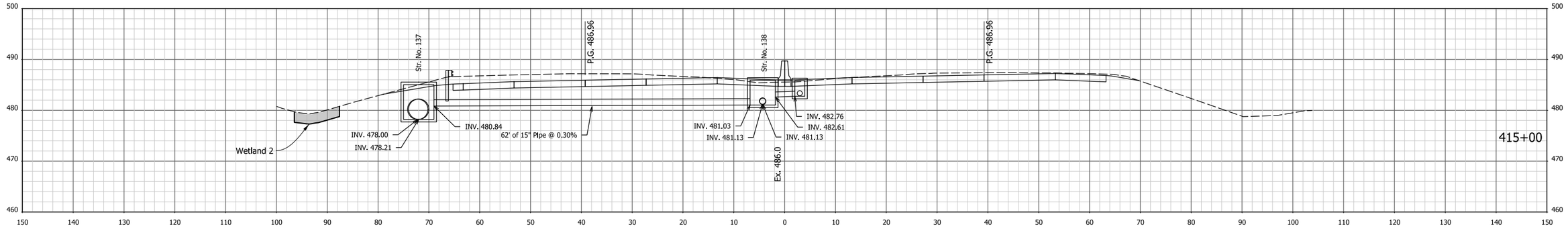
CHECKED: DJG | CHECKED: DJG

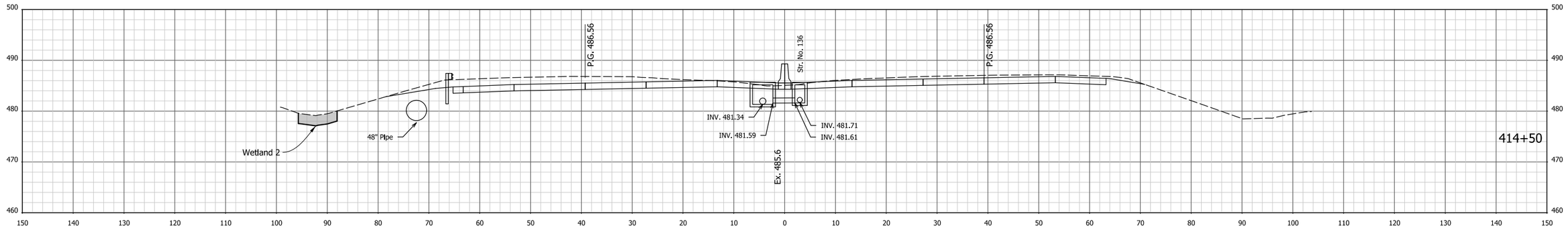
INDIANA
DEPARTMENT OF TRANSPORTATION

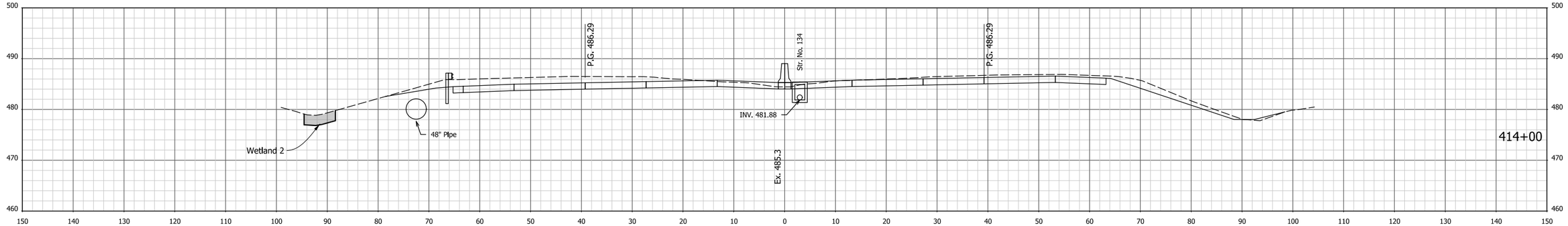
CROSS SECTIONS
STA. 413+25 TO STA. 413+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	6 of 246
CONTRACT	PROJECT
R-41529	1700135







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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

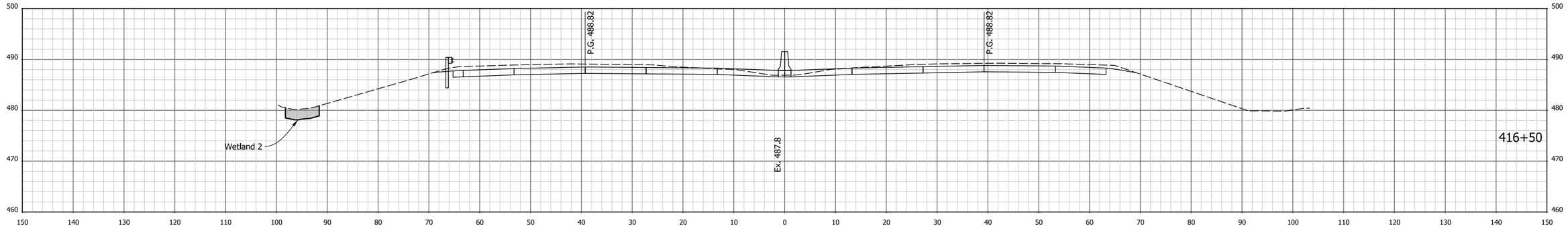
CHECKED: DJG | CHECKED: DJG

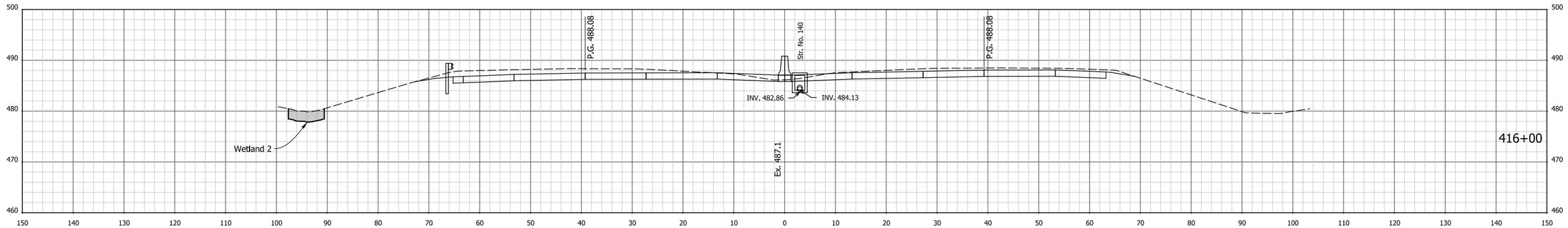
INDIANA
DEPARTMENT OF TRANSPORTATION

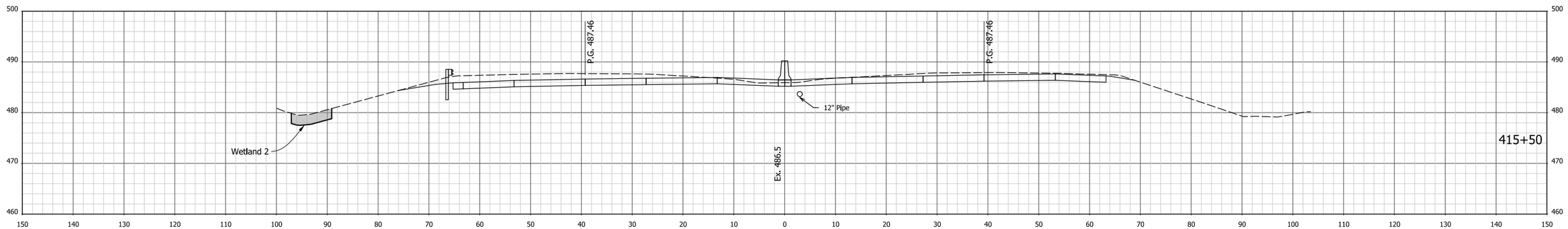
CROSS SECTIONS
STA. 414+00 TO STA. 415+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	7	of	246
CONTRACT	PROJECT		
R-41529	1700135		







Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 415+50 TO STA. 416+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	8	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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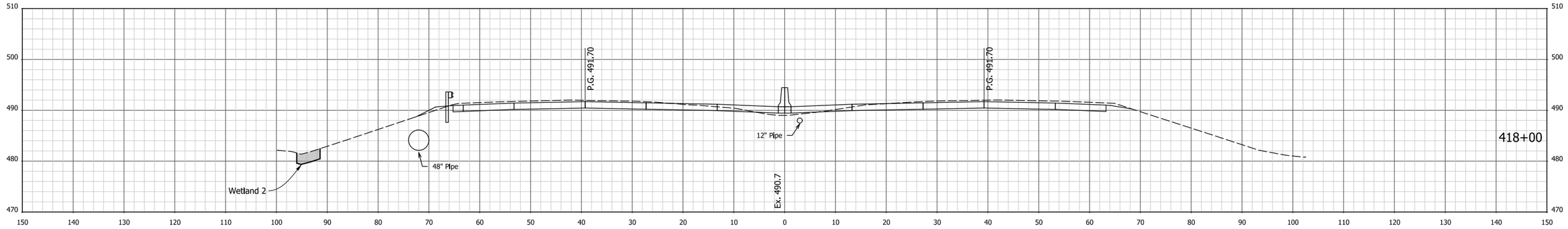

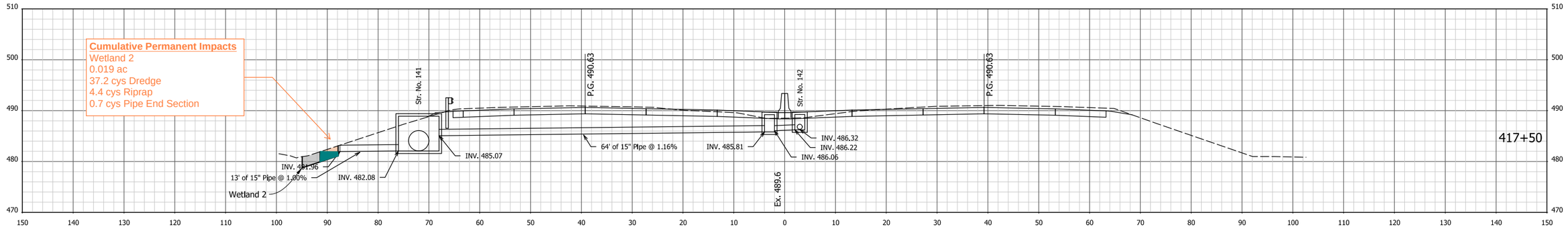

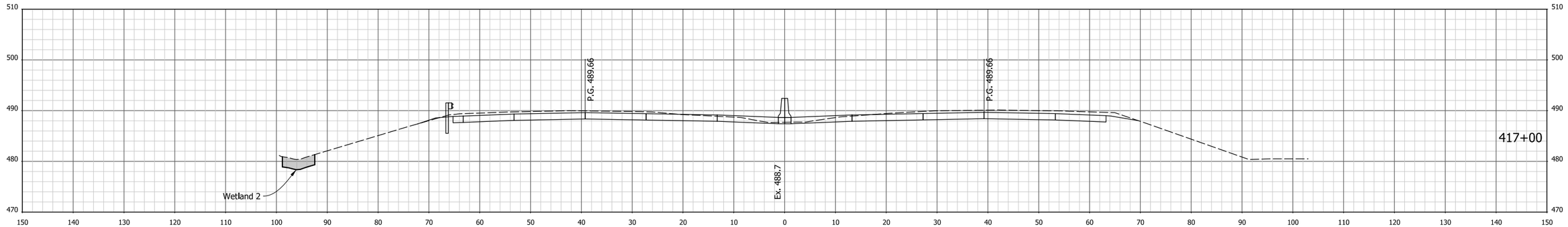

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 417+00 TO STA. 418+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	9 of 246
CONTRACT	PROJECT
R-41529	1700135

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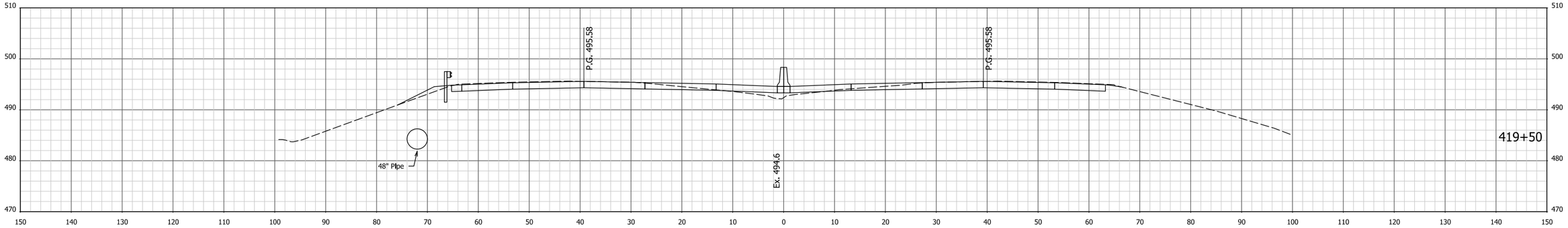

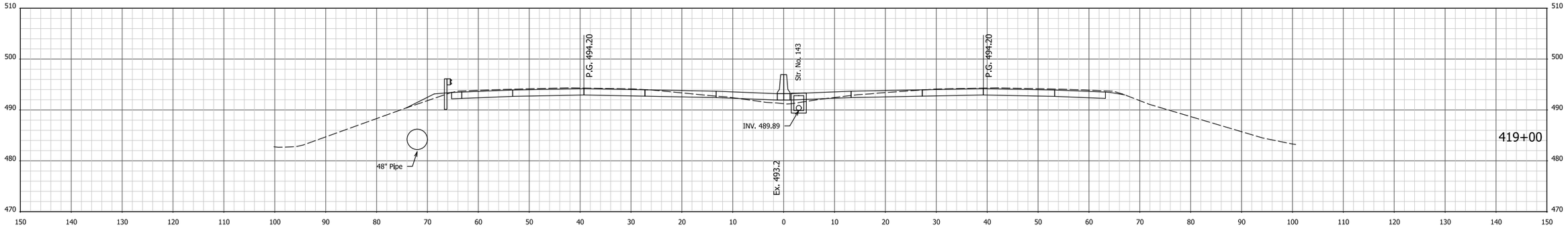

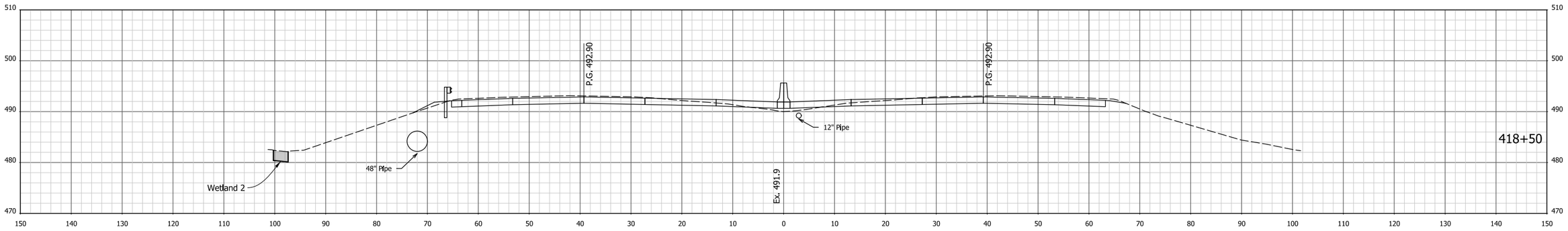

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 418+50 TO STA. 419+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	10 of 246
CONTRACT	PROJECT
R-41529	1700135

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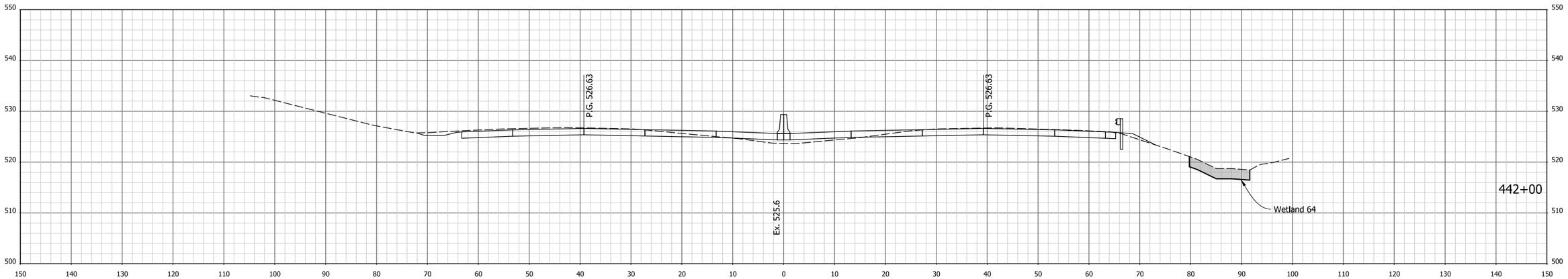

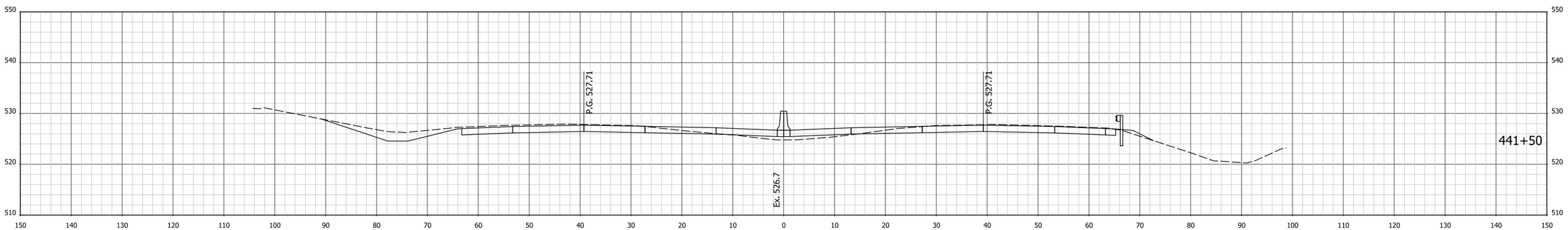

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

STA. 441+50 TO STA. 442+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	11	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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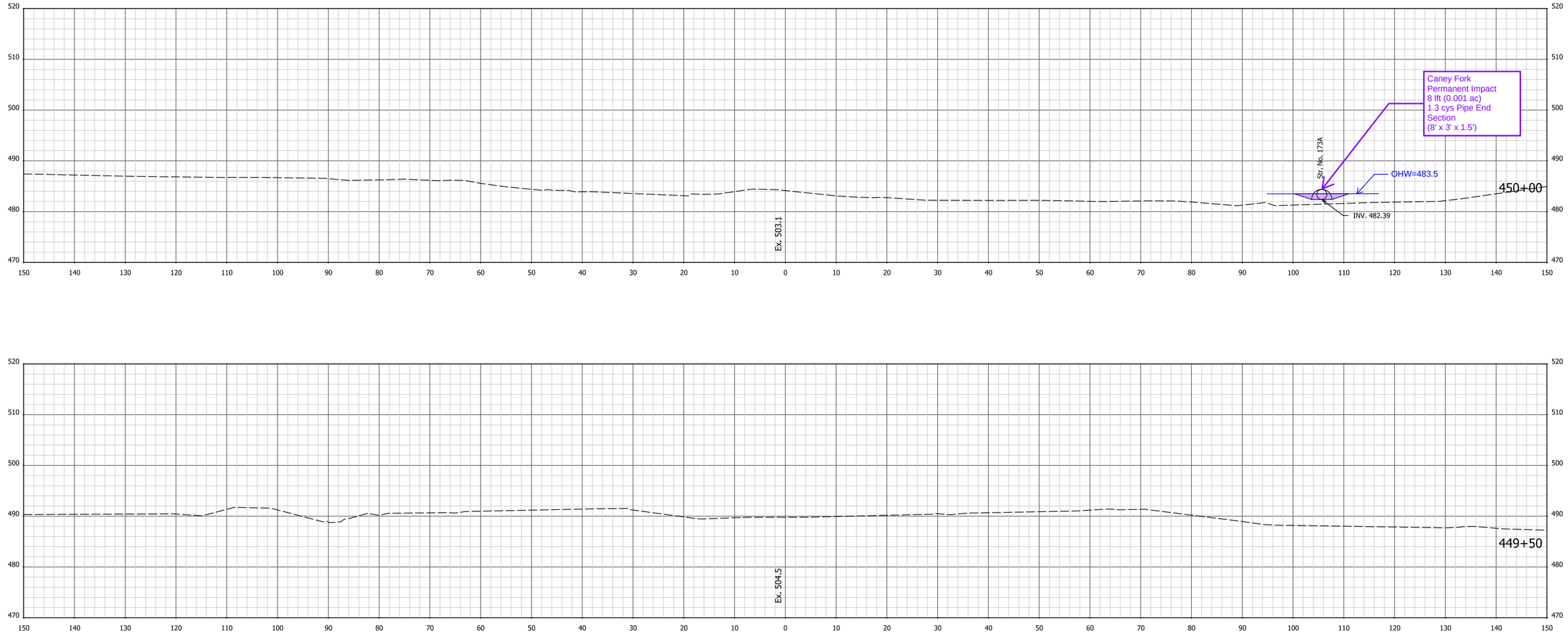

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

STA. 449+50 TO STA. 450+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	12	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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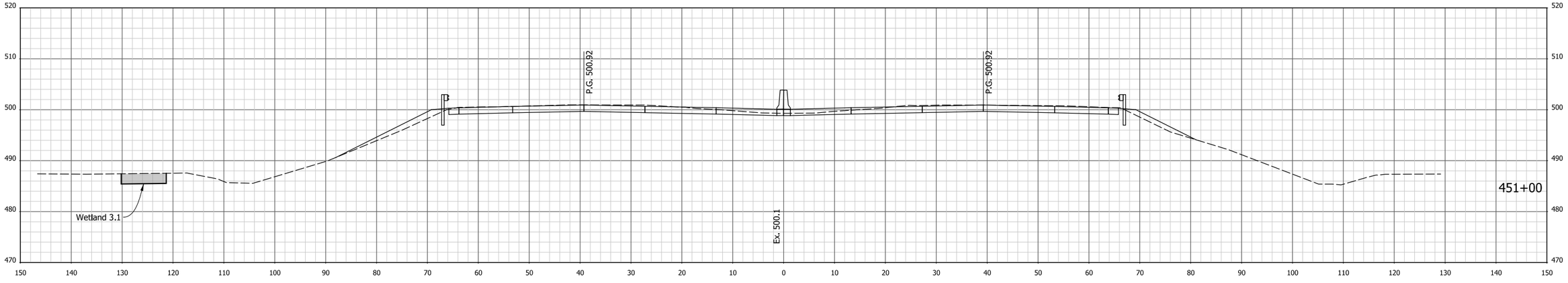
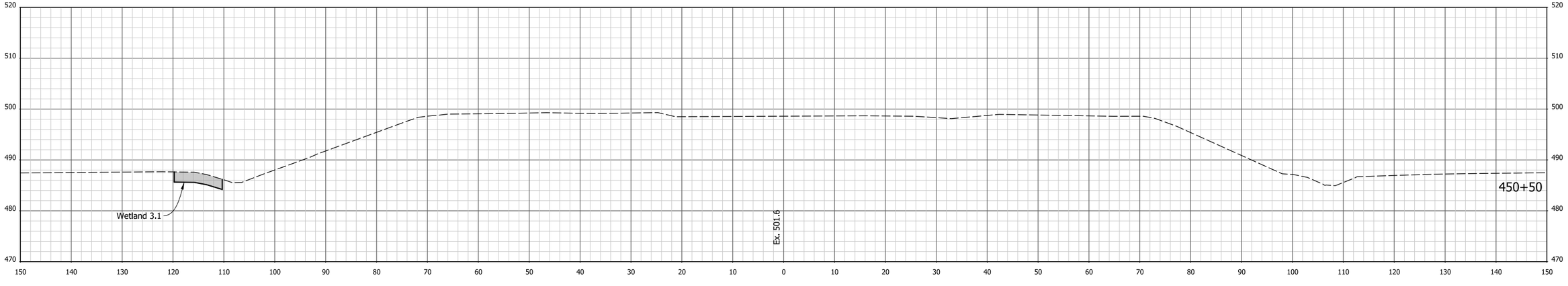


END PAVEMENT LIMITS
STA: 448+98.25 "PR-Q", NB & SB



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 450+50 TO STA. 451+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	13	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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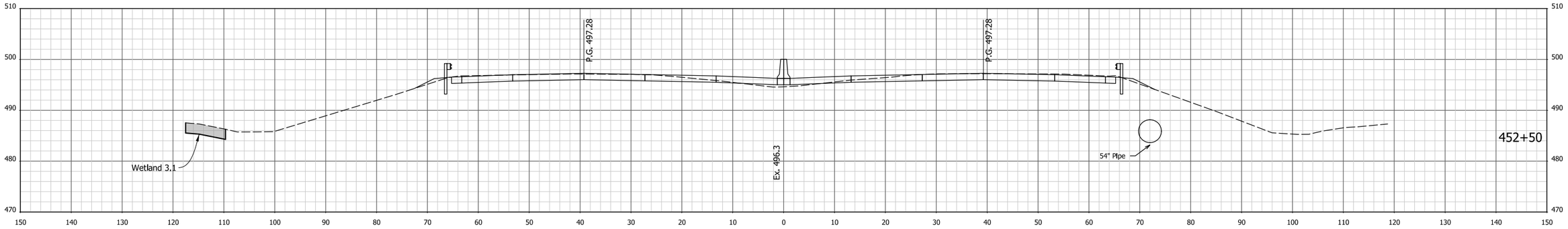

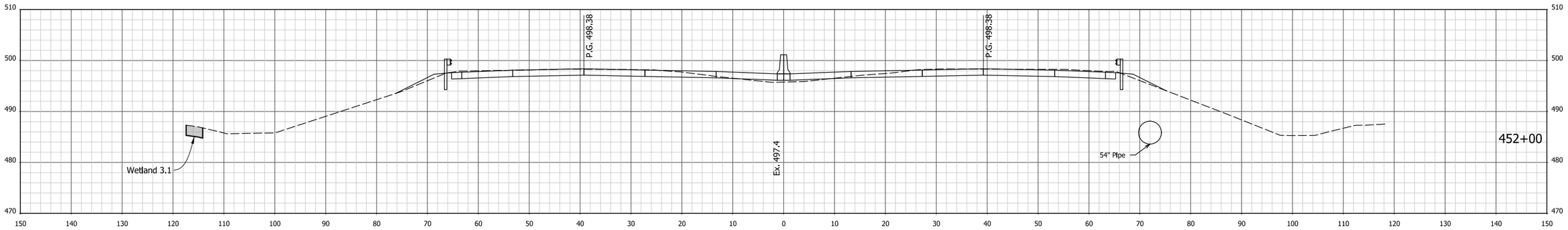

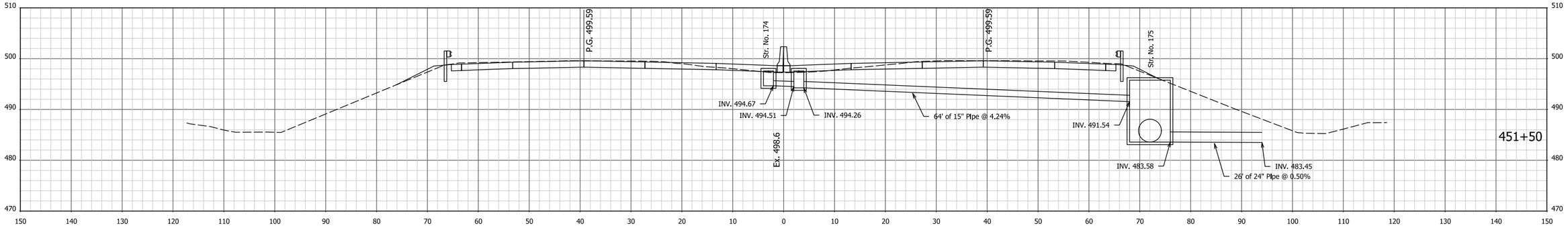

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

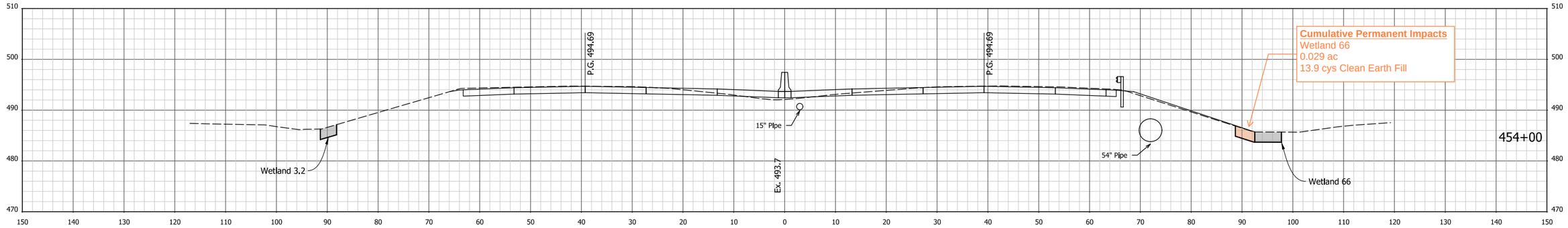
CHECKED: DJG | CHECKED: DJG

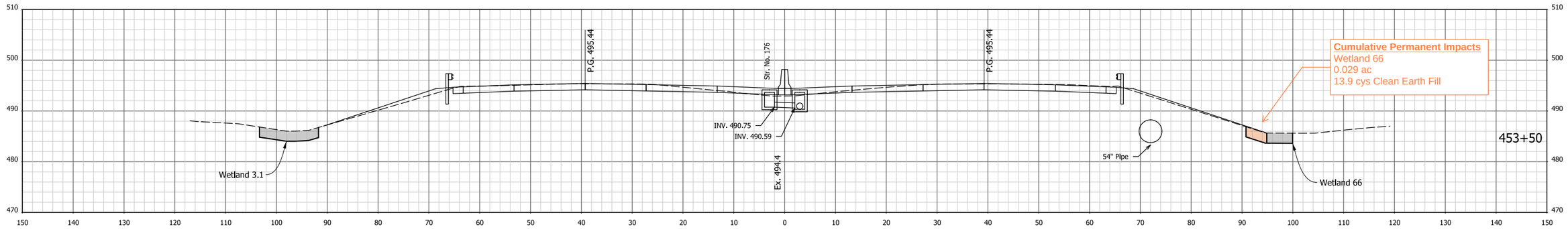
INDIANA
DEPARTMENT OF TRANSPORTATION

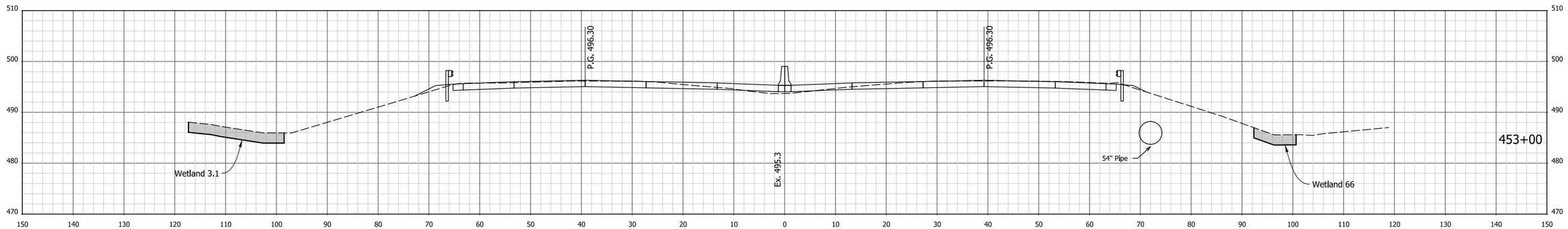
CROSS SECTIONS
STA. 451+50 TO STA. 452+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	14 of 246
CONTRACT	PROJECT
R-41529	1700135







Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

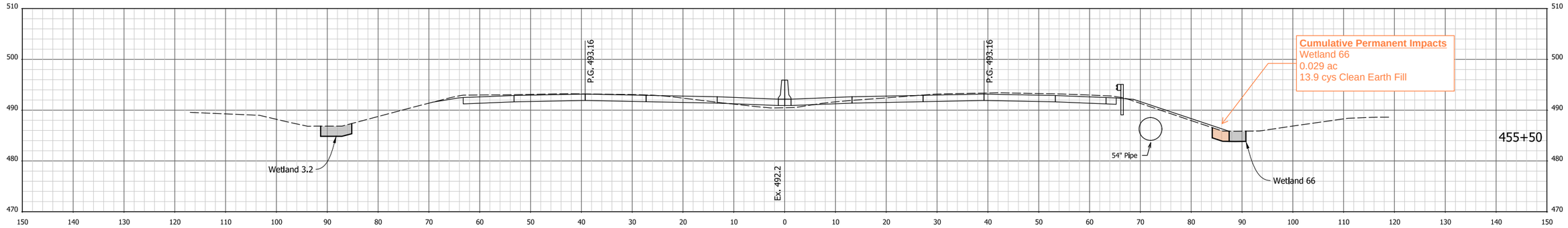
CROSS SECTIONS

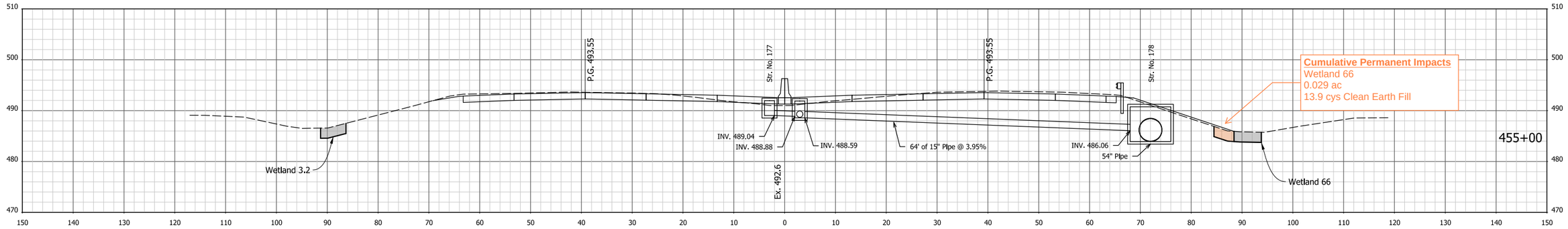
STA. 453+00 TO STA. 454+00 "PR-Q"

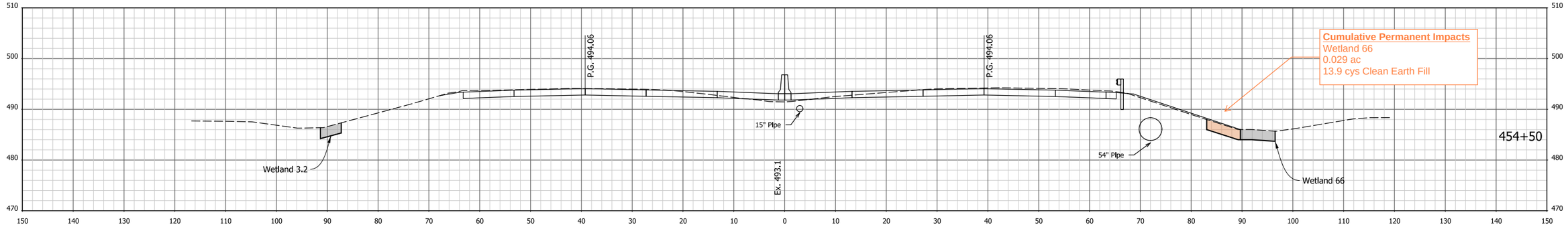
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	15 of 246
CONTRACT	PROJECT
R-41529	1700135

12/9/2021 4:58:35 PM P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn







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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

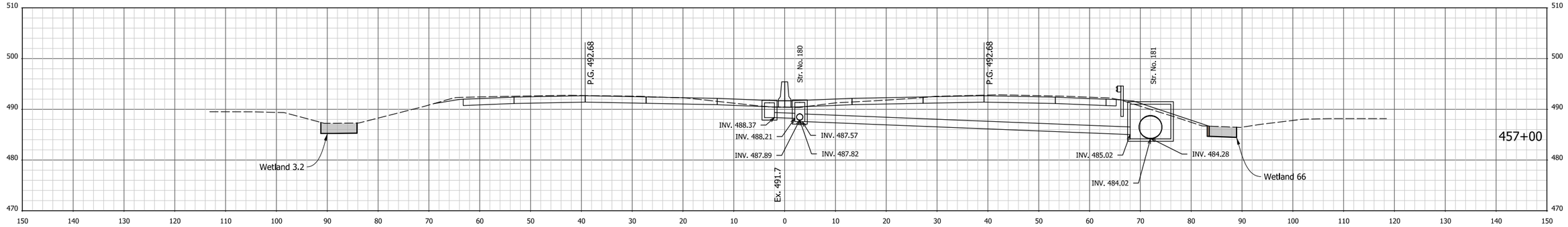
CHECKED: DJG CHECKED: DJG

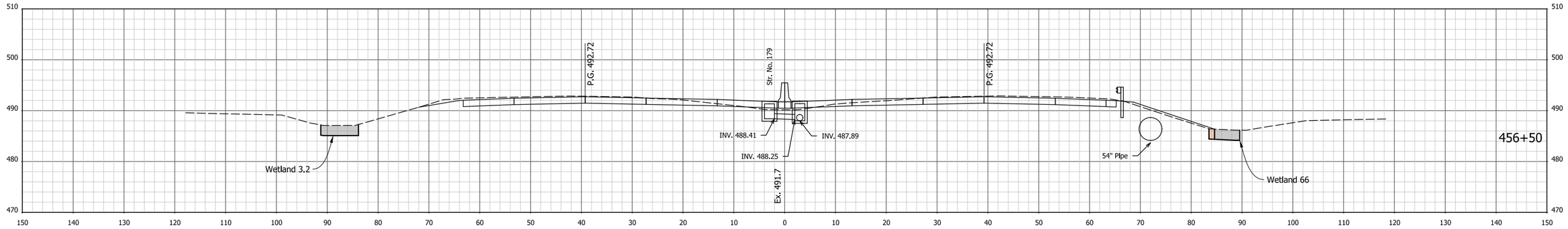
INDIANA
DEPARTMENT OF TRANSPORTATION

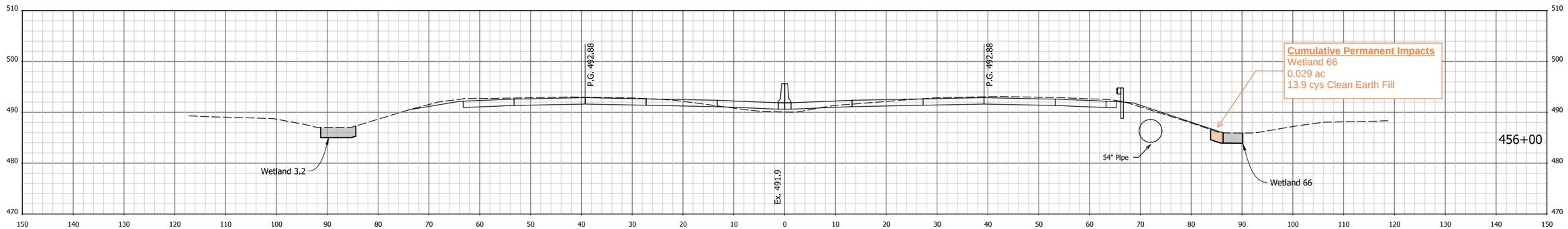
CROSS SECTIONS
STA. 454+50 TO STA. 455+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	16 of 246
CONTRACT	PROJECT
R-41529	1700135







Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 456+00 TO STA. 457+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	17 of 246
CONTRACT	PROJECT
R-41529	1700135

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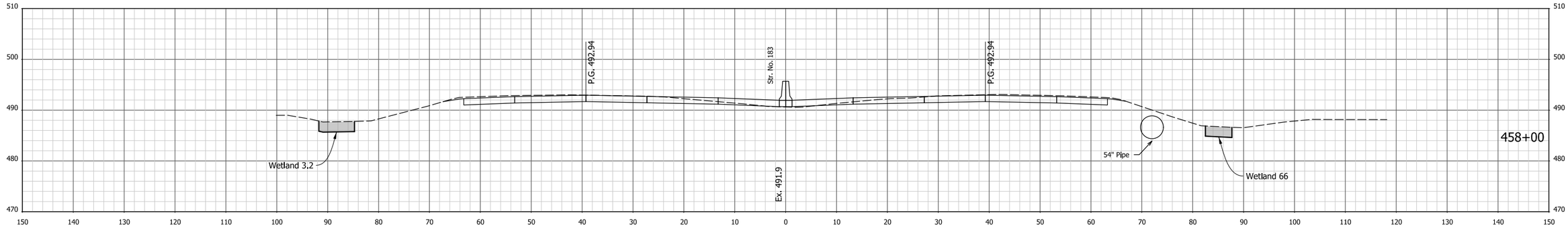

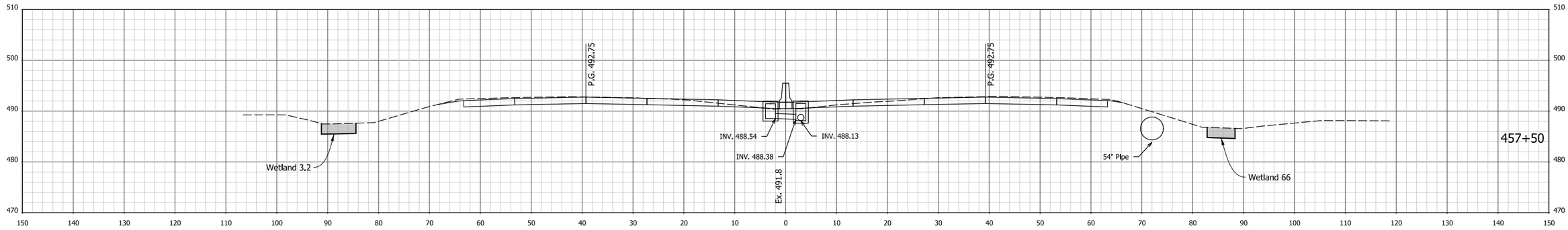

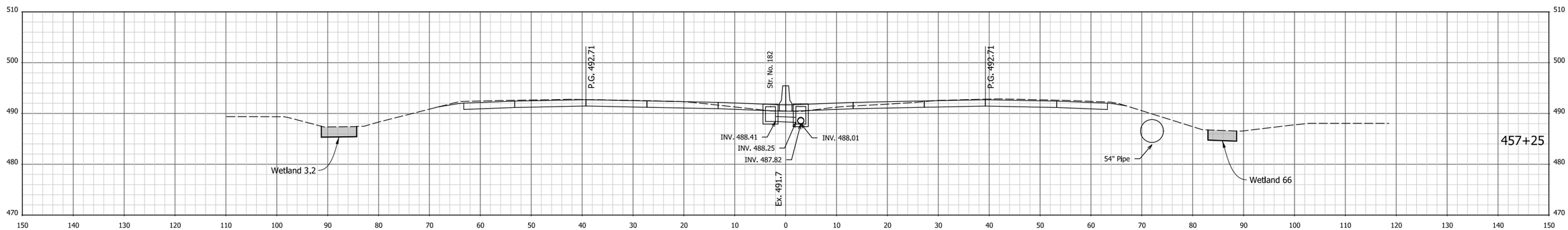

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 457+25 TO STA. 458+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	18 of 246
CONTRACT	PROJECT
R-41529	1700135

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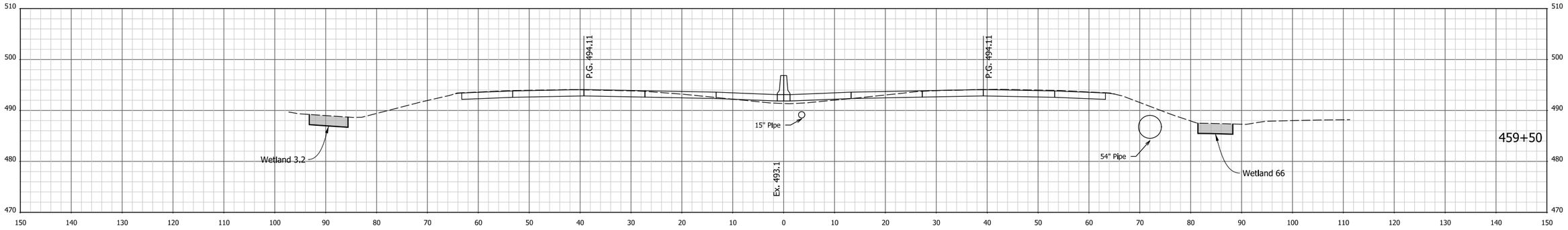

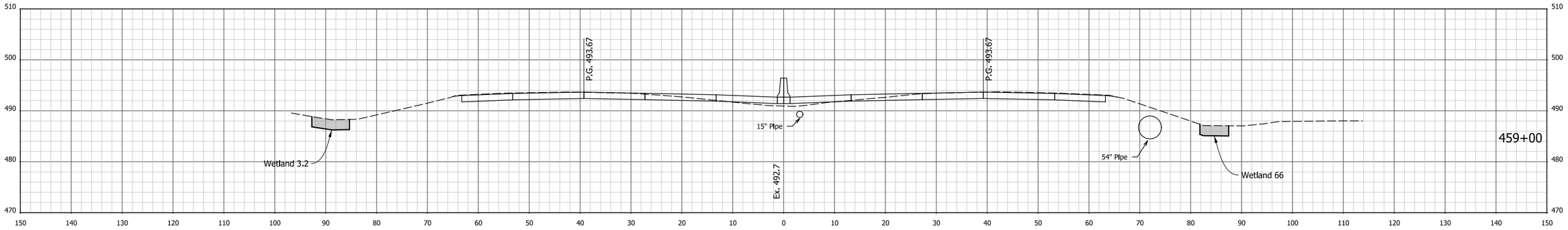

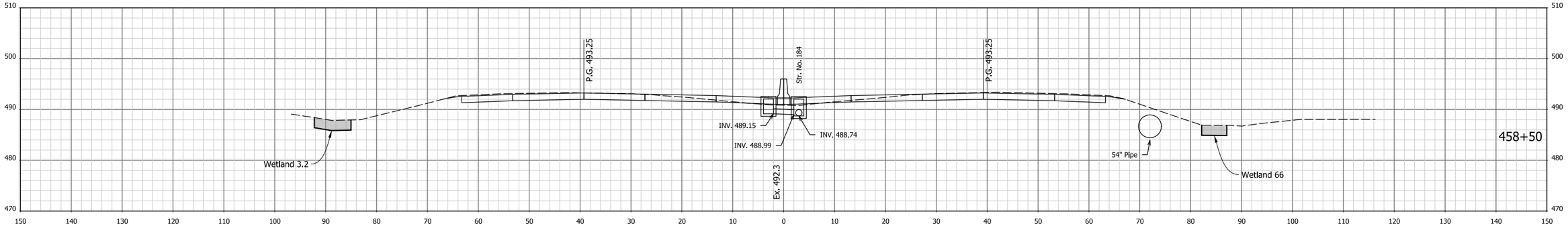

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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

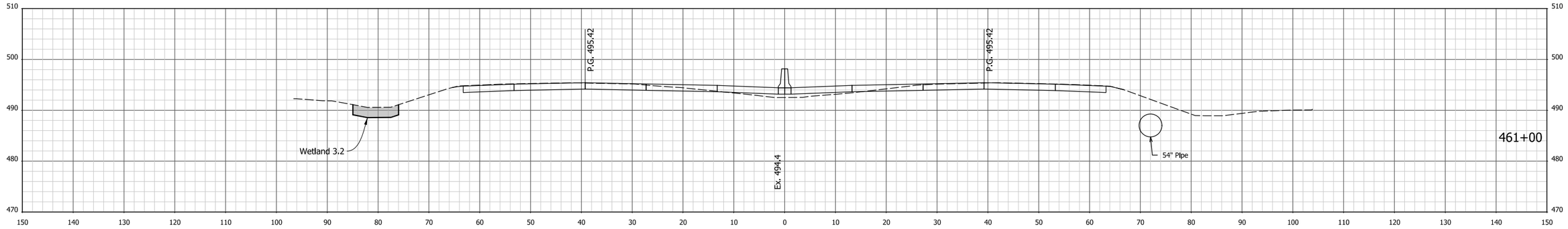
CHECKED: DJG CHECKED: DJG

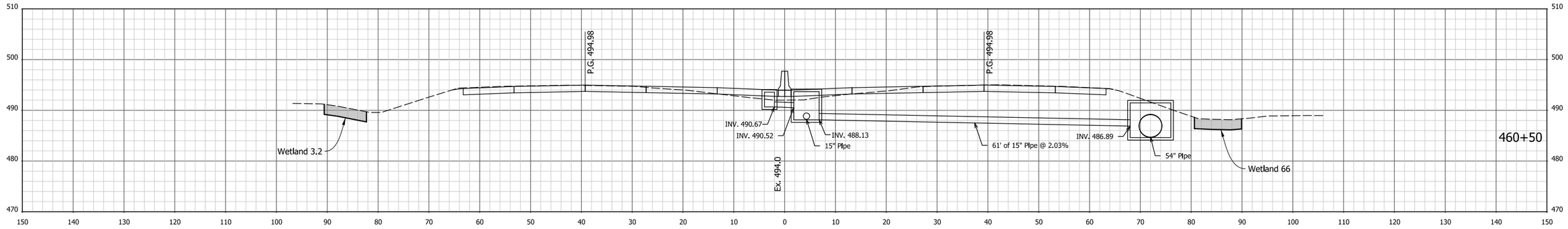
INDIANA
DEPARTMENT OF TRANSPORTATION

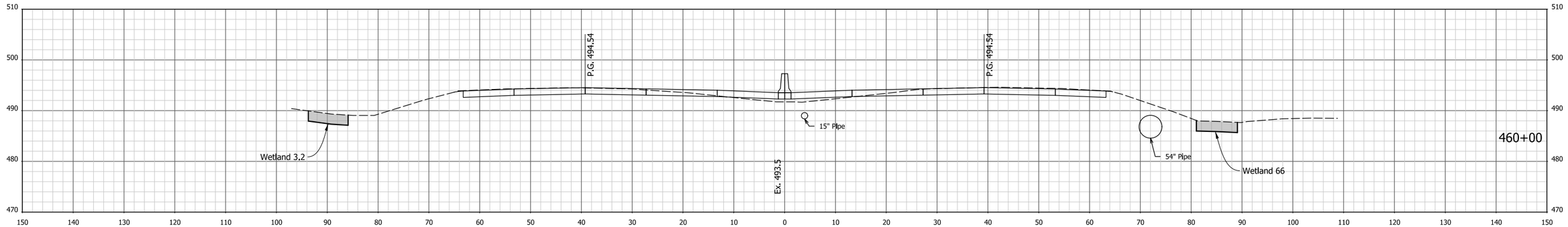
CROSS SECTIONS
STA. 458+50 TO STA. 459+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	19 of 246
CONTRACT	PROJECT
R-41529	1700135







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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

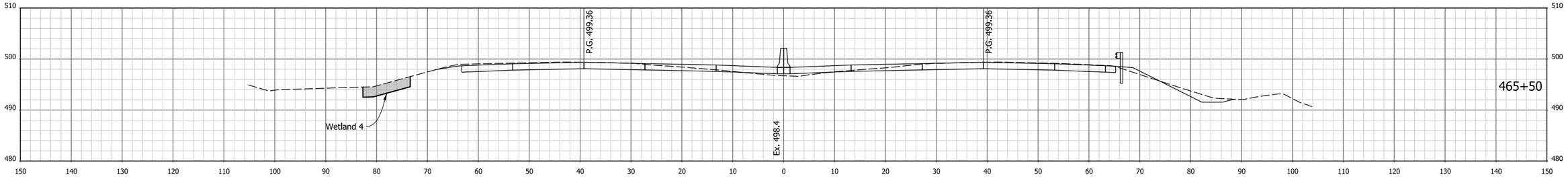
CHECKED: DJG | CHECKED: DJG

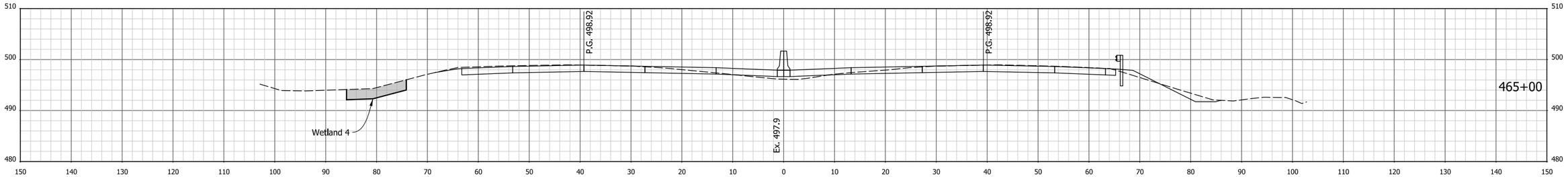
INDIANA
DEPARTMENT OF TRANSPORTATION

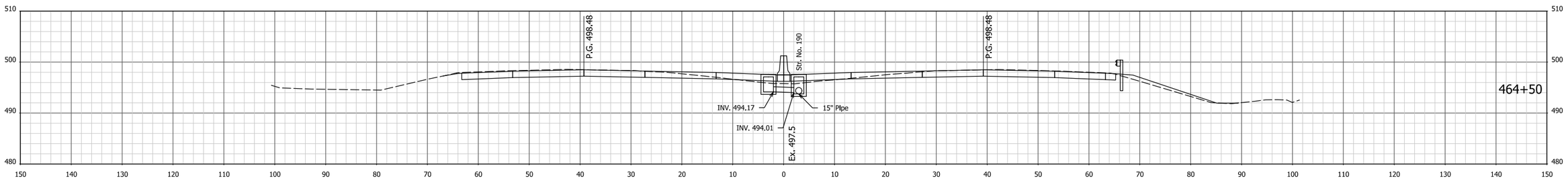
CROSS SECTIONS
STA. 460+00 TO STA. 461+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	20	of	246
CONTRACT	PROJECT		
R-41529	1700135		







Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 464+50 TO STA. 465+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	21	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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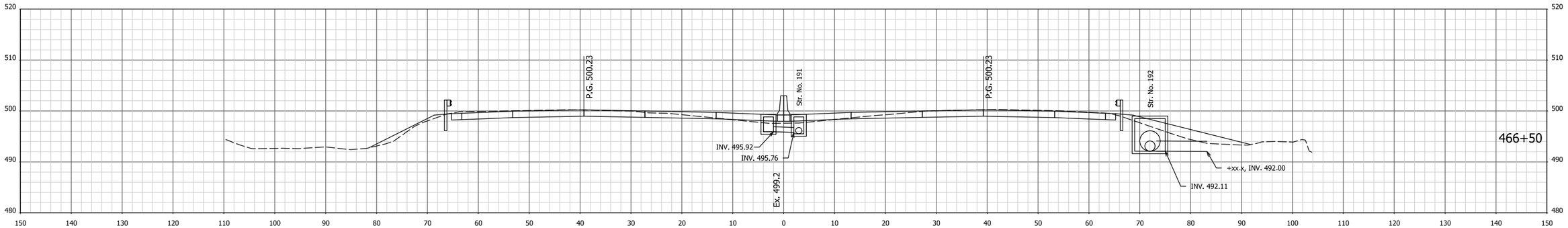

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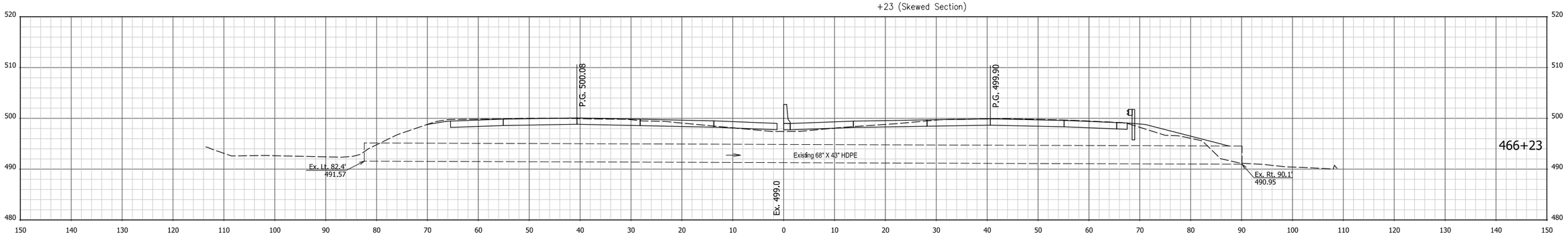

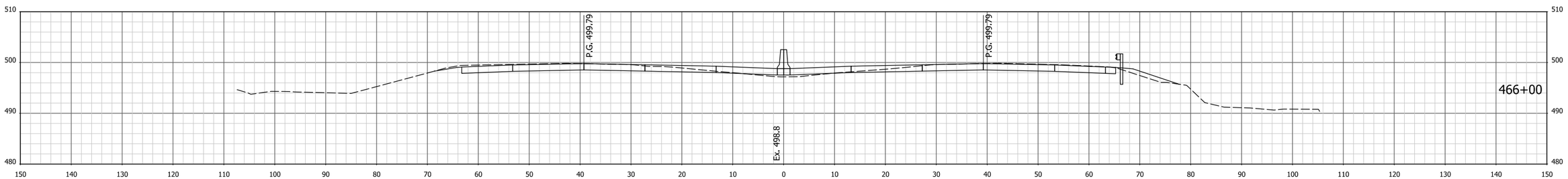

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 466+00 TO STA. 466+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	22 of 246
CONTRACT	PROJECT
R-41529	1700135

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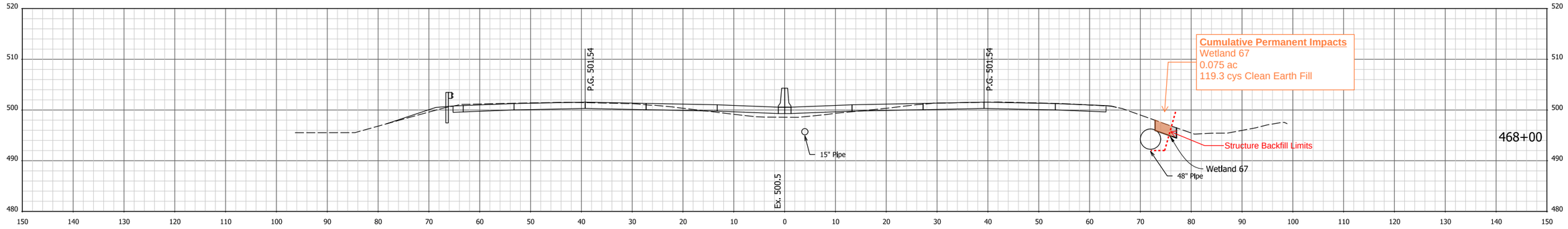

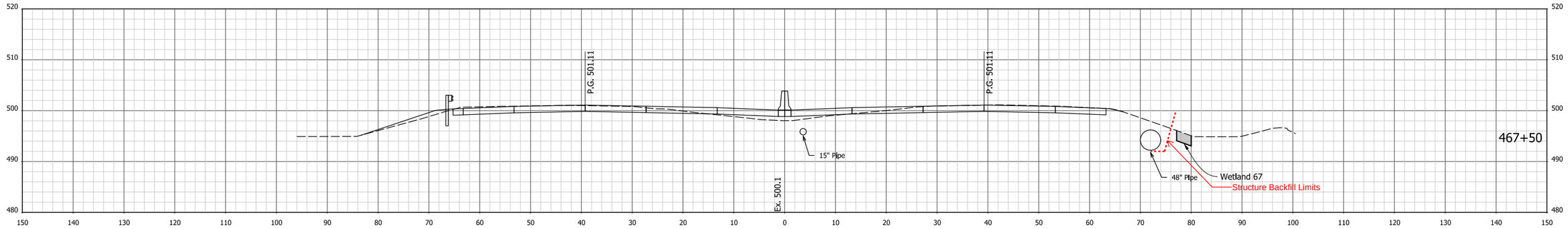

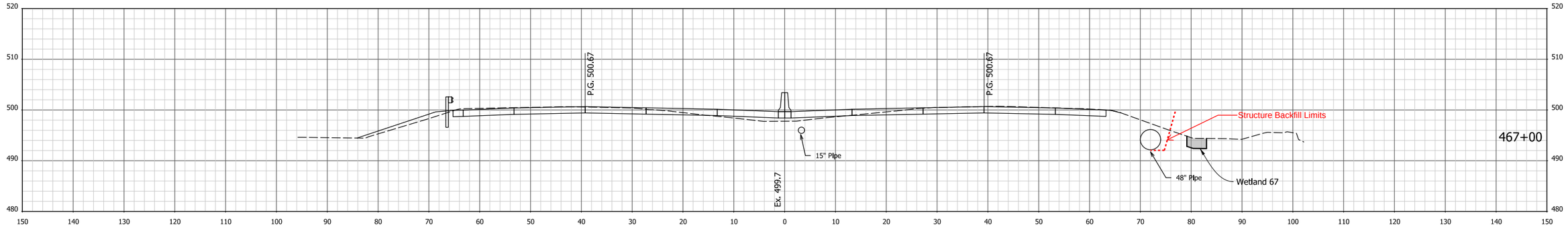

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

STA. 467+00 TO STA. 468+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	23 of 246
CONTRACT	PROJECT
R-41529	1700135

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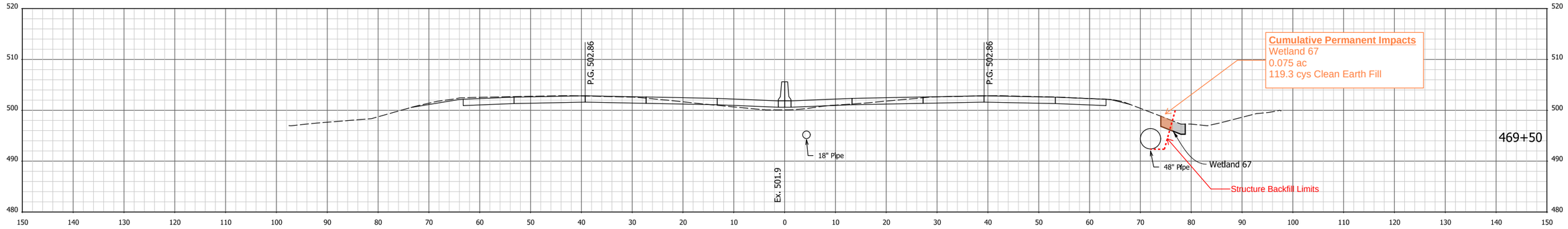

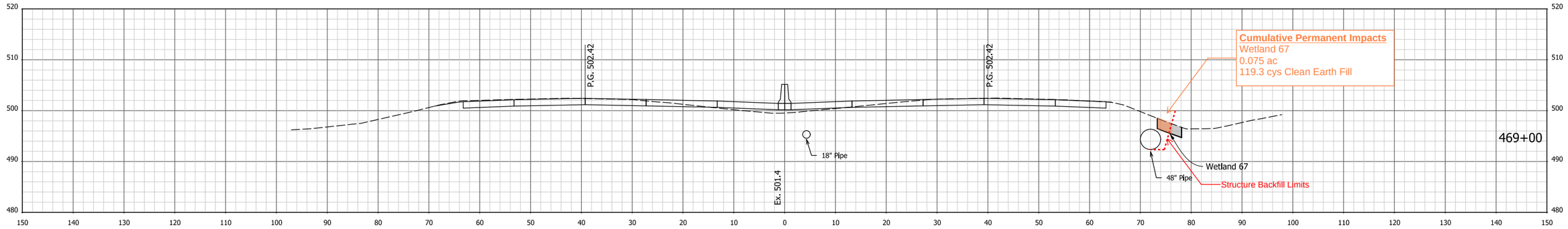

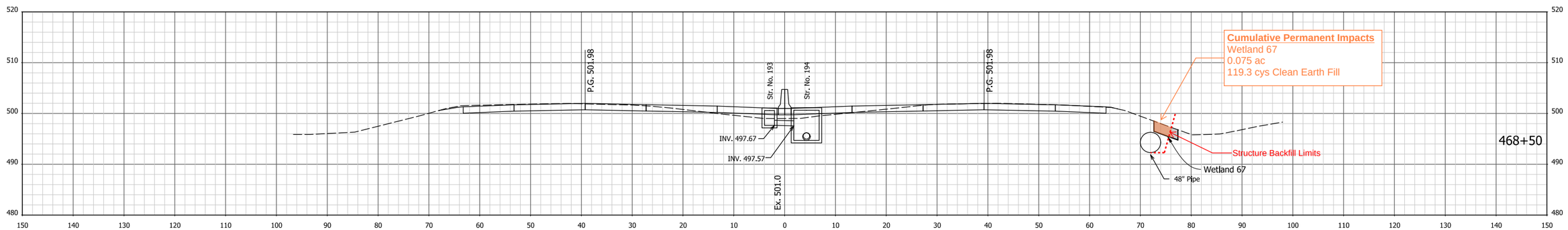

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

STA. 468+50 TO STA. 469+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronlc	24 of 246
CONTRACT	PROJECT
R-41529	1700135

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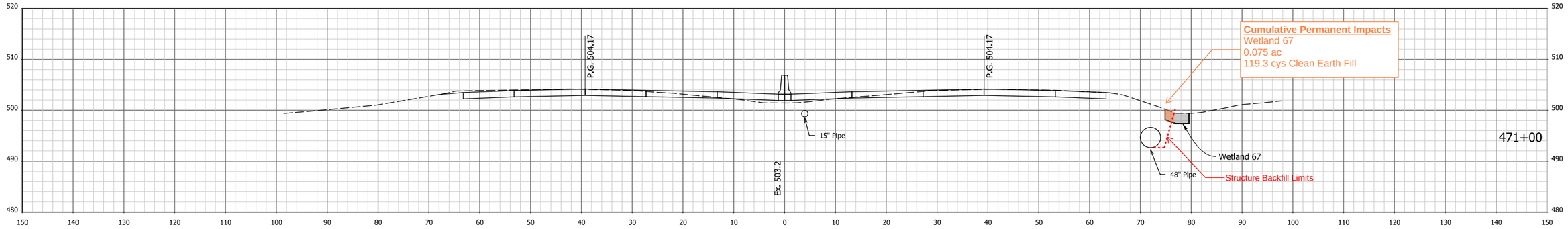

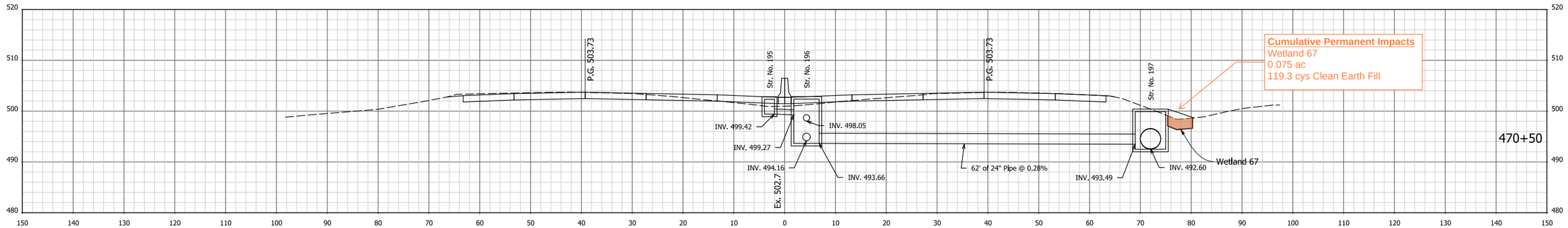

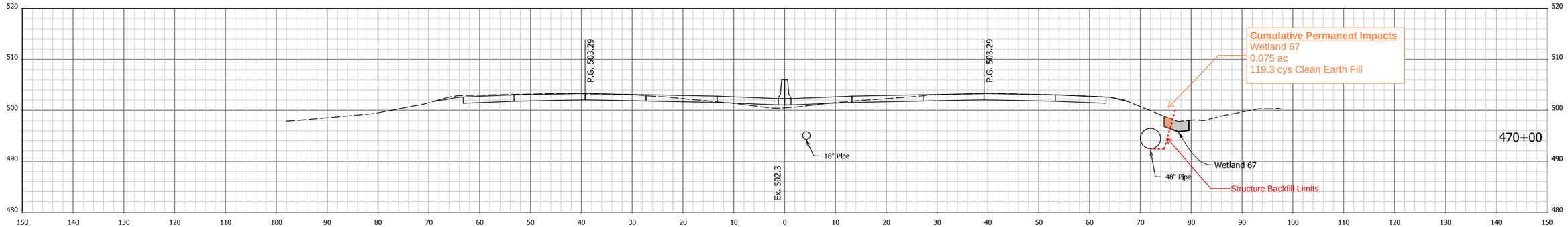

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 470+00 TO STA. 471+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	25	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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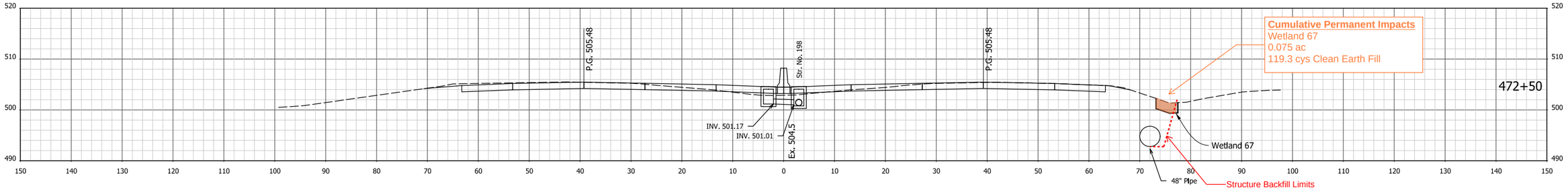

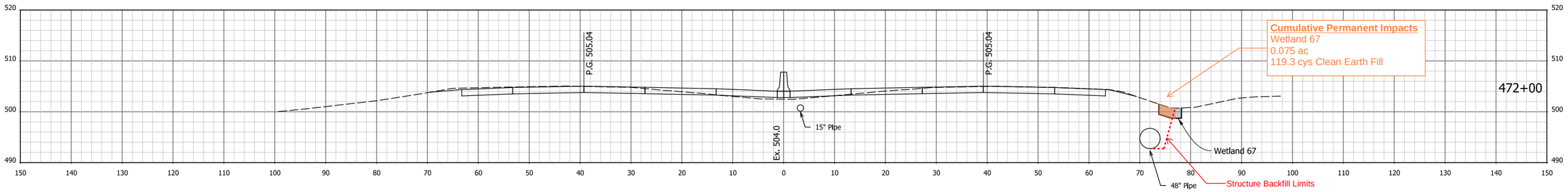

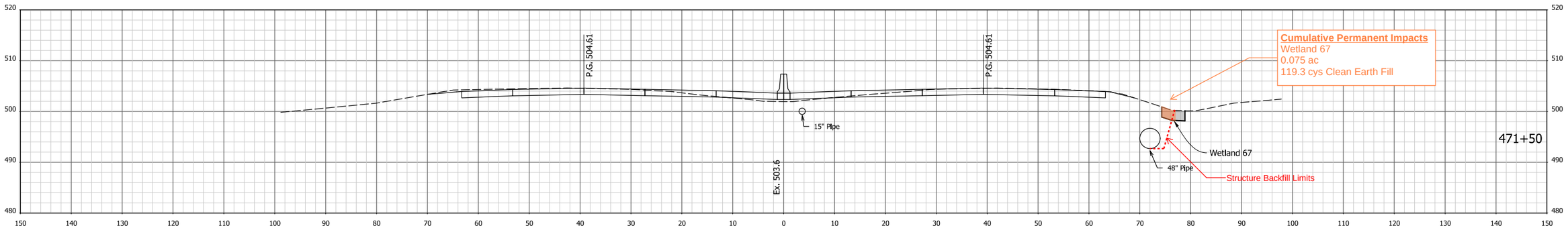

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

STA. 471+50 TO STA. 472+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	26 of 246
CONTRACT	PROJECT
R-41529	1700135

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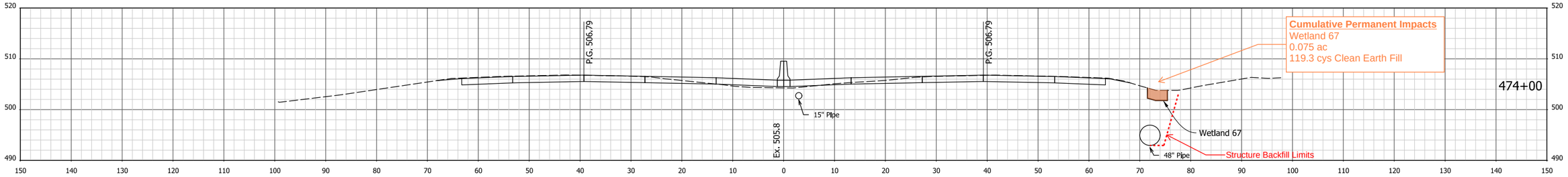

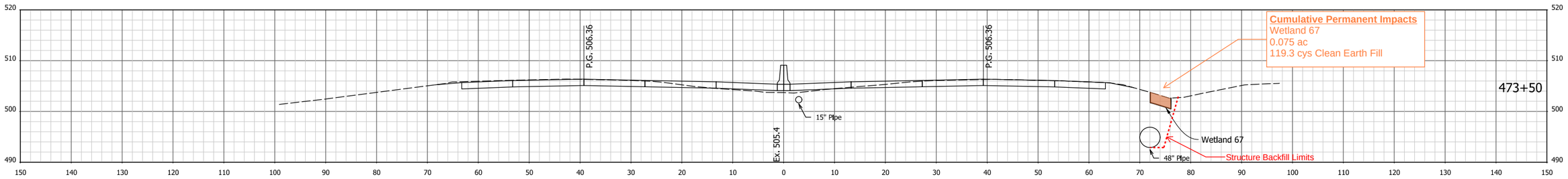

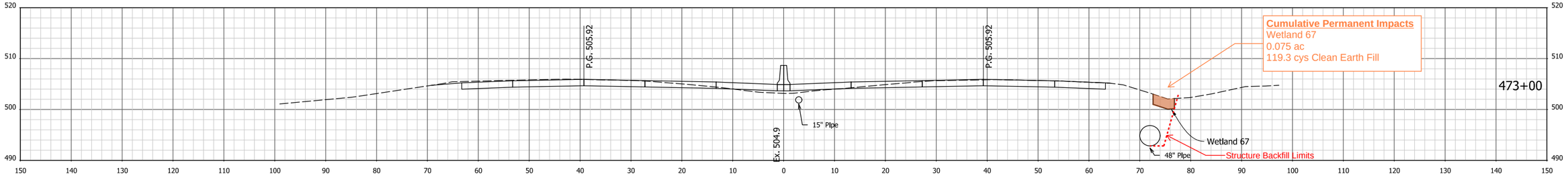

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

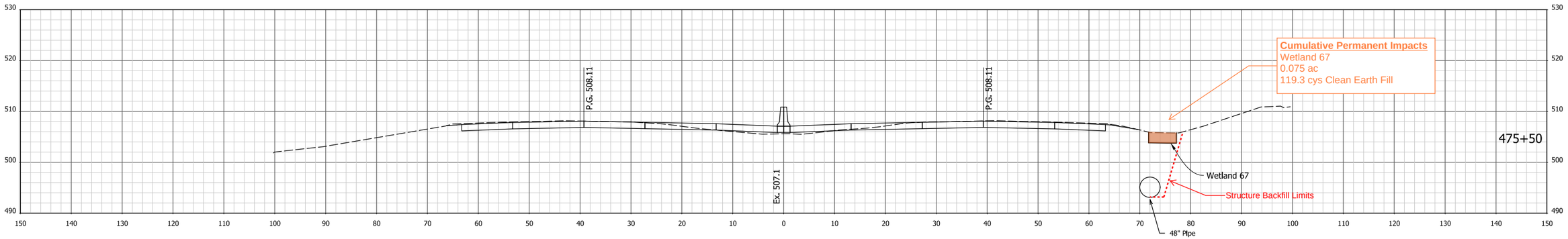
CHECKED: DJG | CHECKED: DJG

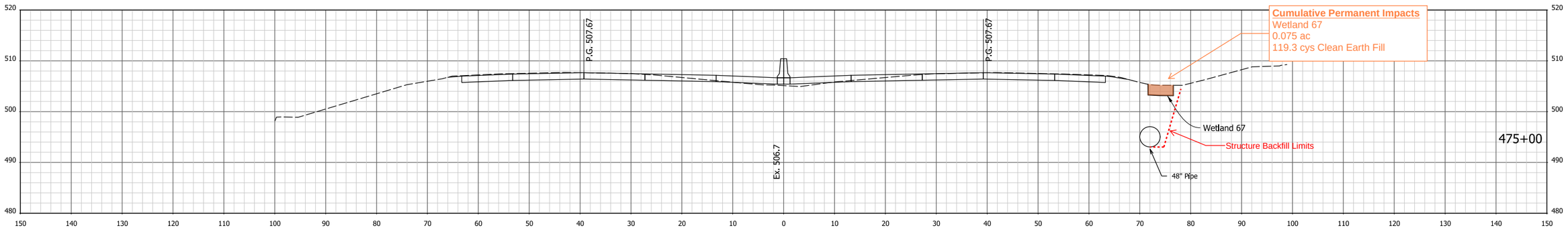
INDIANA
DEPARTMENT OF TRANSPORTATION

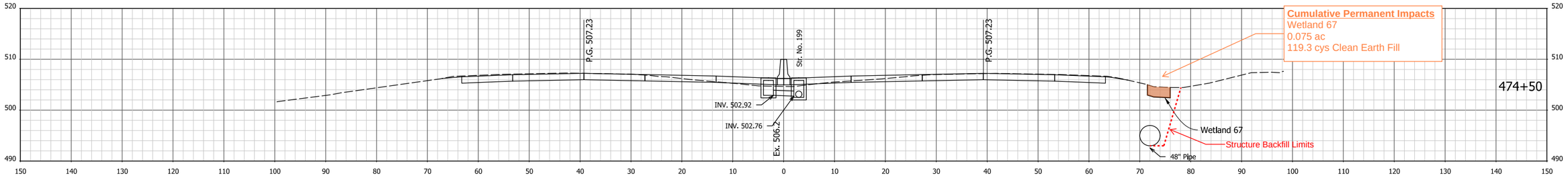
CROSS SECTIONS
STA. 473+00 TO STA. 474+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	27	of	246
CONTRACT	PROJECT		
R-41529	1700135		







Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD
DRAWN: JJP
CHECKED: DJG
CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 474+50 TO STA. 475+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	28	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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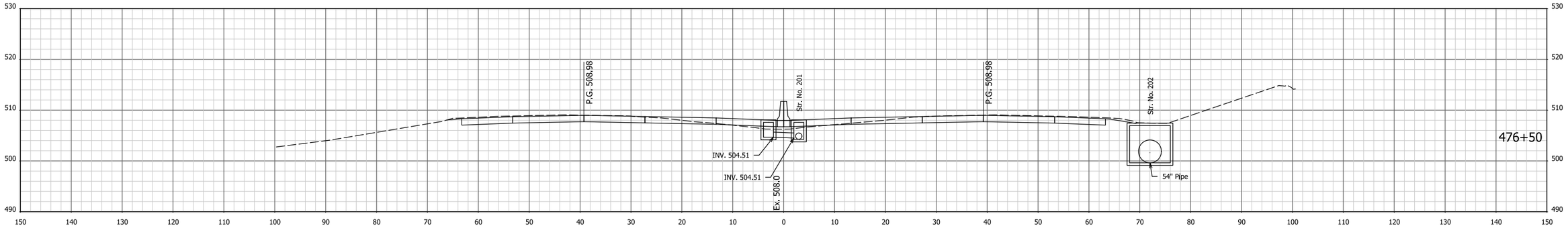

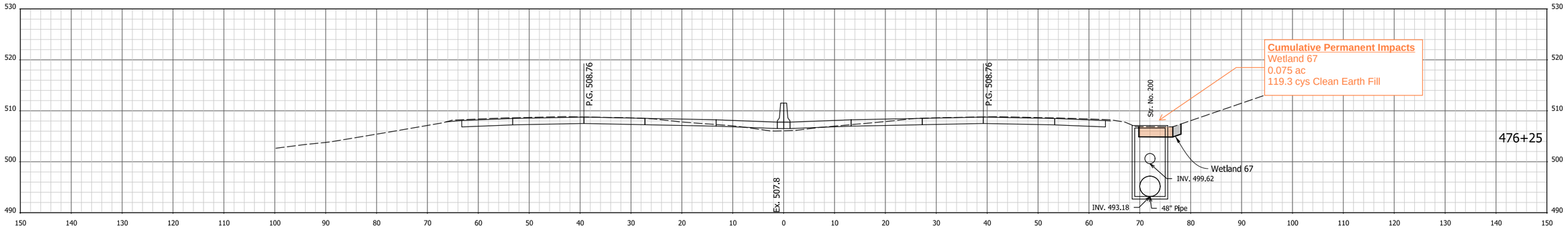

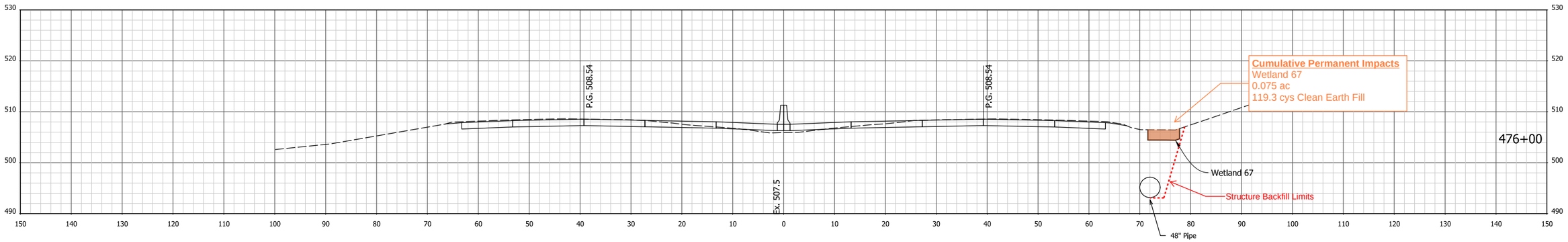

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 476+00 TO STA. 476+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	29 of 246
CONTRACT	PROJECT
R-41529	1700135

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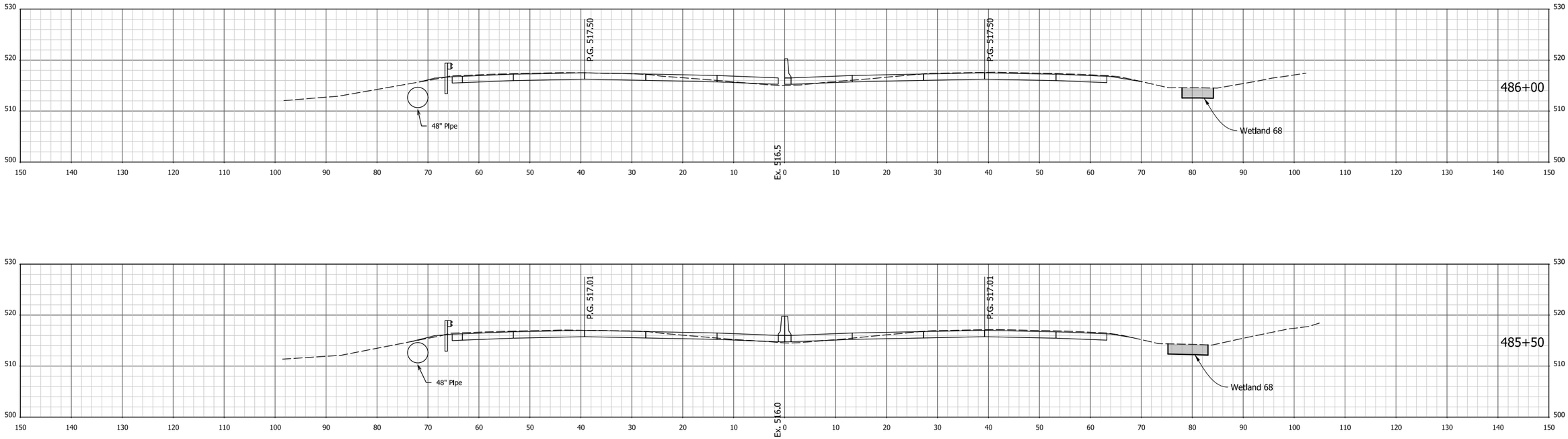

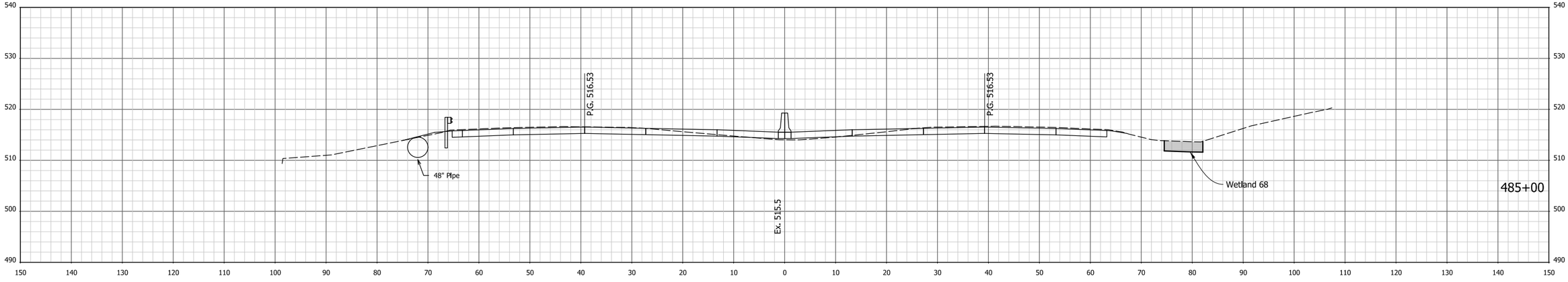

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 485+00 TO STA. 486+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	30 of 246
CONTRACT	PROJECT
R-41529	1700135

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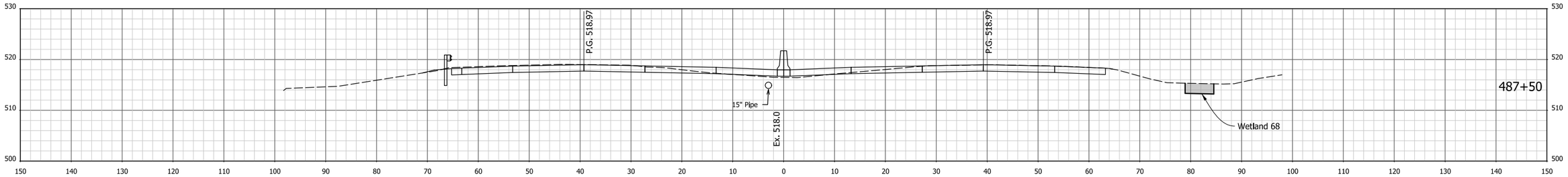

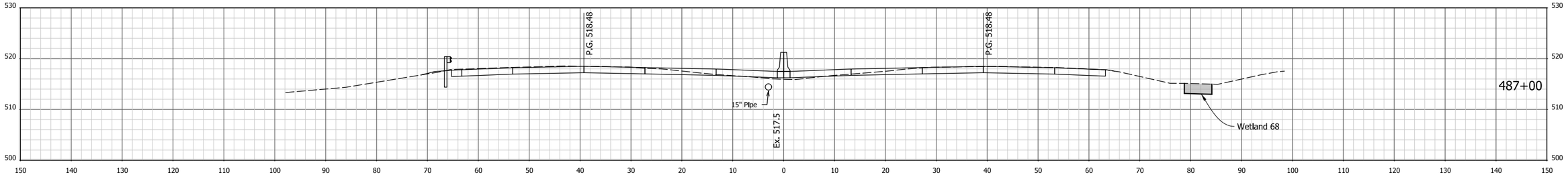

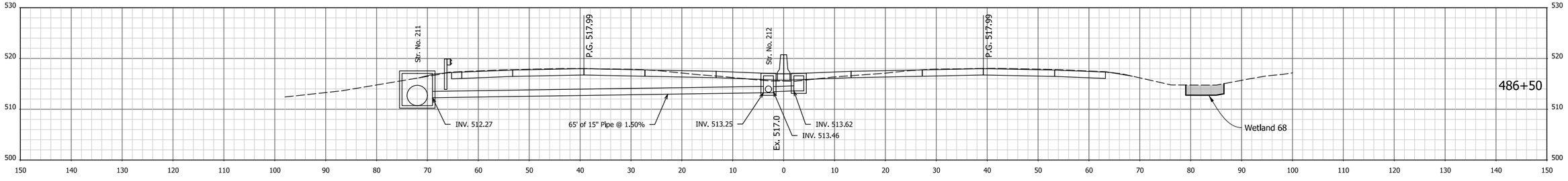

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 486+50 TO STA. 487+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	31	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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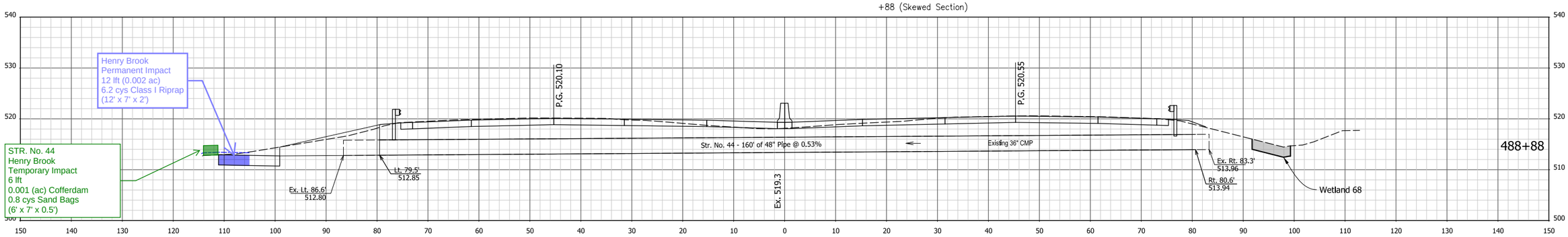
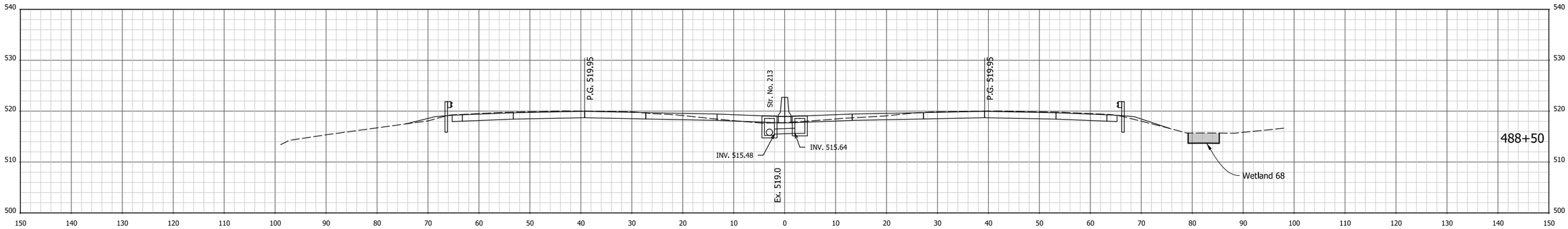
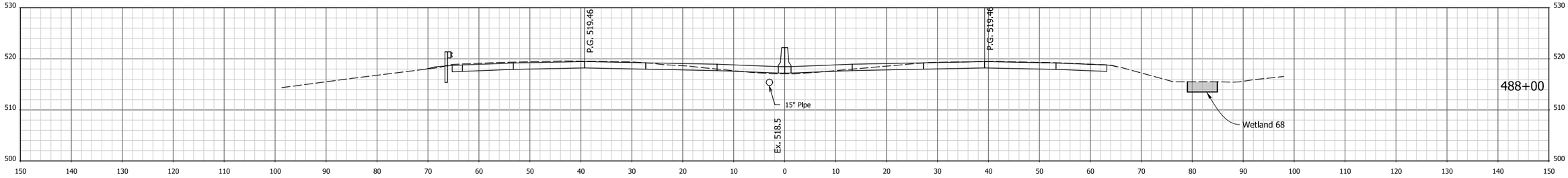
+88 (Skewed Section)







Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 488+00 TO STA. 488+88 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	32 of 246
CONTRACT	PROJECT
R-41529	1700135

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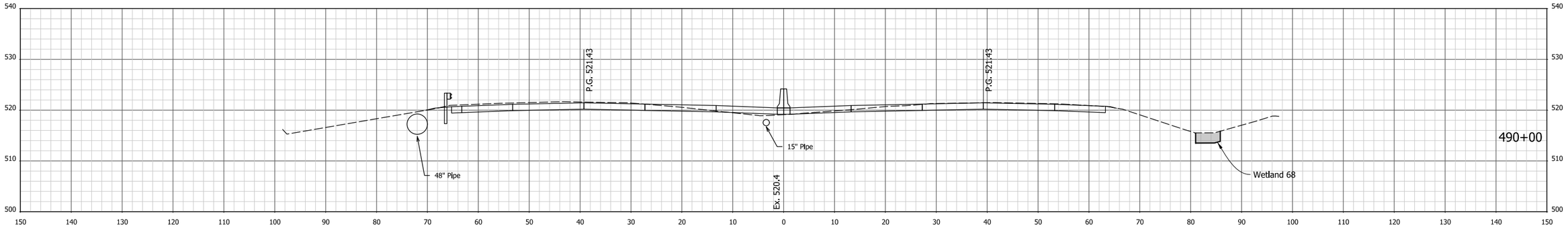

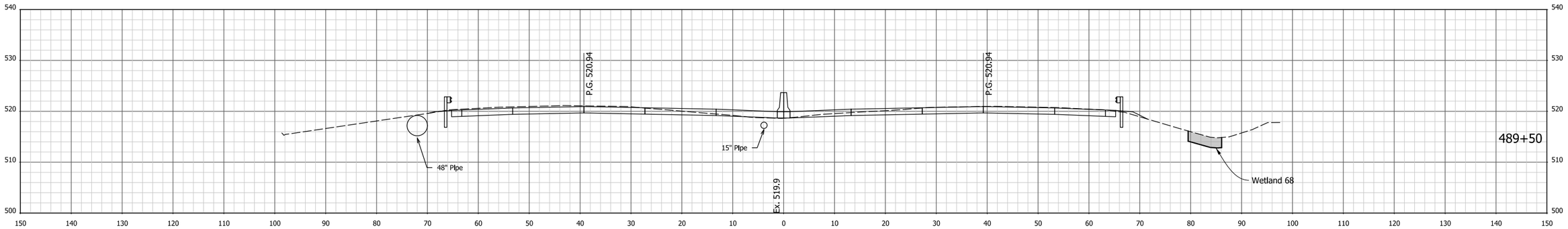

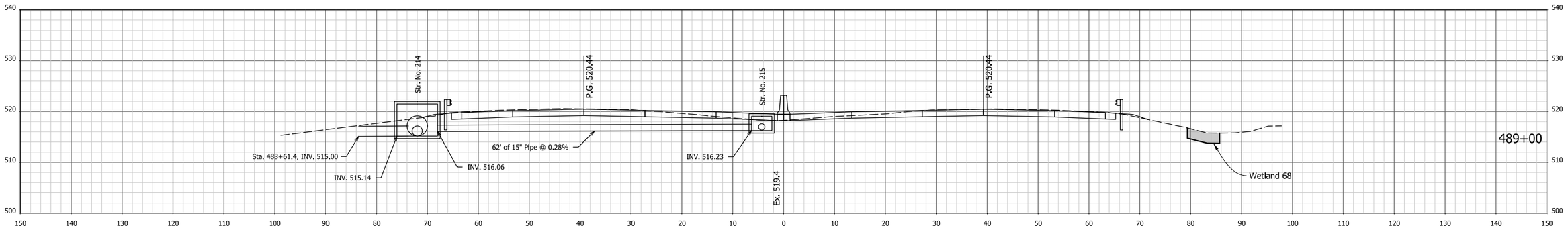

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

STA. 489+00 TO STA. 490+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	33	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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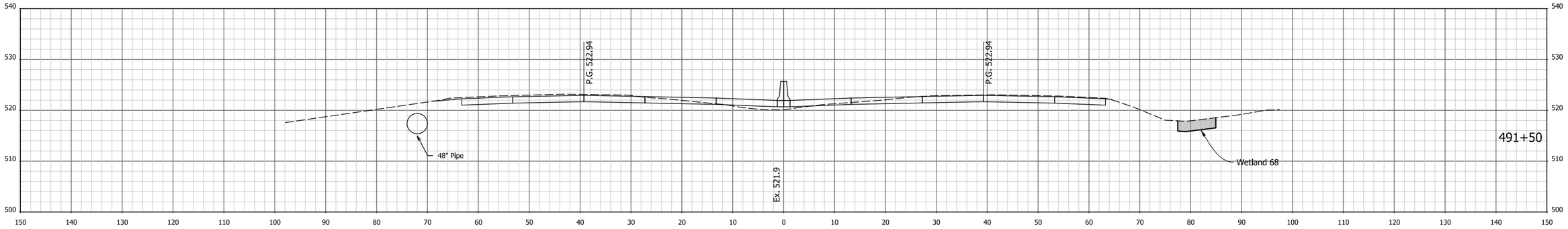

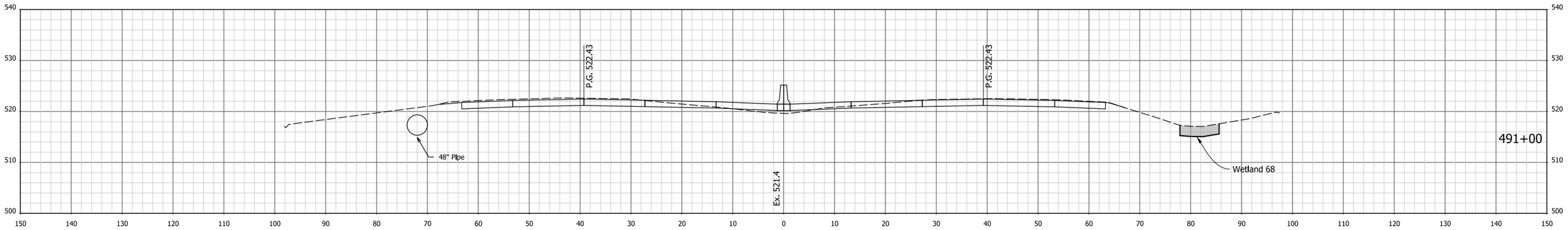

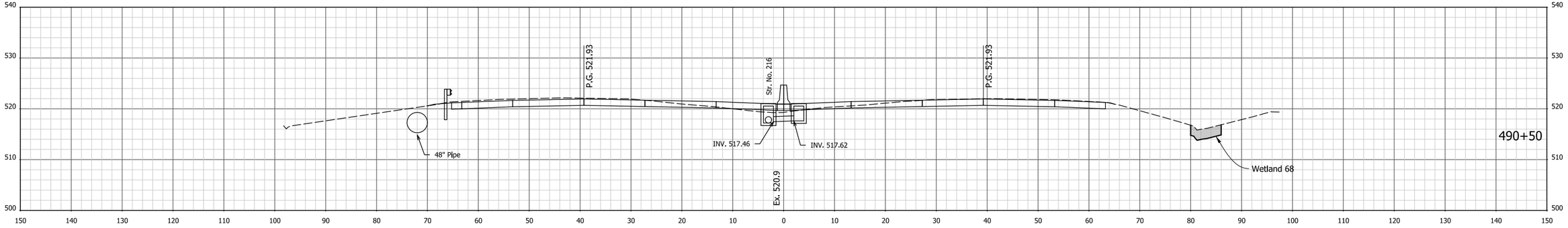

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 490+50 TO STA. 491+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	34 of 246
CONTRACT	PROJECT
R-41529	1700135

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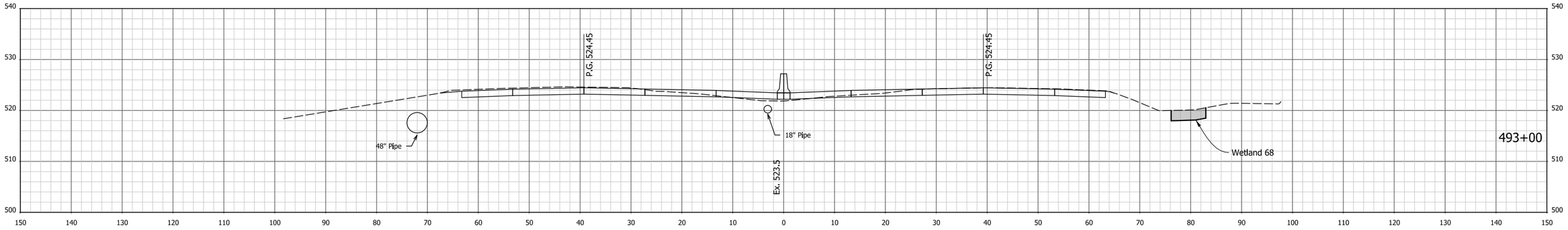
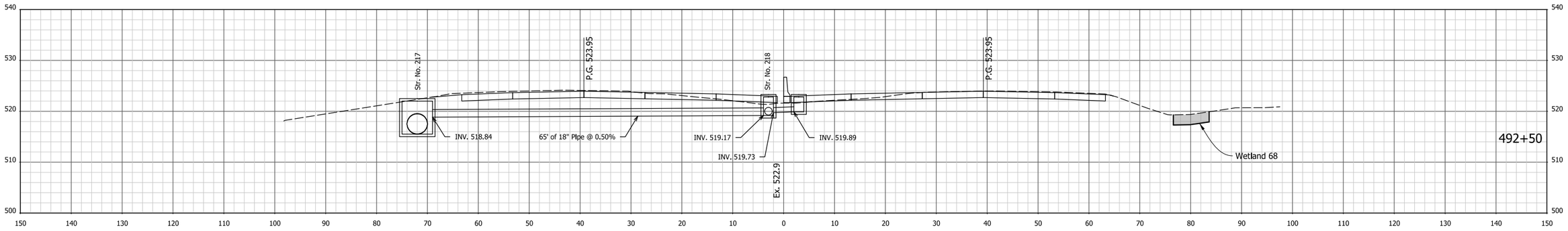
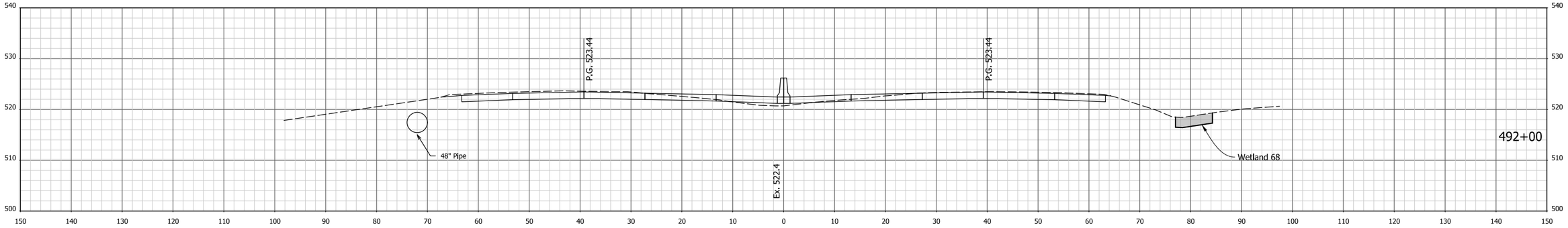






Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

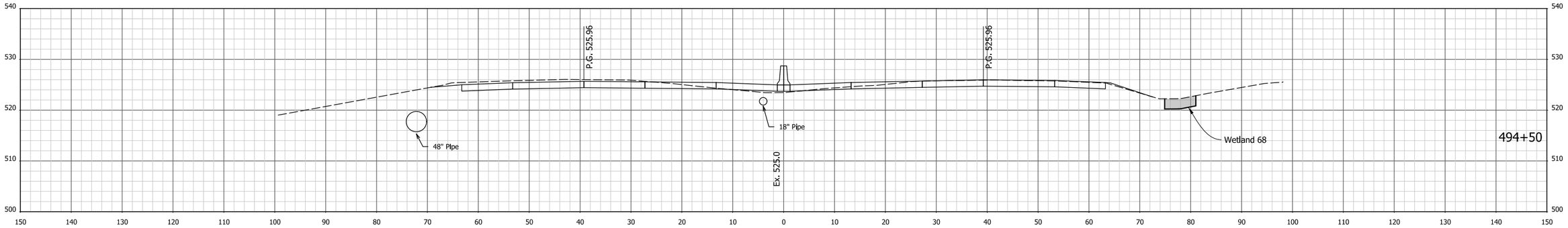
CHECKED: DJG | CHECKED: DJG

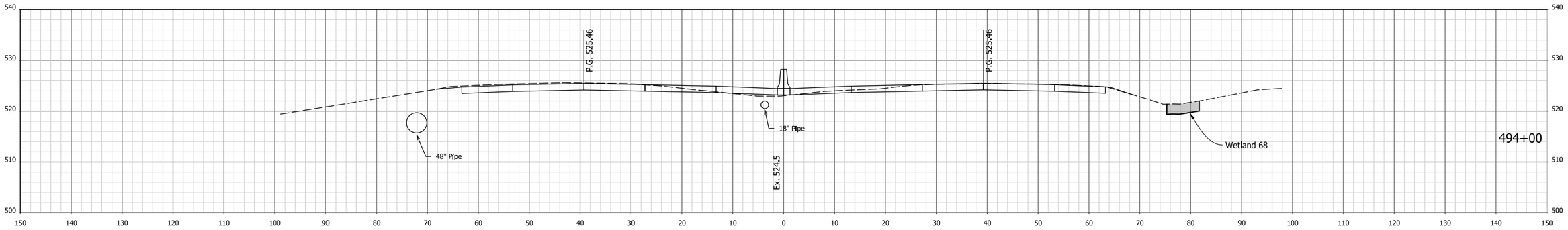
INDIANA
DEPARTMENT OF TRANSPORTATION

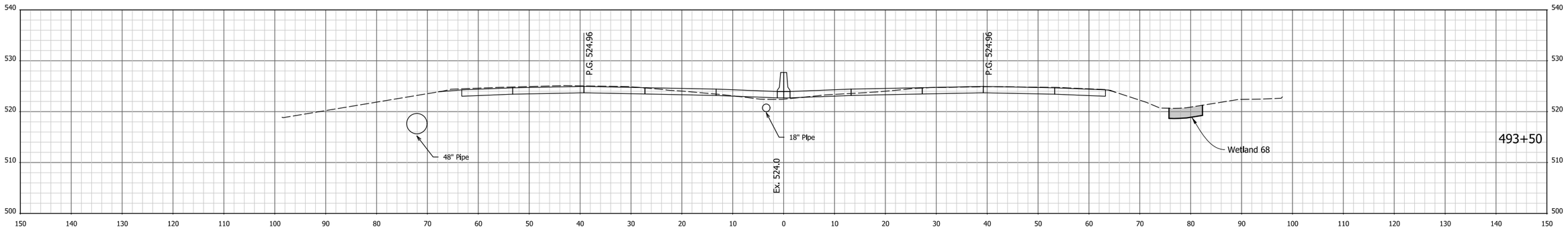
CROSS SECTIONS
STA. 492+00 TO STA. 493+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	35 of 246
CONTRACT	PROJECT
R-41529	1700135

12/9/2021 4:59:36 PM | P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn







Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 493+50 TO STA. 494+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	36 of 246
CONTRACT	PROJECT
R-41529	1700135

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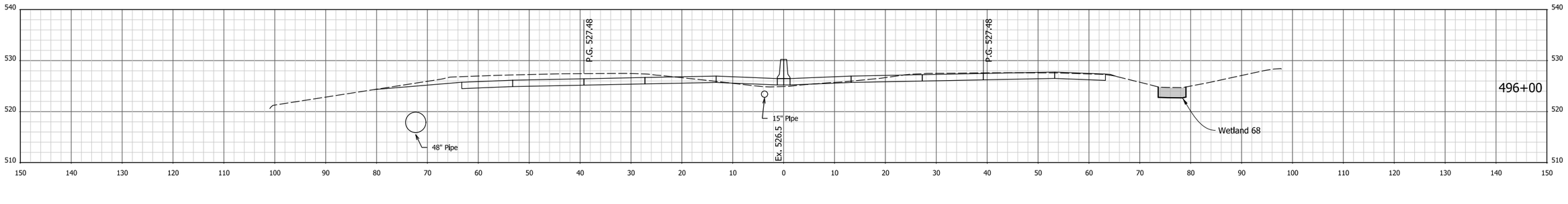

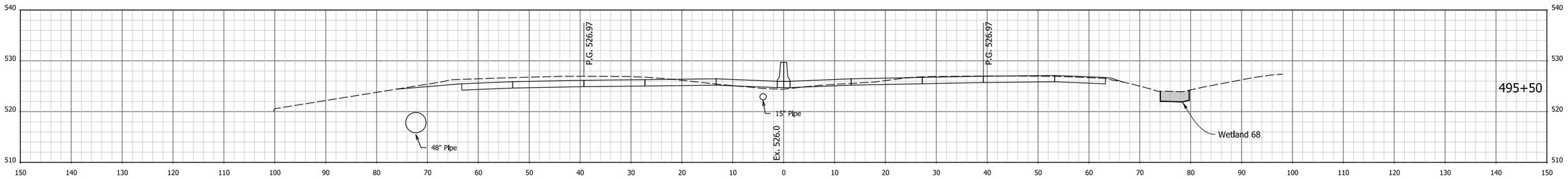

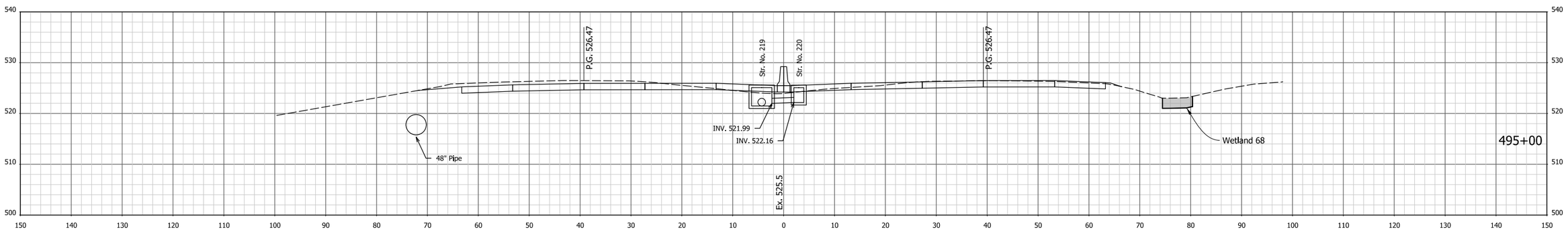

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 495+00 TO STA. 496+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	37 of 246
CONTRACT	PROJECT
R-41529	1700135

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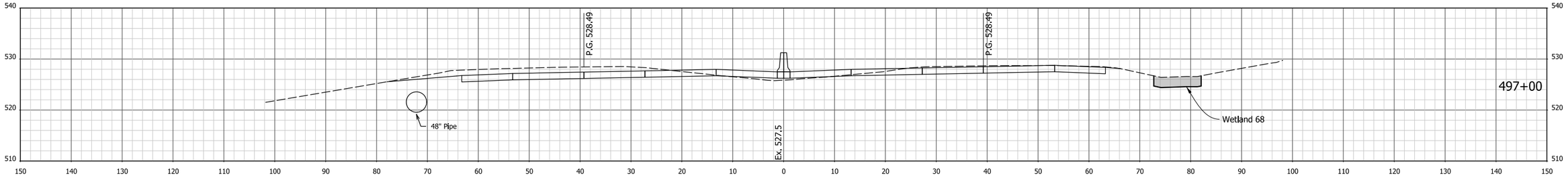

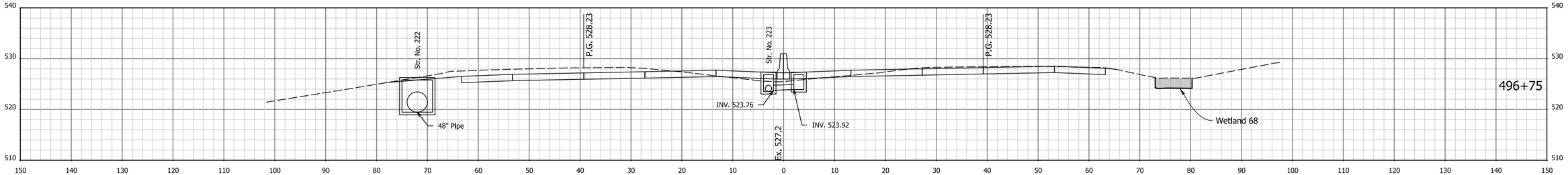

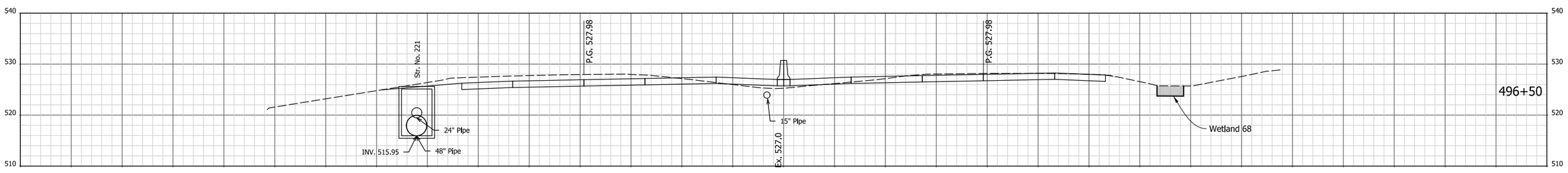

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 496+50 TO STA. 497+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	38	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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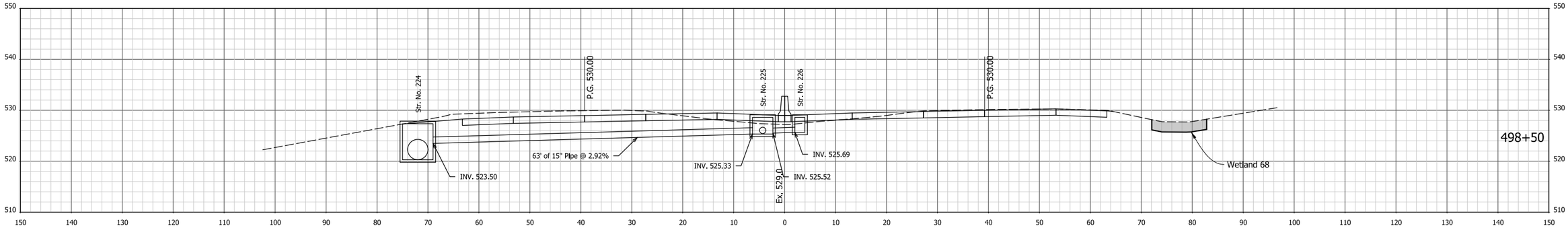
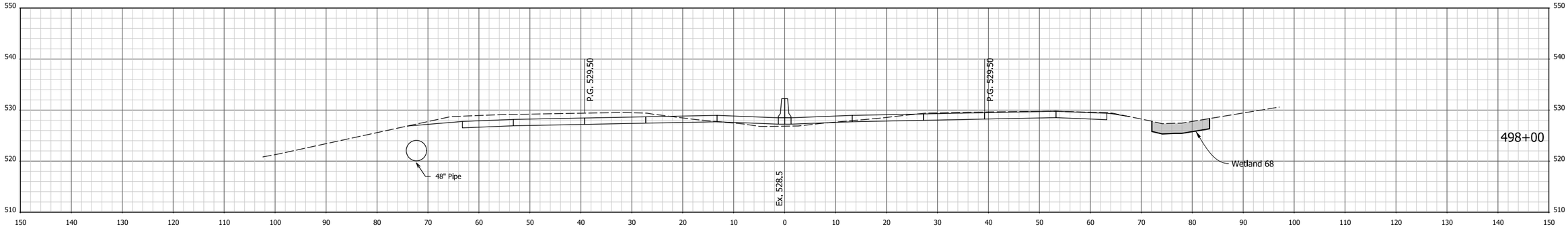
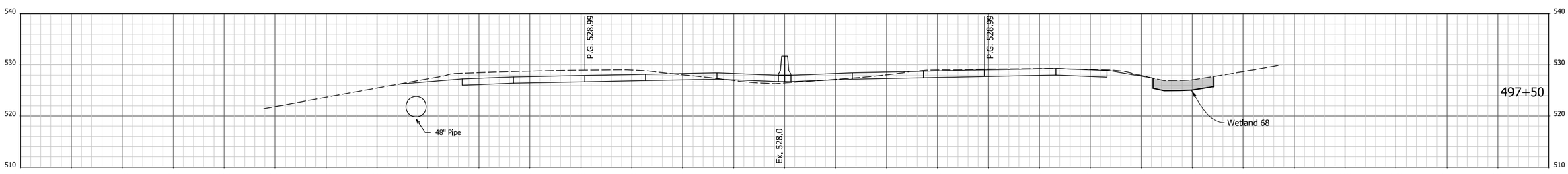






Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

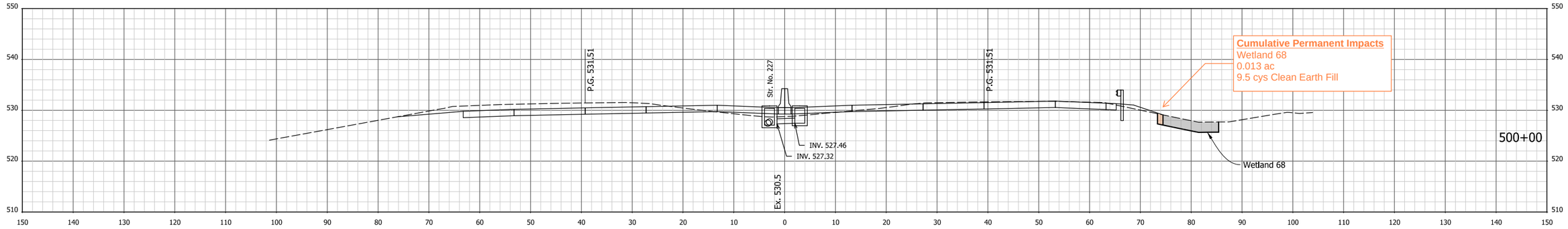
INDIANA
DEPARTMENT OF TRANSPORTATION

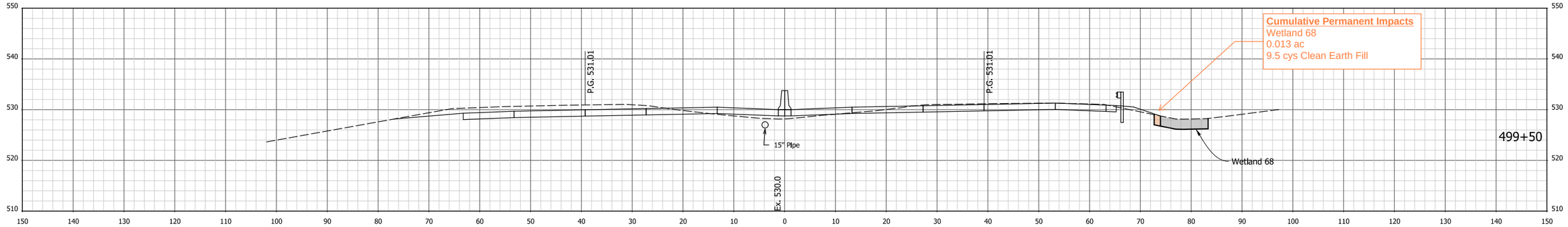
CROSS SECTIONS
STA. 497+50 TO STA. 498+50 "PR-Q"

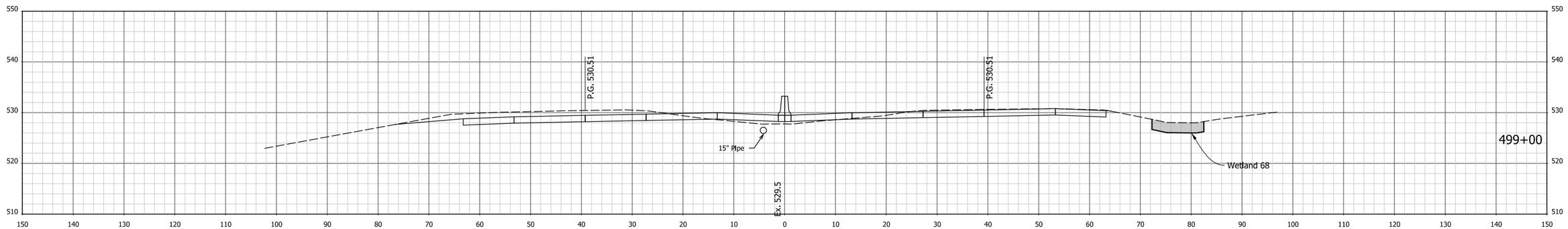
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	39	of	246
CONTRACT	PROJECT		
R-41529	1700135		

I 12/9/2021 4:59:44 PM I P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn







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Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 499+00 TO STA. 500+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	40	of	246
CONTRACT	PROJECT		
R-41529	1700135		

Str. No. 45
Henry Brook
Permanent Impact
153 lft (0.021 ac) due to installation of New 153 lft of 72" Pipe
17.0 cys
(153' x 6' x 0.5')

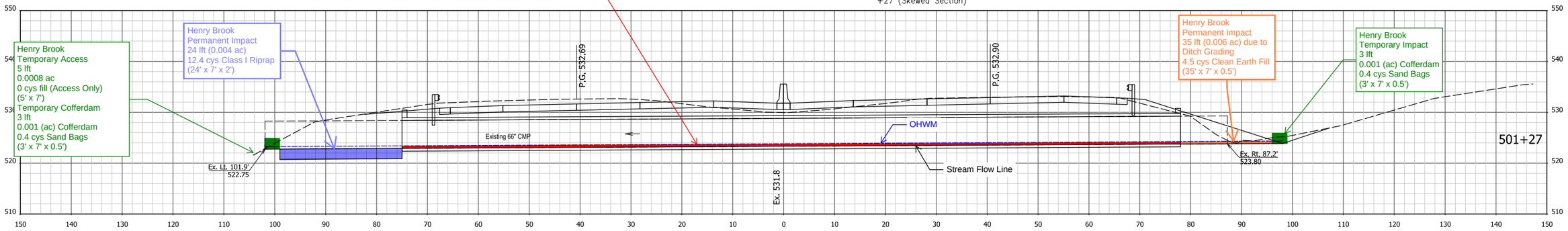
+27 (Skewed Section)

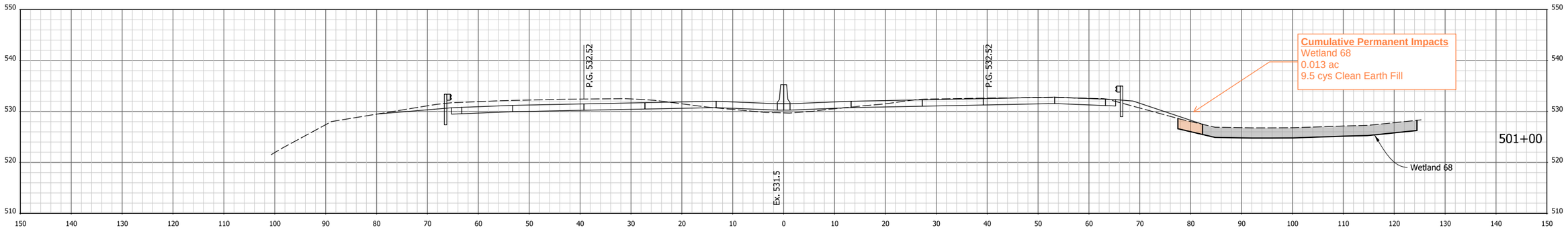
Henry Brook
Temporary Access
5 lft
0.0008 ac
0 cys fill (Access Only)
(5' x 7')
Temporary Cofferdam
3 lft
0.001 (ac) Cofferdam
0.4 cys Sand Bags
(3' x 7' x 0.5')

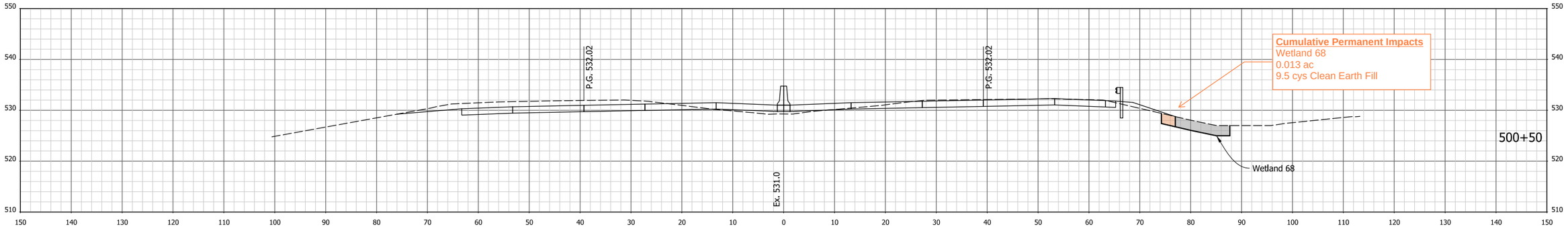
Henry Brook
Permanent Impact
24 lft (0.004 ac)
12.4 cys Class I Riprap
(24' x 7' x 2')

Henry Brook
Permanent Impact
35 lft (0.006 ac) due to
Ditch Grading
4.5 cys Clean Earth Fill
(35' x 7' x 0.5')

Henry Brook
Temporary Impact
3 lft
0.001 (ac) Cofferdam
0.4 cys Sand Bags
(3' x 7' x 0.5')







Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 500+50 TO STA. 501+27 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	41 of 246
CONTRACT	PROJECT
R-41529	1700135

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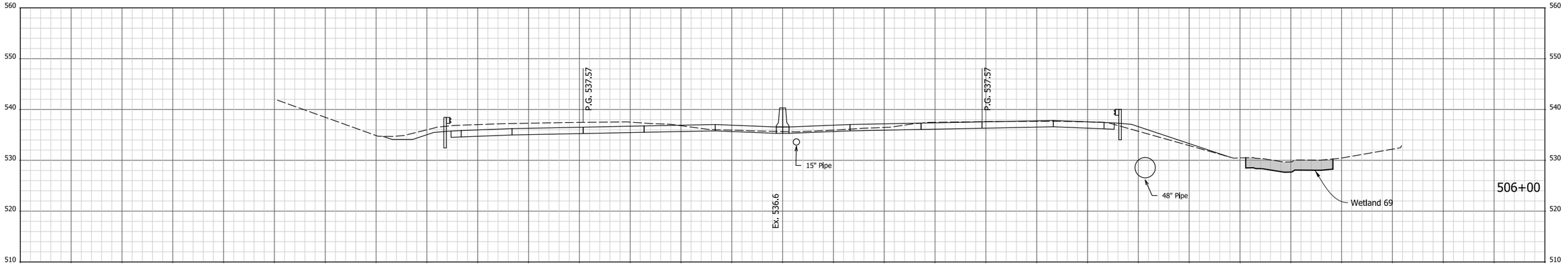

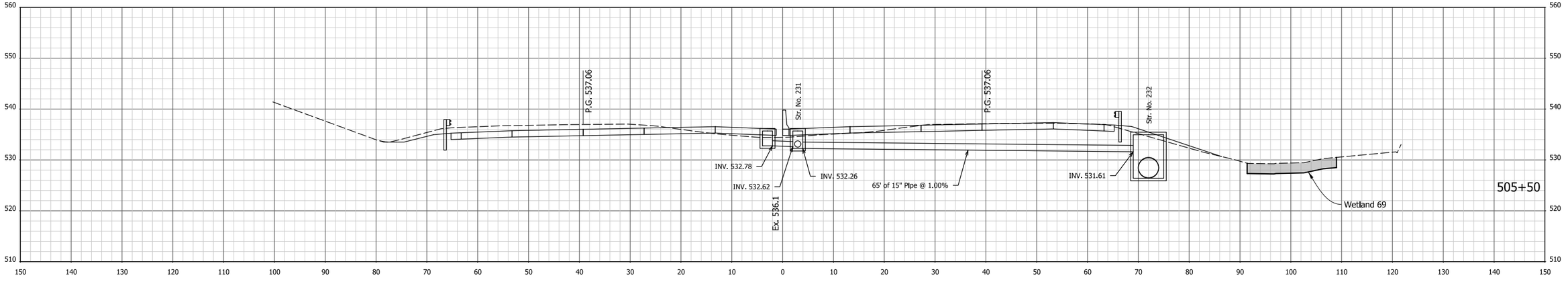

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 505+50 TO STA. 506+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	42	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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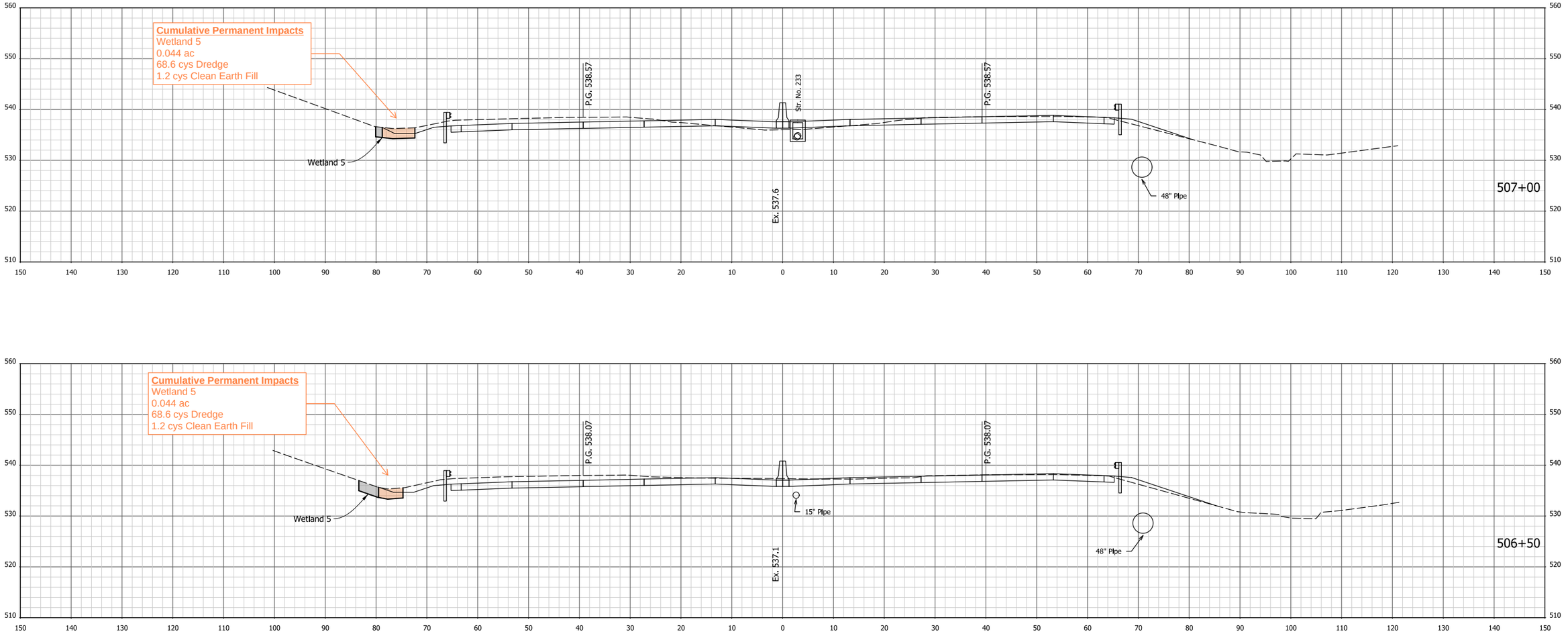

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 506+50 TO STA. 507+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	43 of 246
CONTRACT	PROJECT
R-41529	1700135

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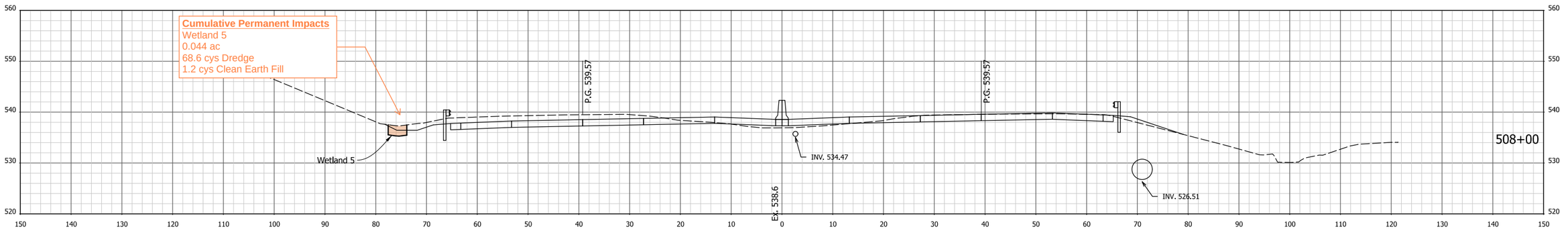

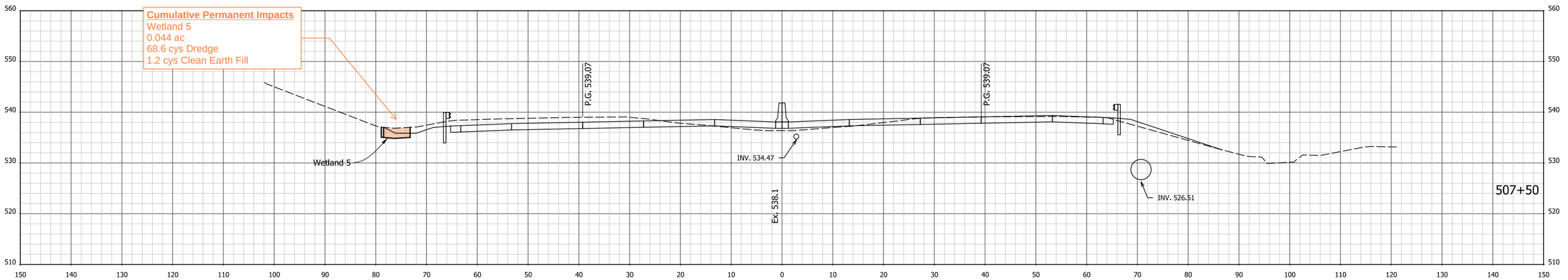

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 507+50 TO STA. 508+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	44	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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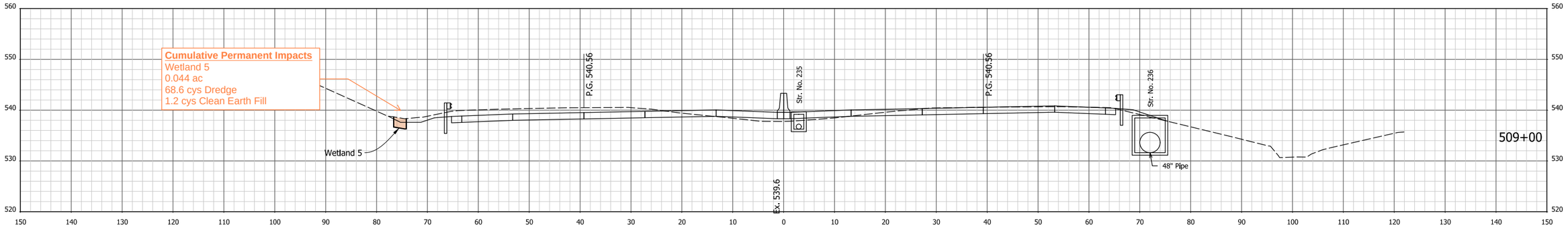

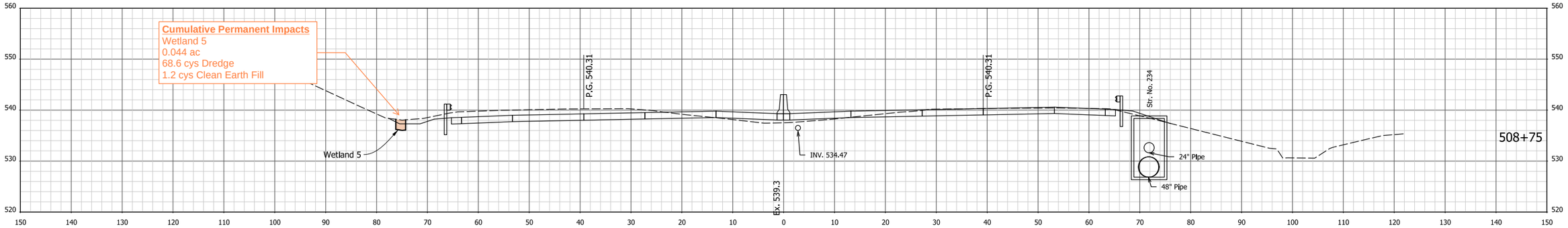

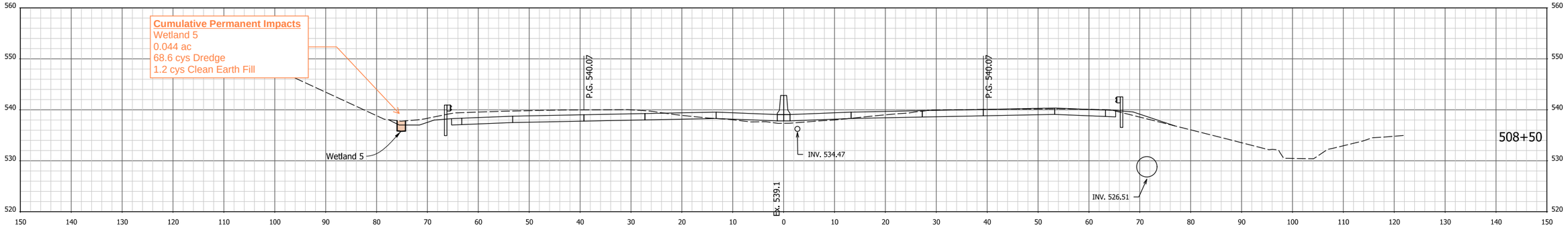

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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

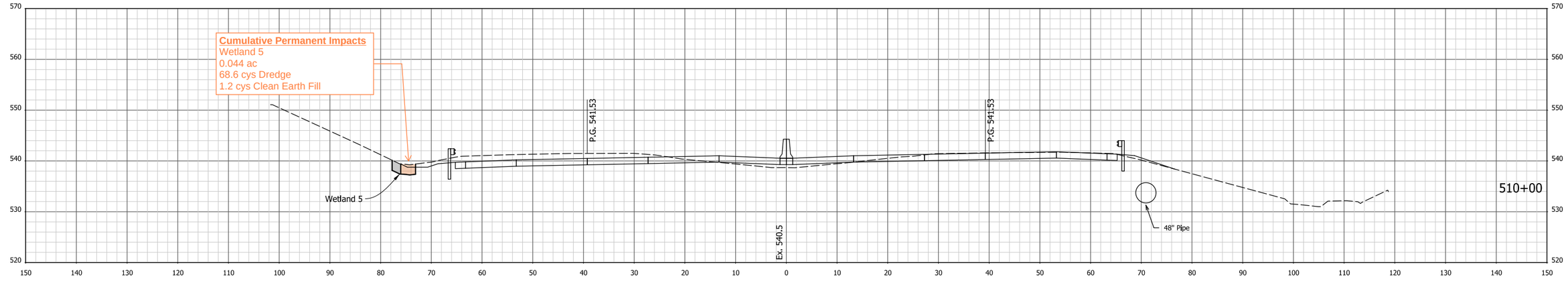
INDIANA
DEPARTMENT OF TRANSPORTATION

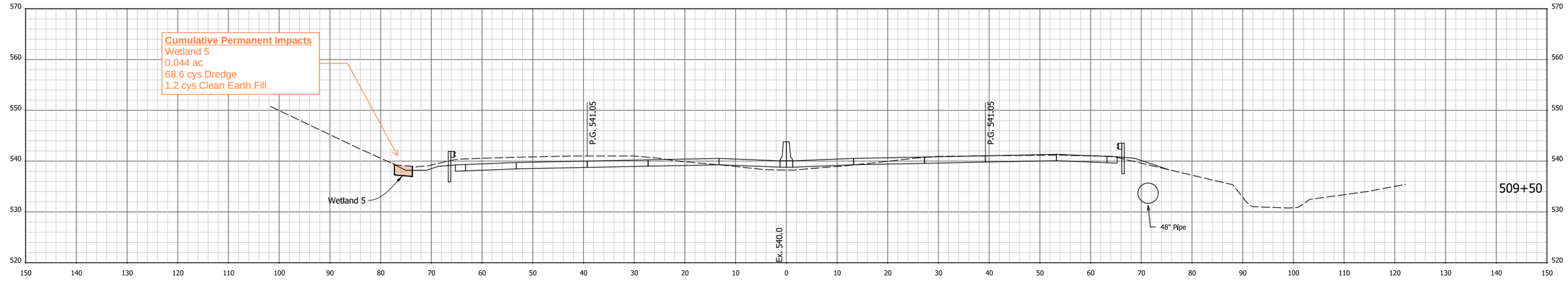
CROSS SECTIONS

STA. 508+50 TO STA. 509+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	45 of 246
CONTRACT	PROJECT
R-41529	1700135





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 509+50 TO STA. 510+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	46 of 246
CONTRACT	PROJECT
R-41529	1700135

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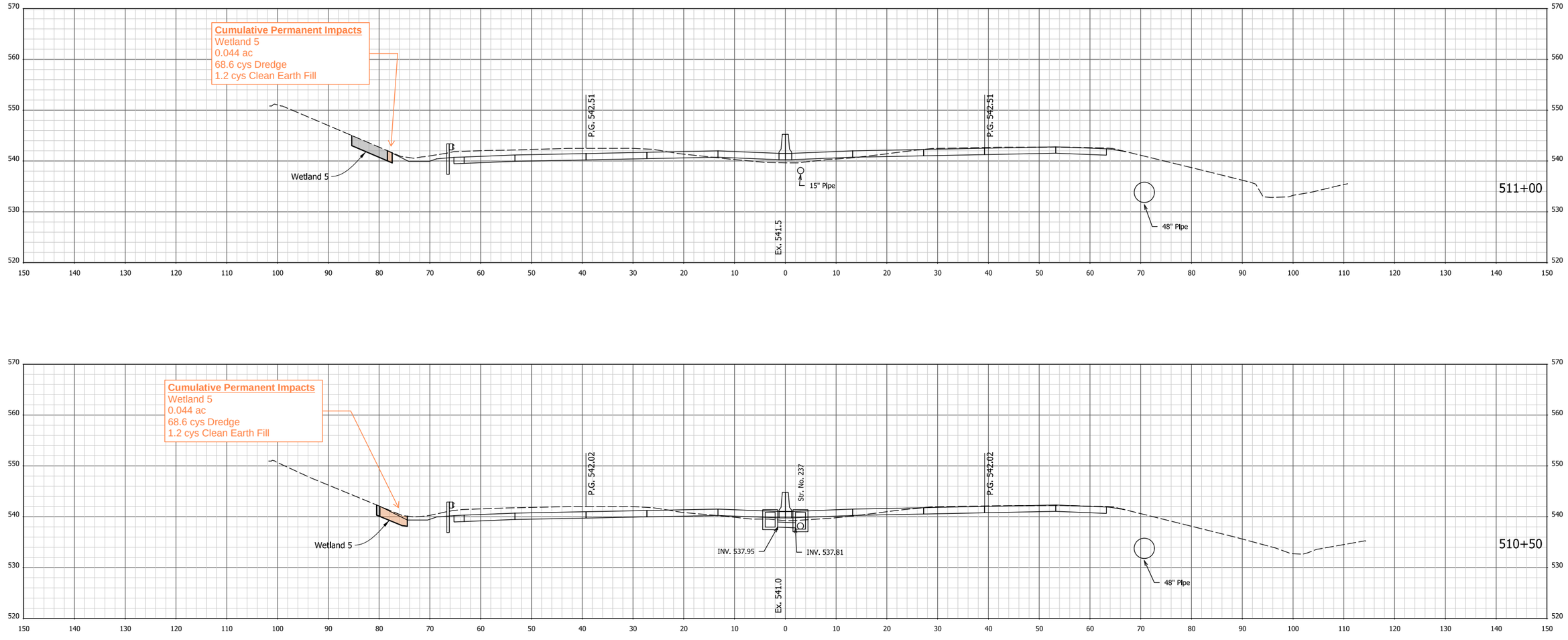

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 510+50 TO STA. 511+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	47 of 246
CONTRACT	PROJECT
R-41529	1700135

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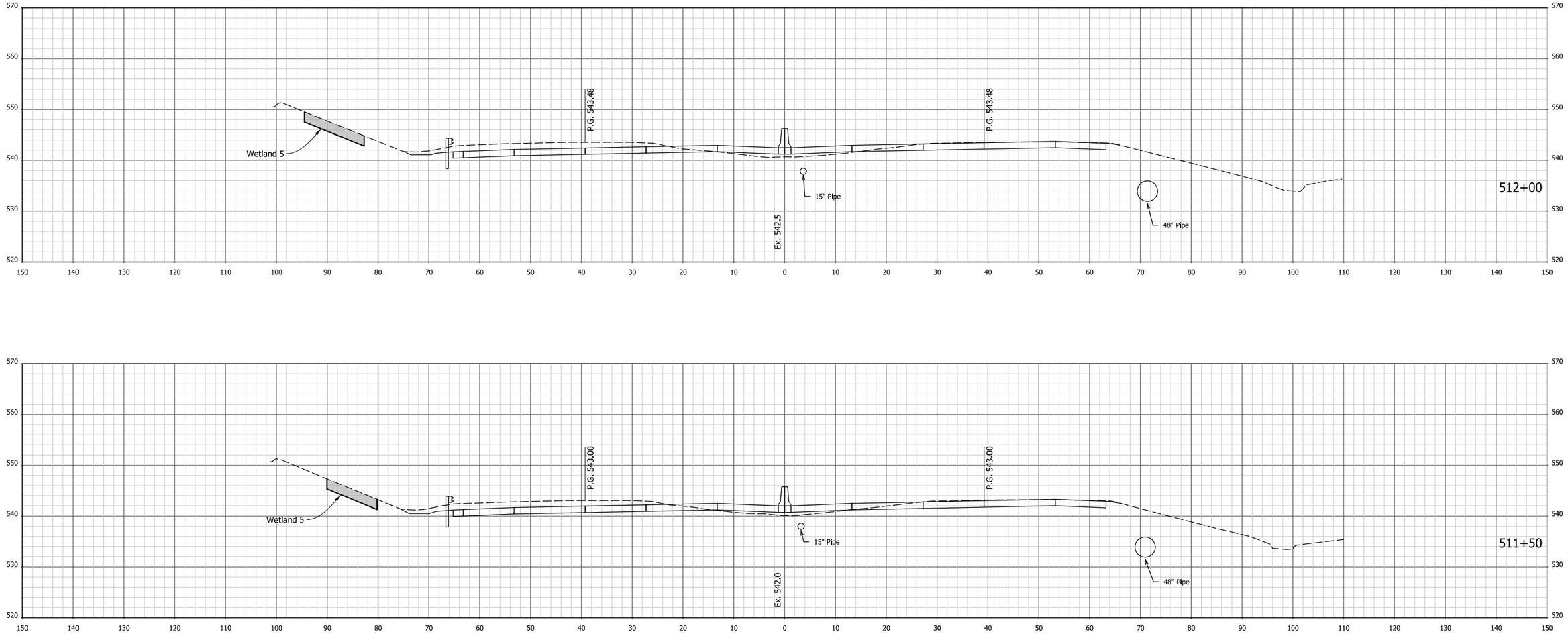

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

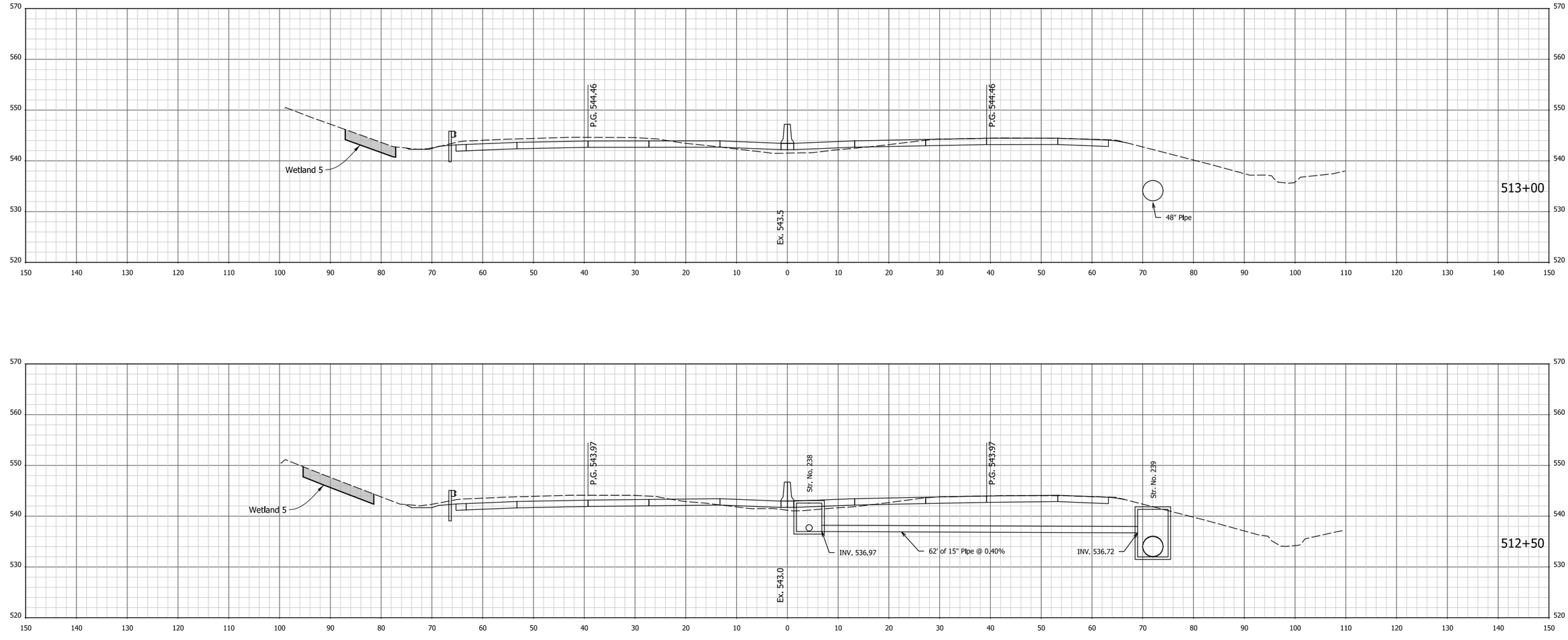
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 511+50 TO STA. 512+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	48	of	246
CONTRACT	PROJECT		
R-41529	1700135		



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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

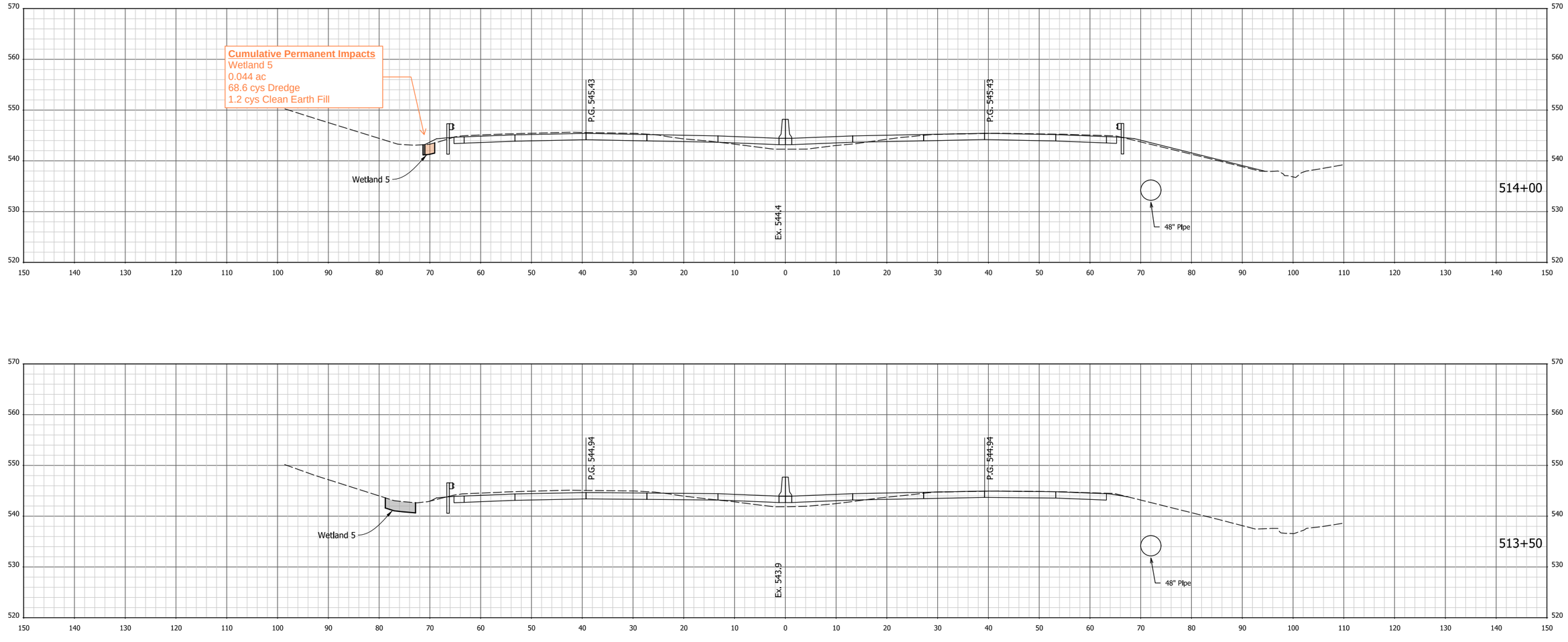
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 512+50 TO STA. 513+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	49	of	246
CONTRACT	PROJECT		
R-41529	1700135		



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 513+50 TO STA. 514+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	50 of 246
CONTRACT	PROJECT
R-41529	1700135

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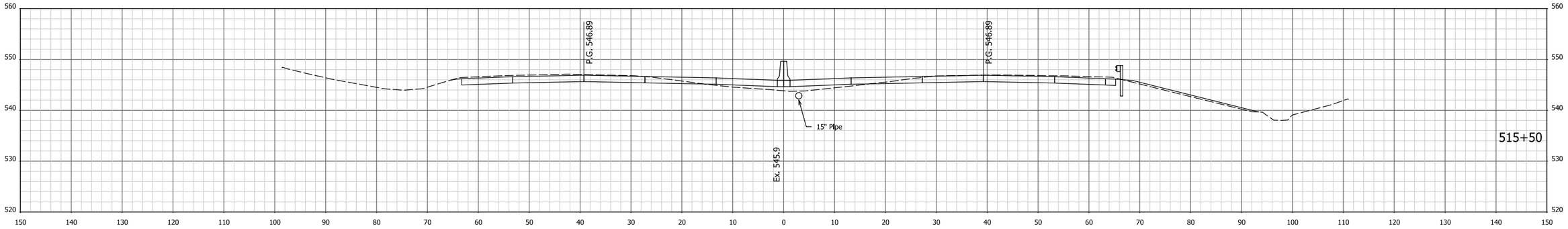

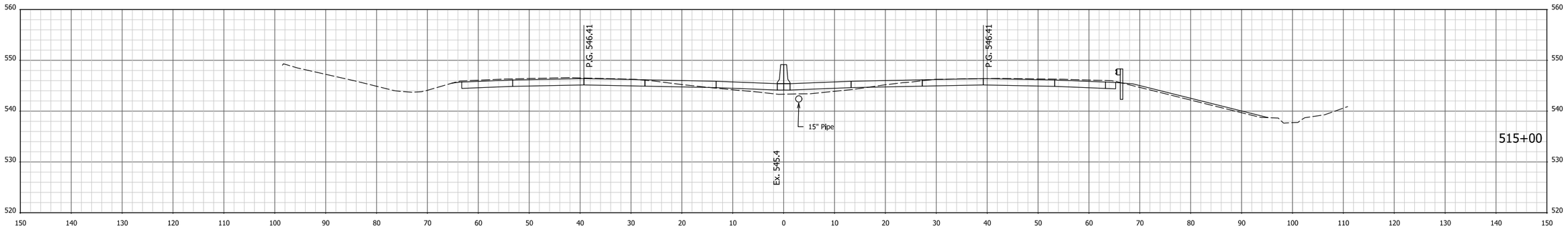

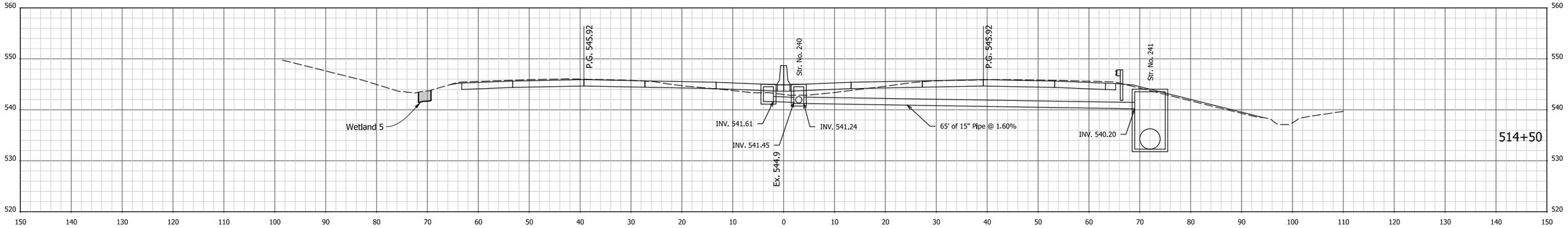

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 514+50 TO STA. 515+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	51	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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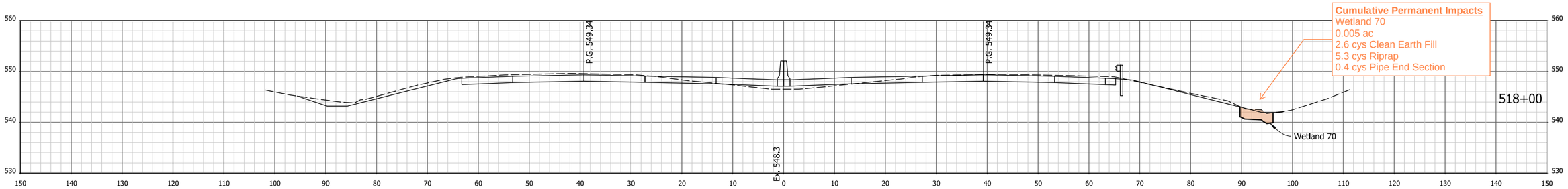

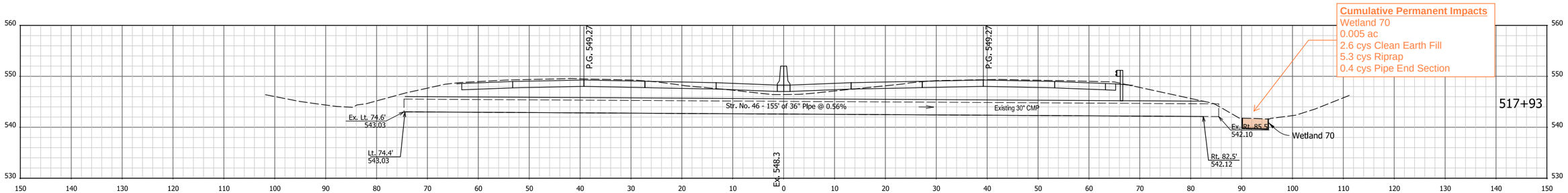

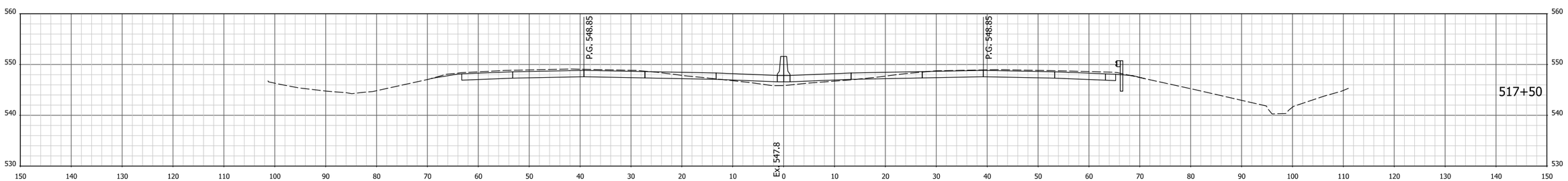

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

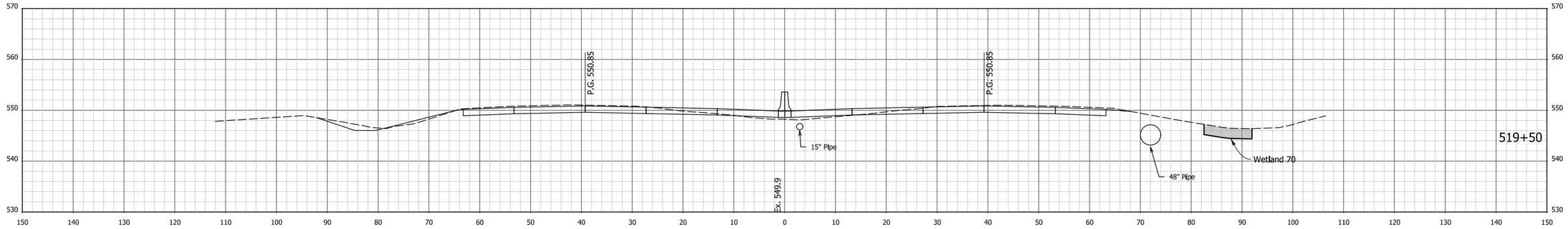
CHECKED: DJG CHECKED: DJG

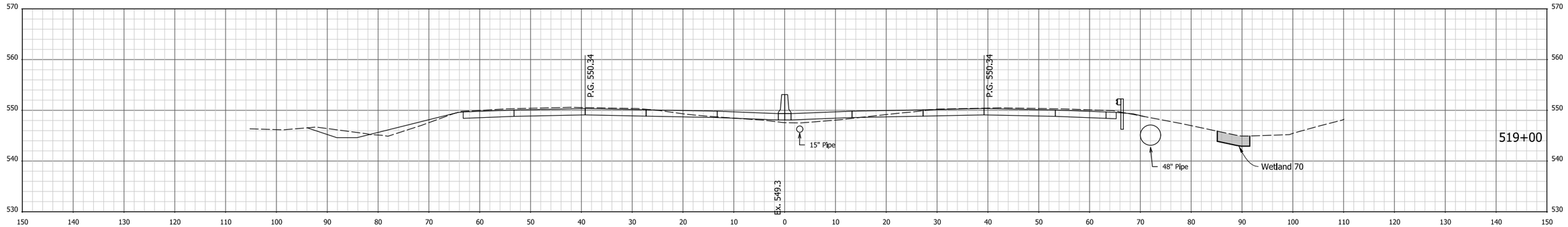
INDIANA
DEPARTMENT OF TRANSPORTATION

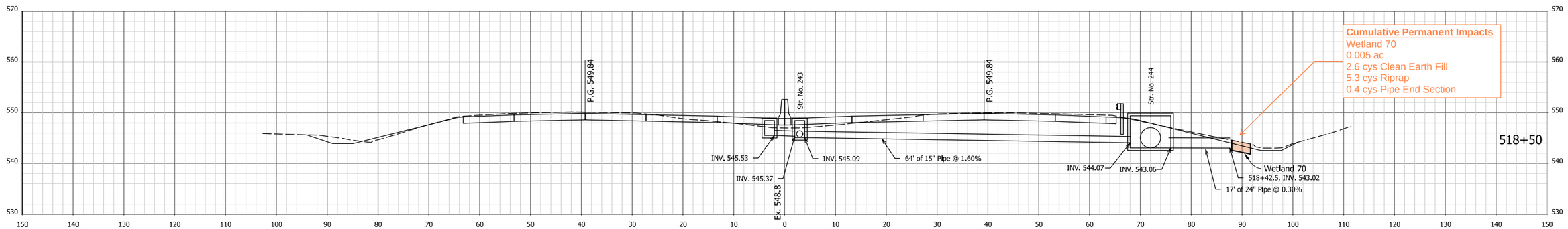
CROSS SECTIONS
STA. 517+50 TO STA. 518+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	52	of	246
CONTRACT	PROJECT		
R-41529	1700135		







Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 518+50 TO STA. 519+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	53 of 246
CONTRACT	PROJECT
R-41529	1700135

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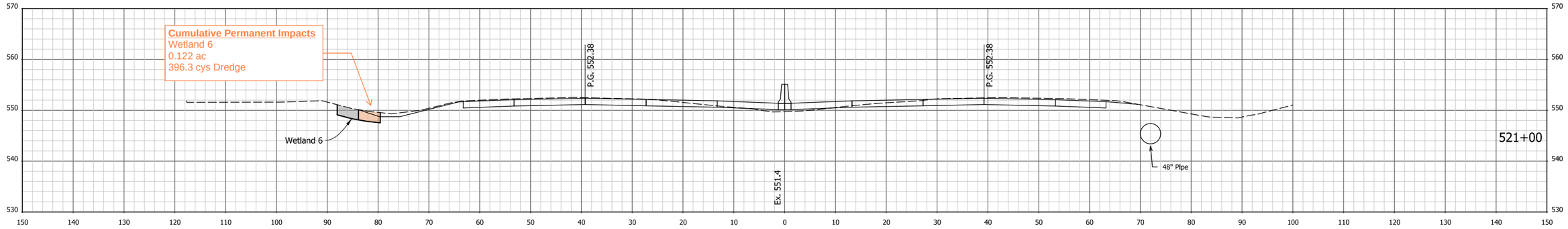
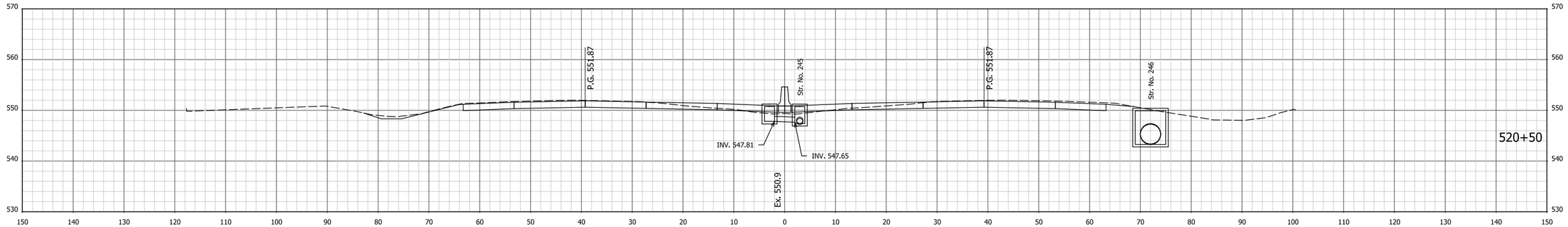
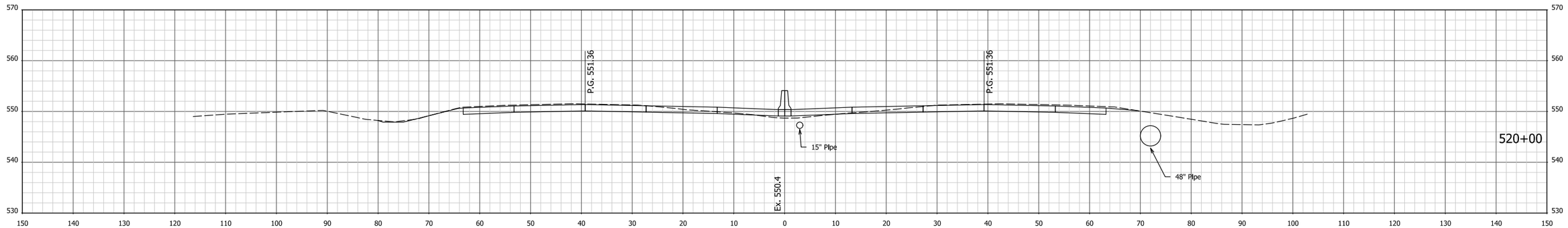






Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

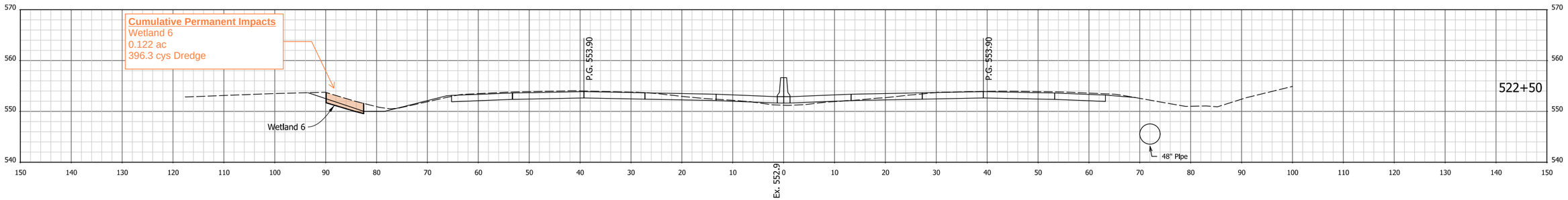
INDIANA
DEPARTMENT OF TRANSPORTATION

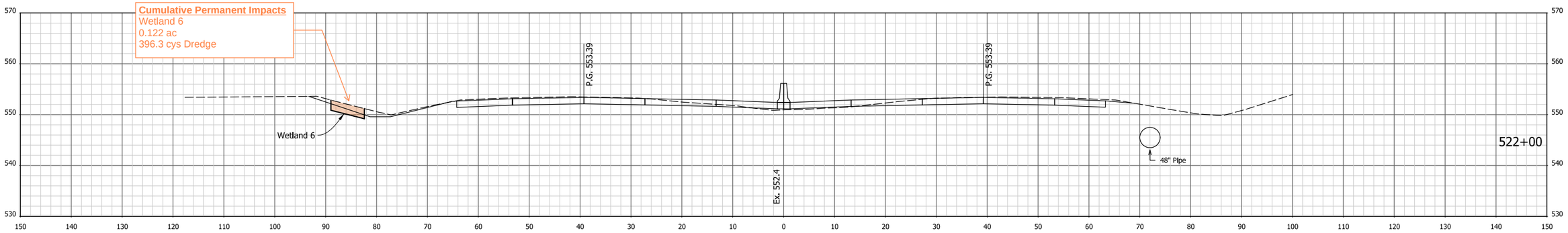
CROSS SECTIONS
STA. 520+00 TO STA. 521+00 "PR-Q"

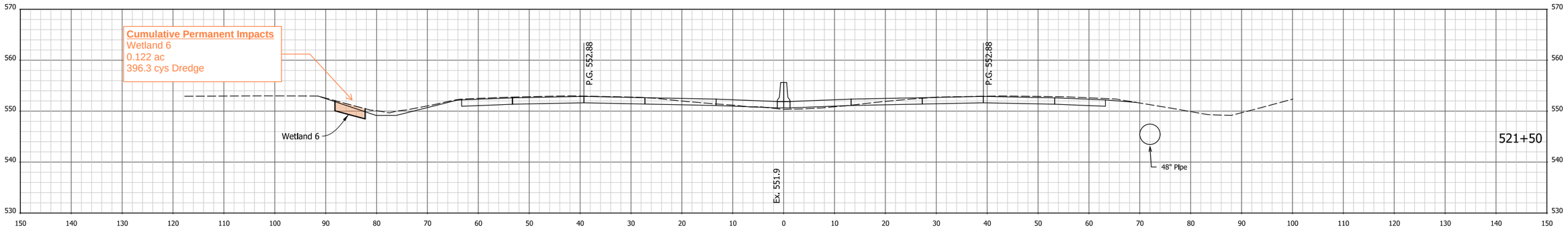
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	54 of 246
CONTRACT	PROJECT
R-41529	1700135

12/9/2021 5:01:00 PM P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn







Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 521+50 TO STA. 522+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	55 of 246
CONTRACT	PROJECT
R-41529	1700135

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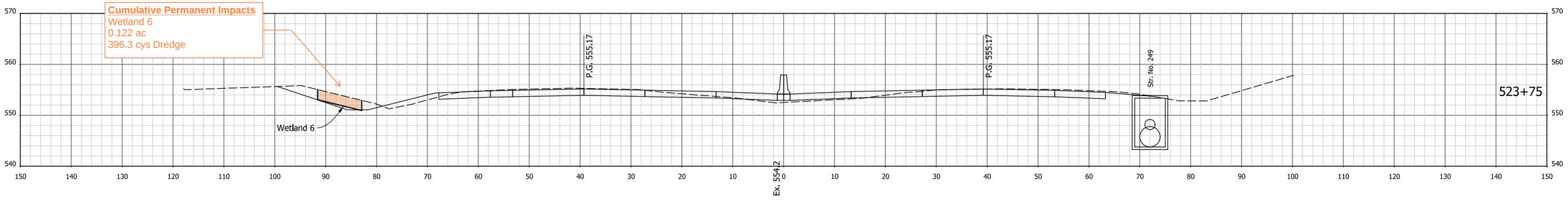

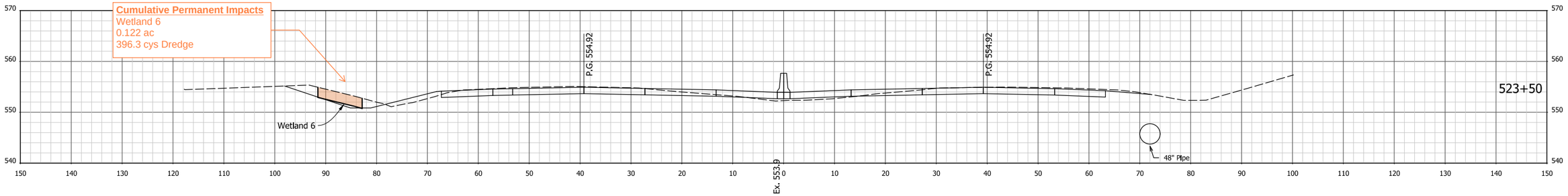

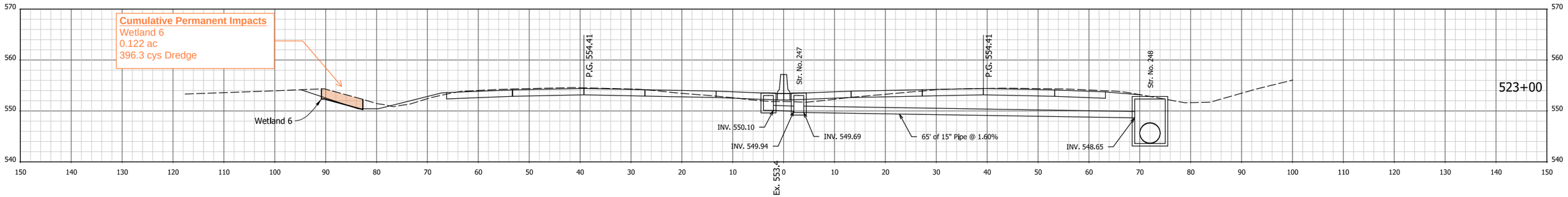

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 523+00 TO STA. 523+75 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	56 of 246
CONTRACT	PROJECT
R-41529	1700135

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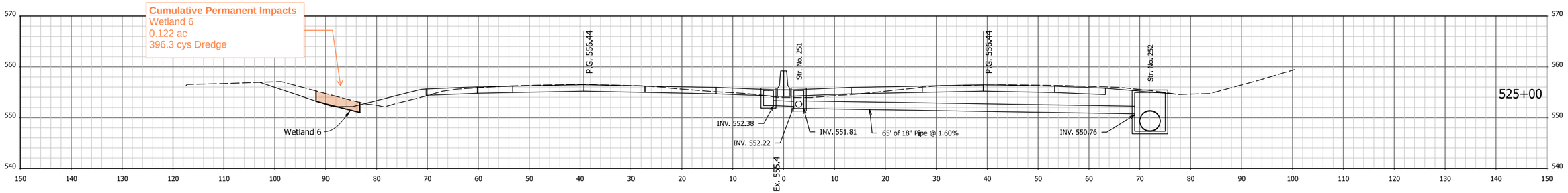

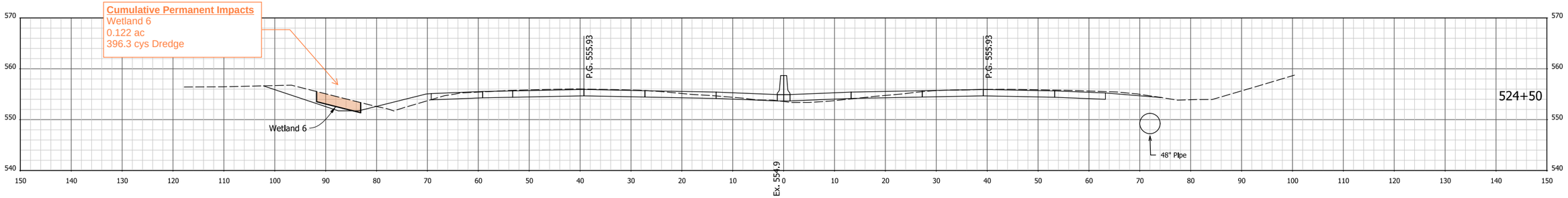

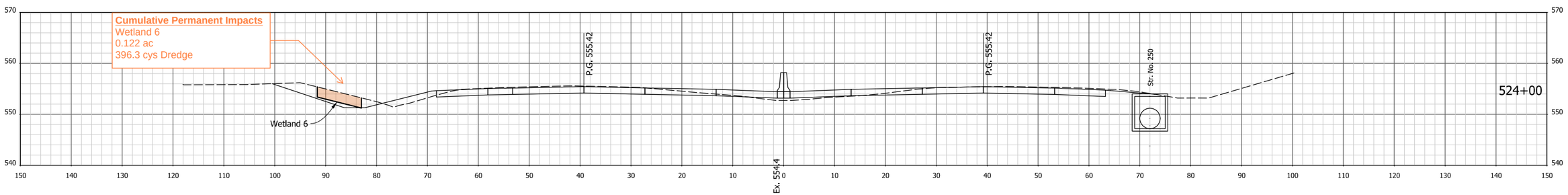

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 524+00 TO STA. 525+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	57	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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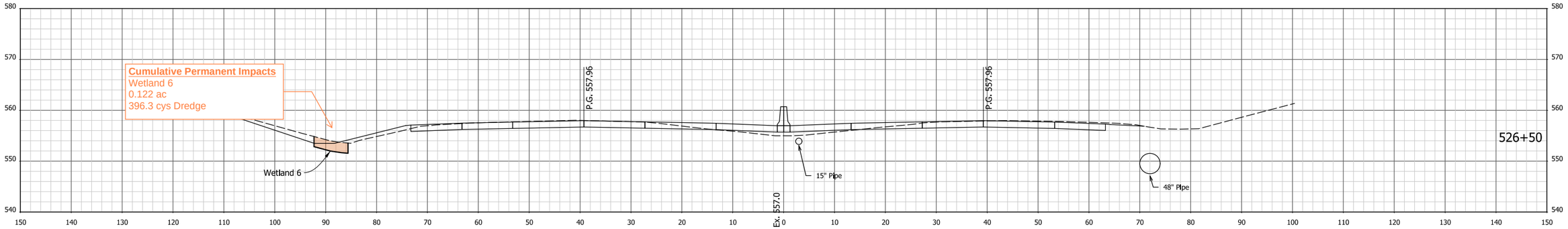

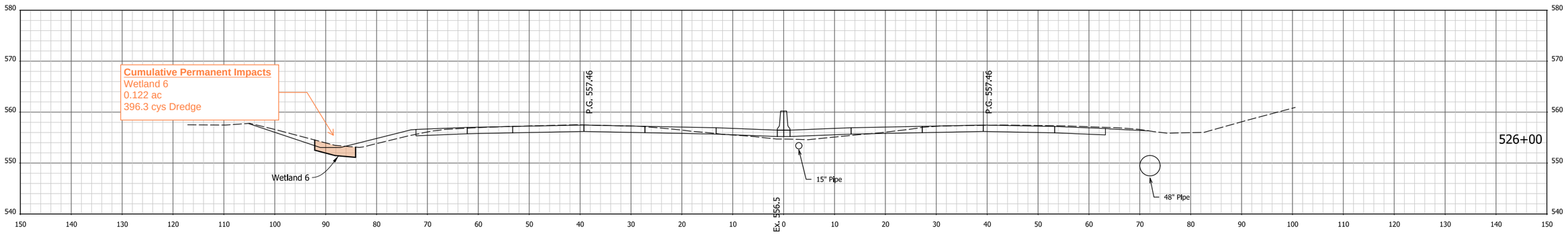

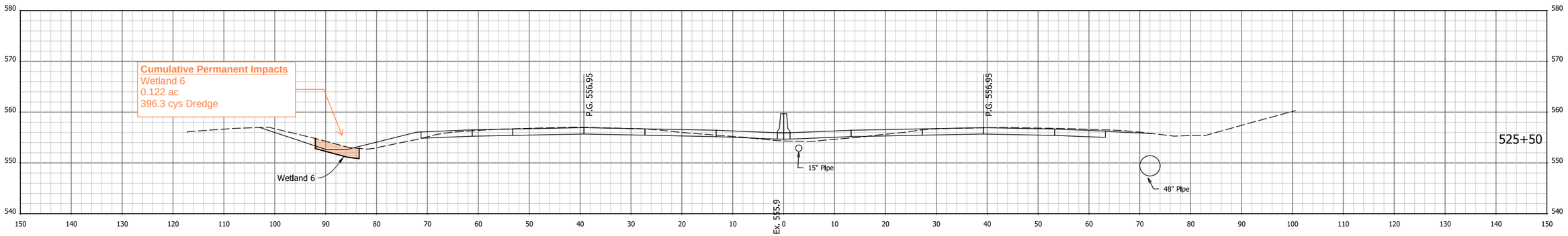

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 525+50 TO STA. 526+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	58 of 246
CONTRACT	PROJECT
R-41529	1700135

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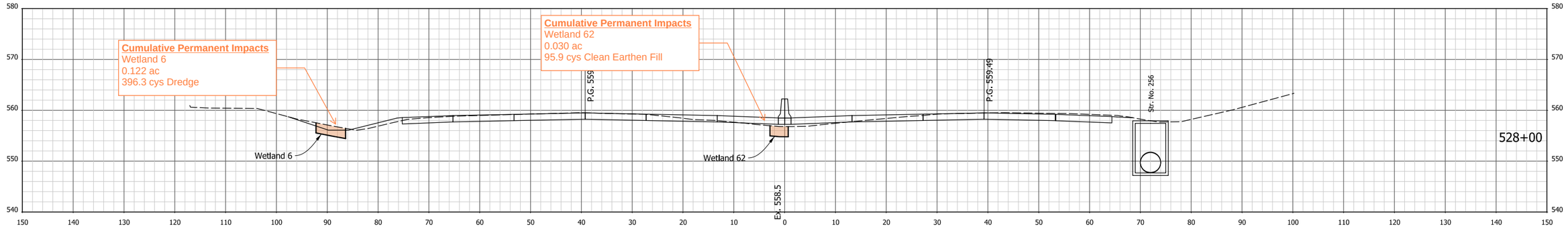

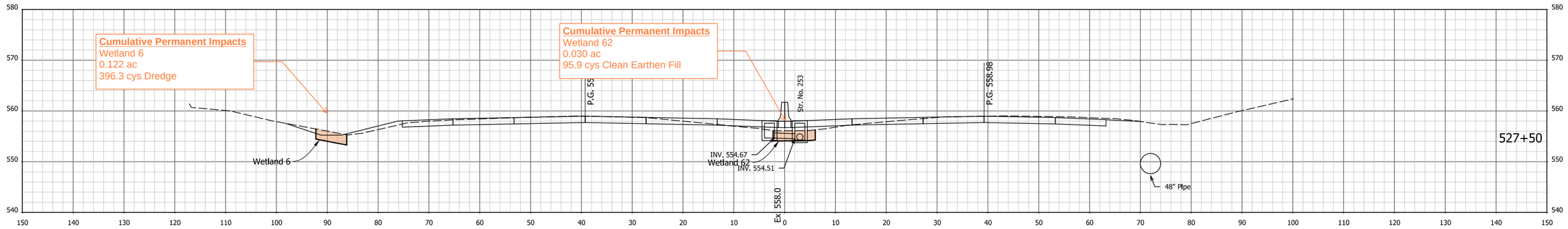

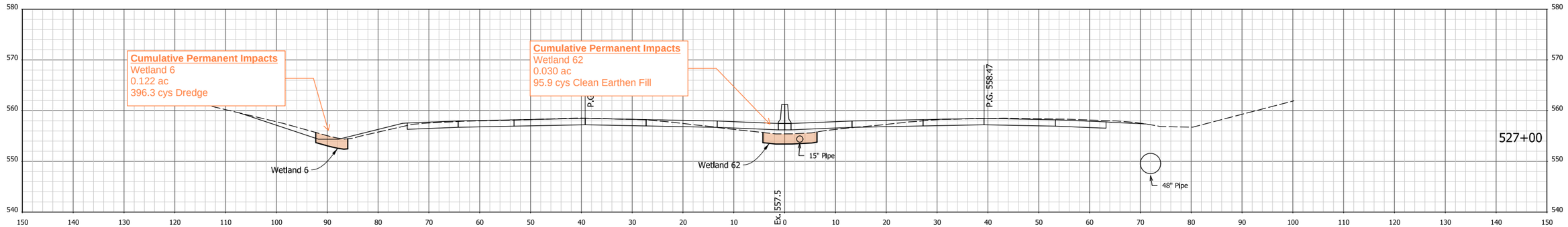

Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD
DRAWN: JJP
CHECKED: DJG
CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 527+00 TO STA. 528+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	59 of 246
CONTRACT	PROJECT
R-41529	1700135

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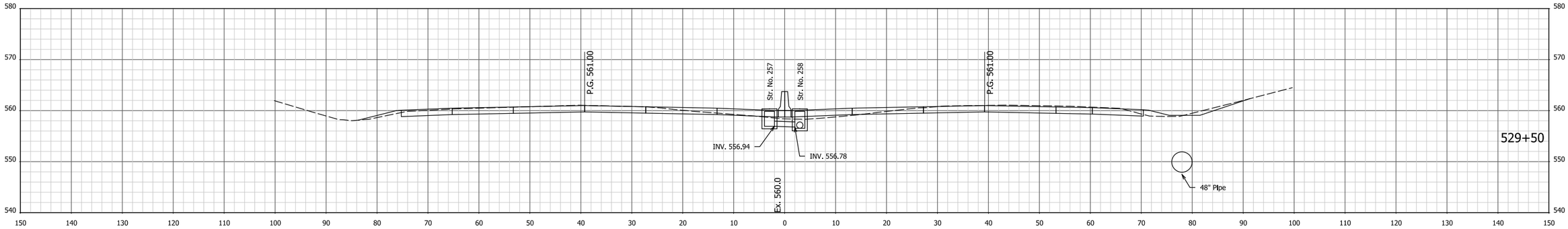

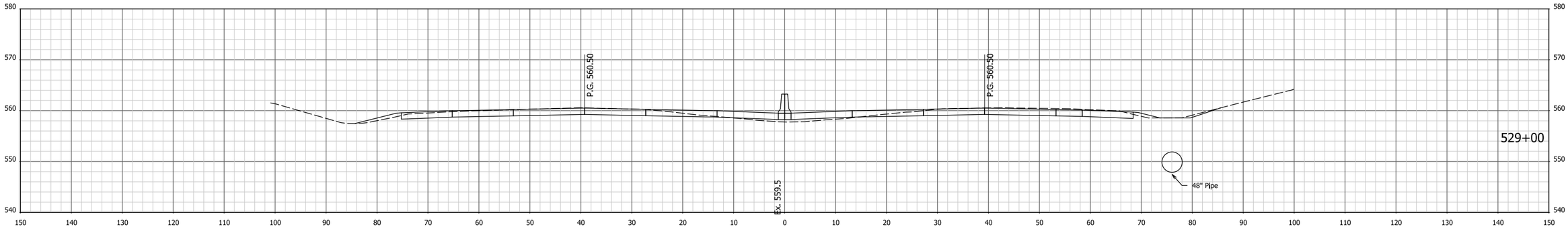

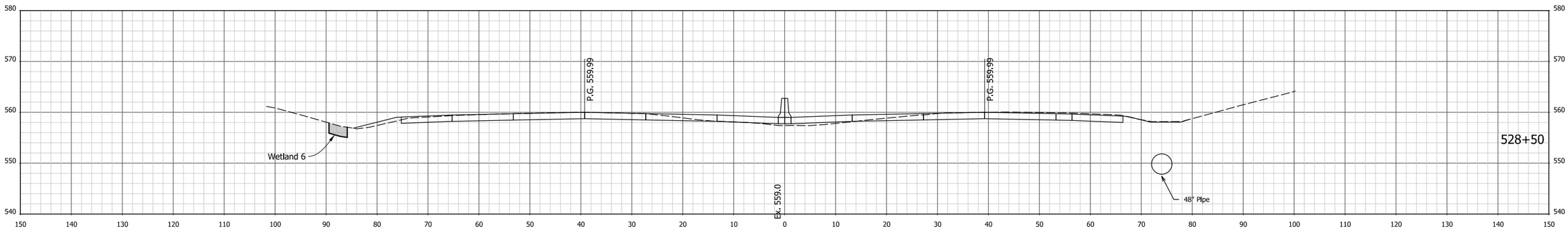

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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

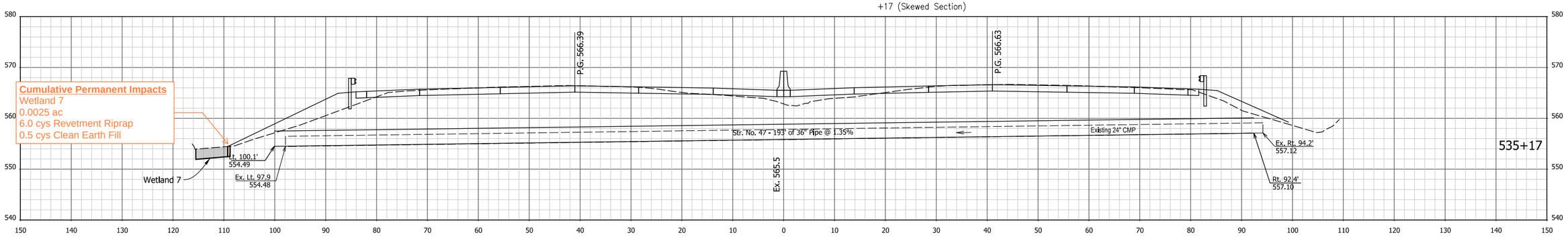
CROSS SECTIONS

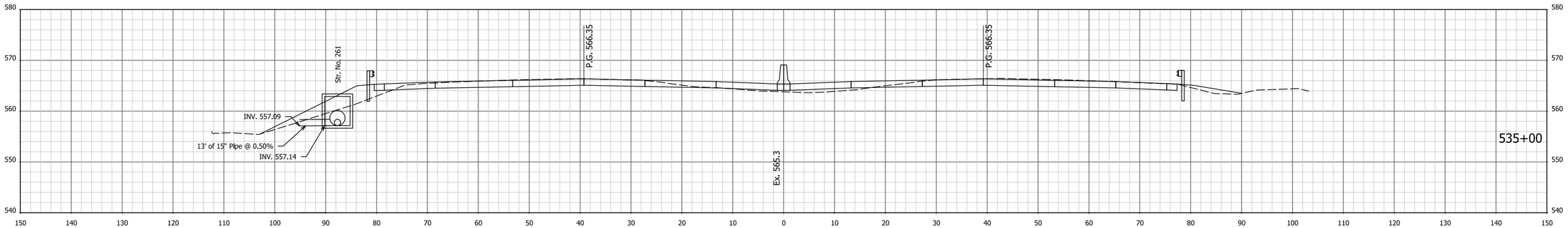
STA. 528+50 TO STA. 529+50 "PR-Q"

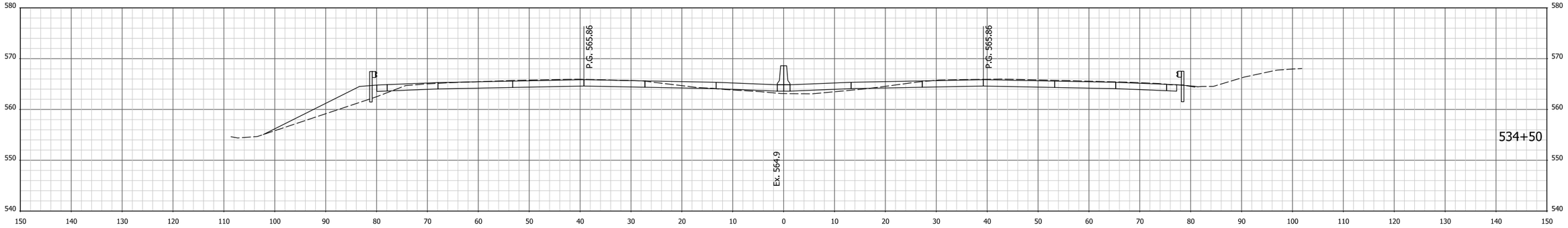
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	60	of	246
CONTRACT	PROJECT		
R-41529	1700135		

+17 (Skewed Section)







Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMD
DRAWN: JJP
CHECKED: DJG
CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 534+50 TO STA. 535+17 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	61	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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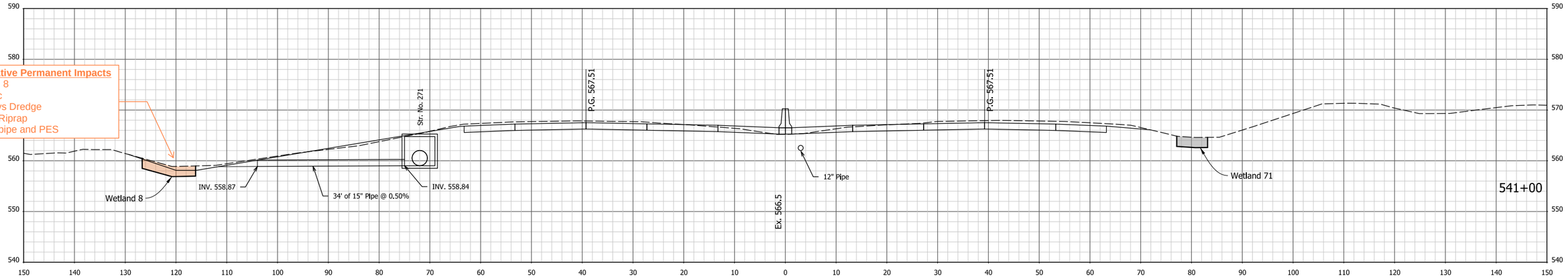
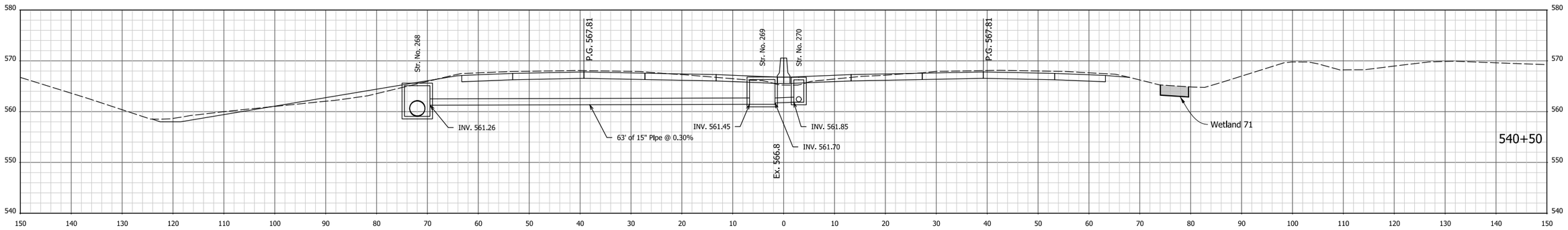
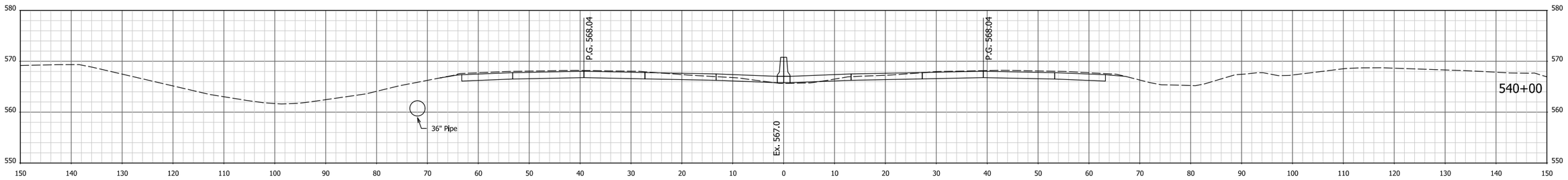
Cumulative Permanent Impacts
Wetland 8
0.099 ac
308.5 cys Dredge
9.5 cys Riprap
0.3 cys pipe and PES







Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 540+00 TO STA. 541+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	62 of 246
CONTRACT	PROJECT
R-41529	1700135

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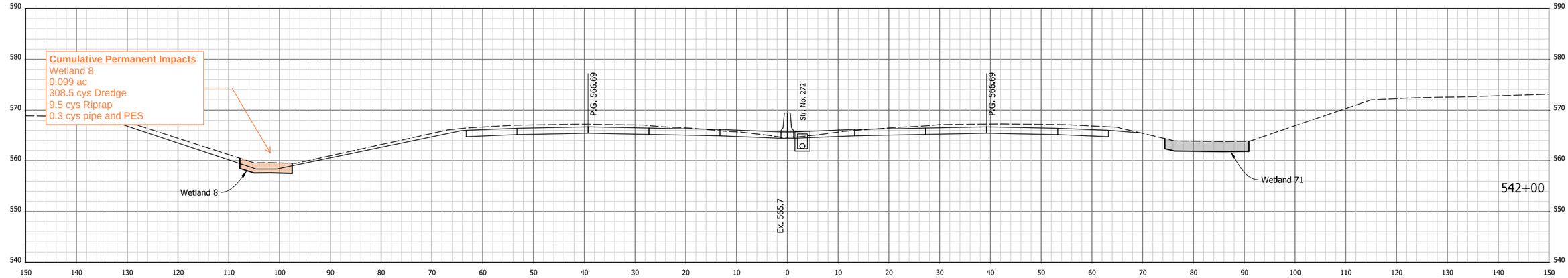

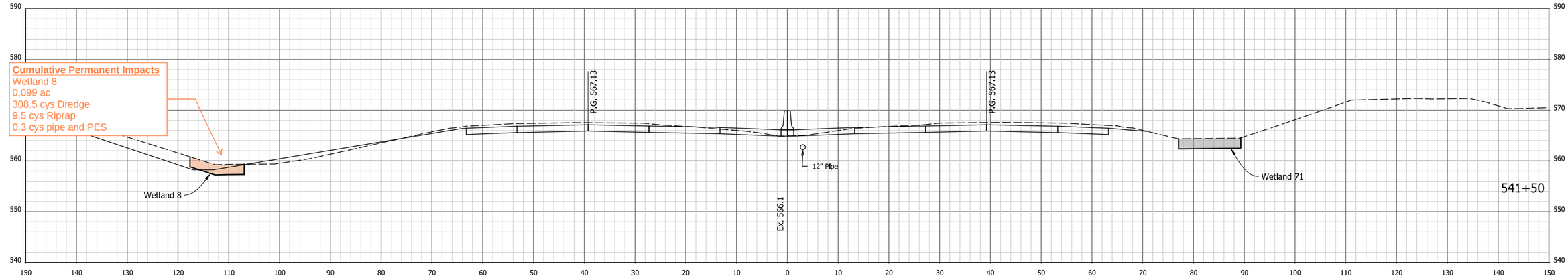

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 541+50 TO STA. 542+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	63 of 246
CONTRACT	PROJECT
R-41529	1700135

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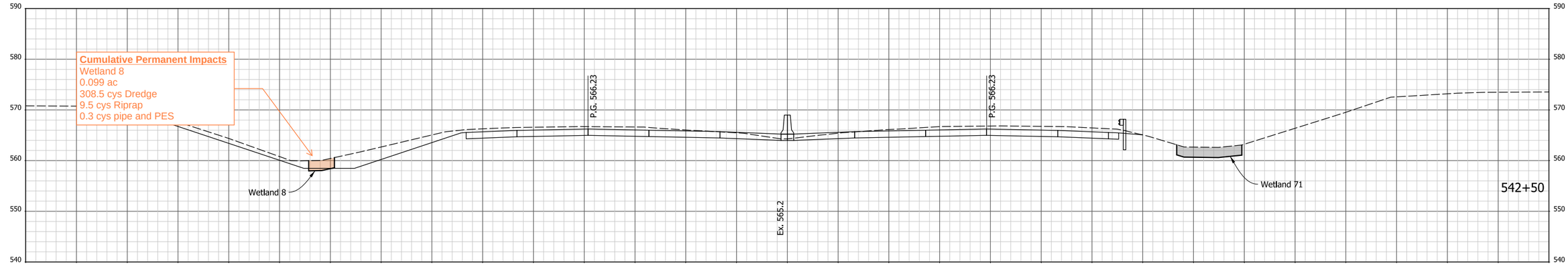

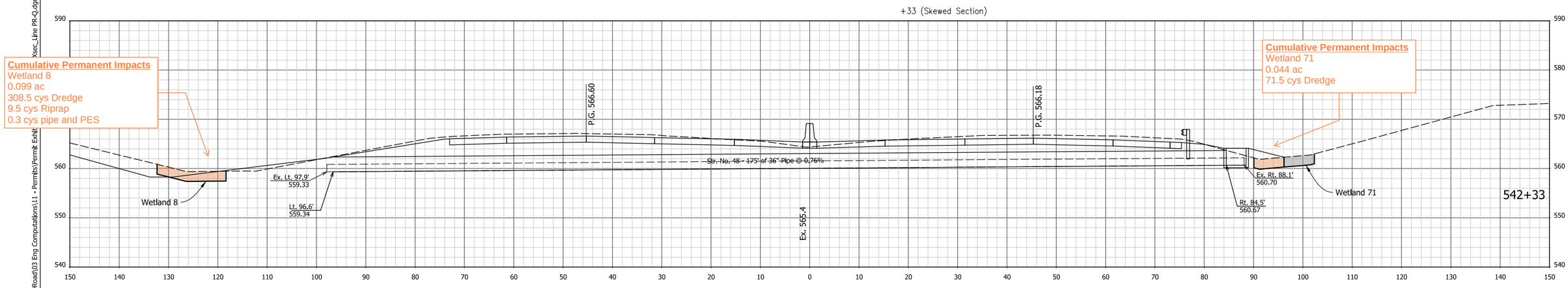

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 542+33 TO STA. 542+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	64 of 246
CONTRACT	PROJECT
R-41529	1700135

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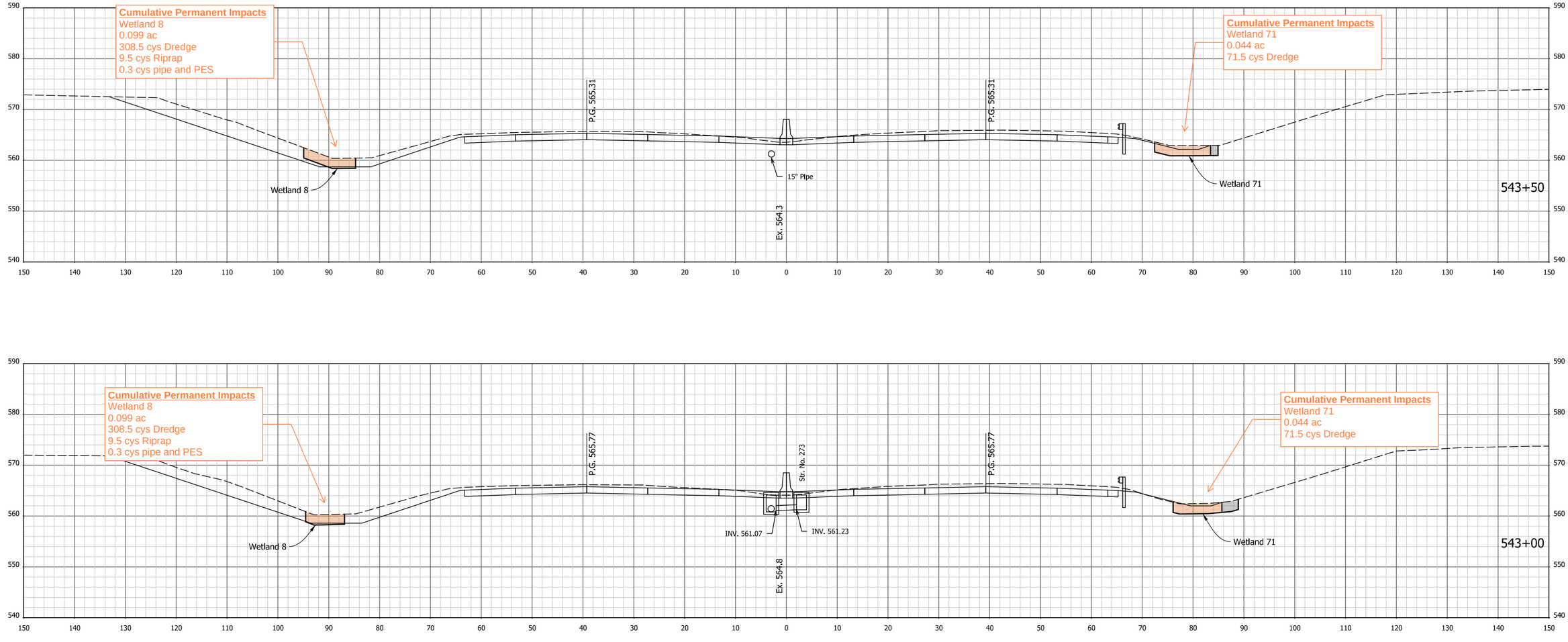

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

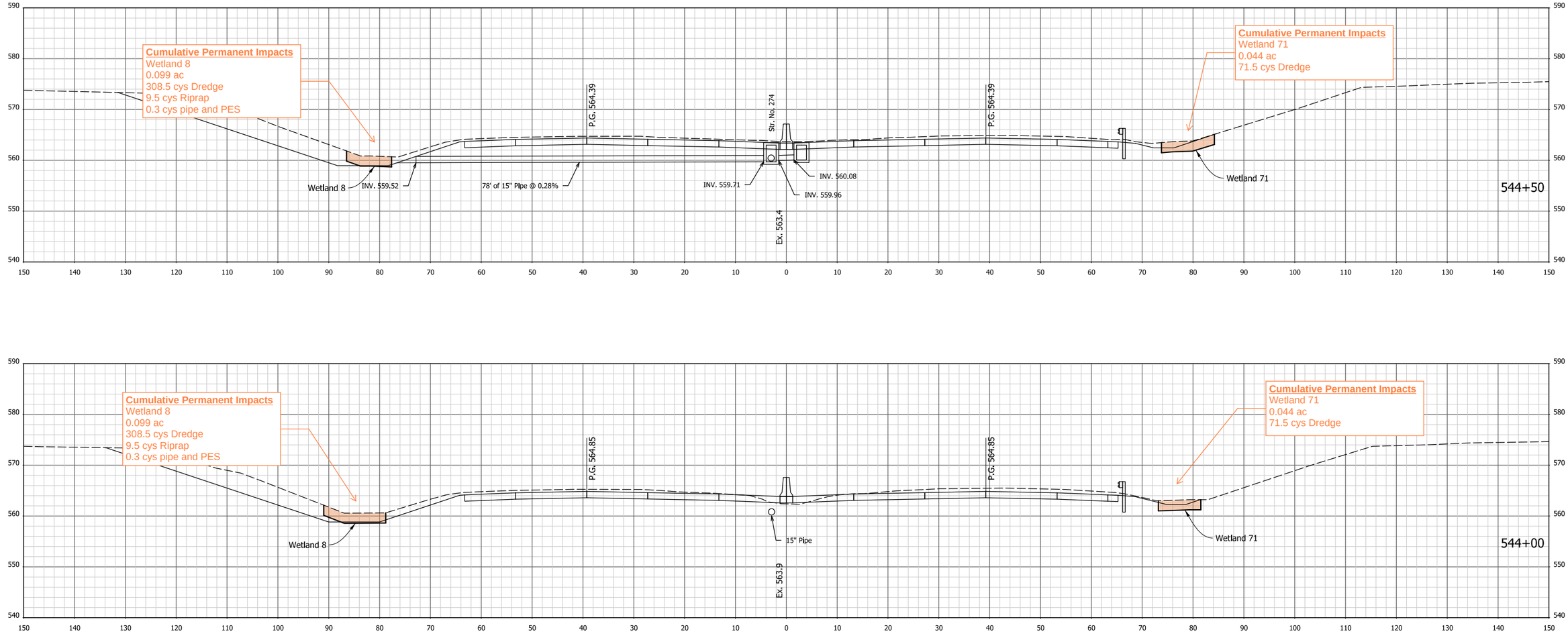
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 543+00 TO STA. 543+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	65	of	246
CONTRACT	PROJECT		
R-41529	1700135		



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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

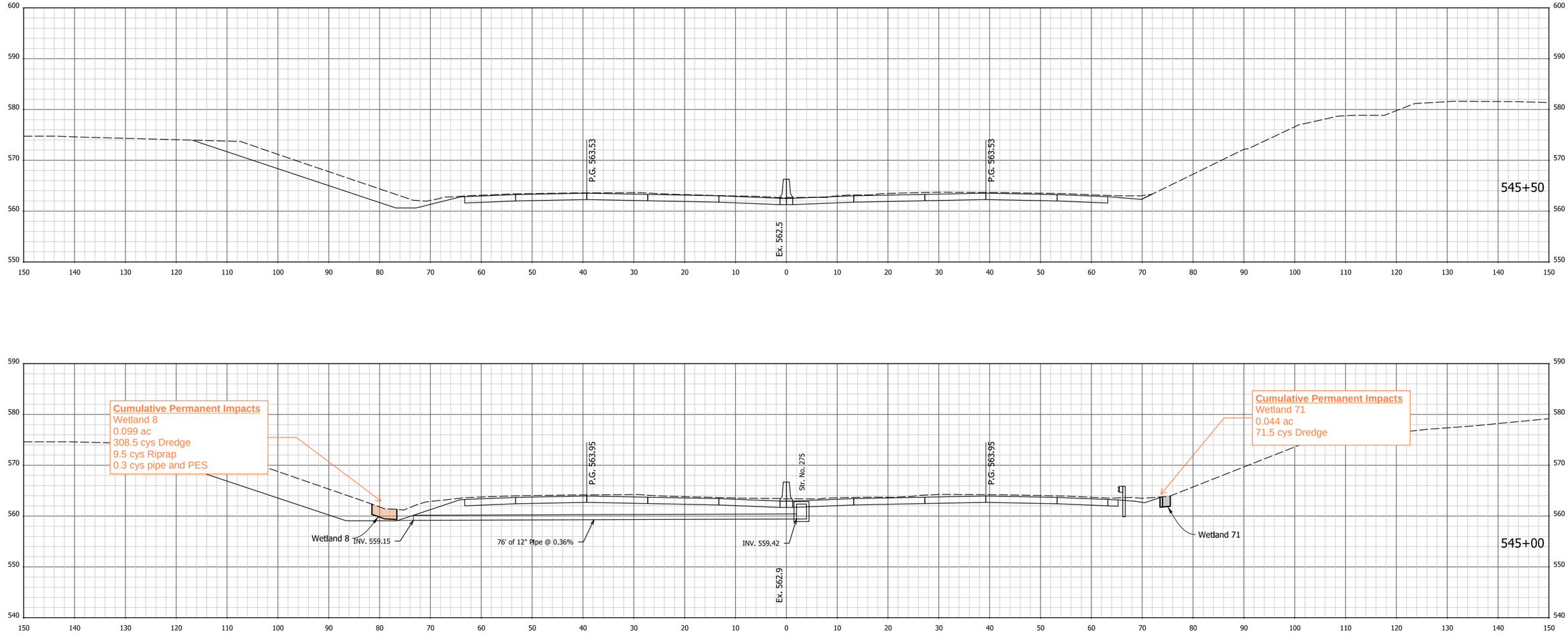
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 544+00 TO STA. 544+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	66 of 246
CONTRACT	PROJECT
R-41529	1700135



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 545+00 TO STA. 545+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	67	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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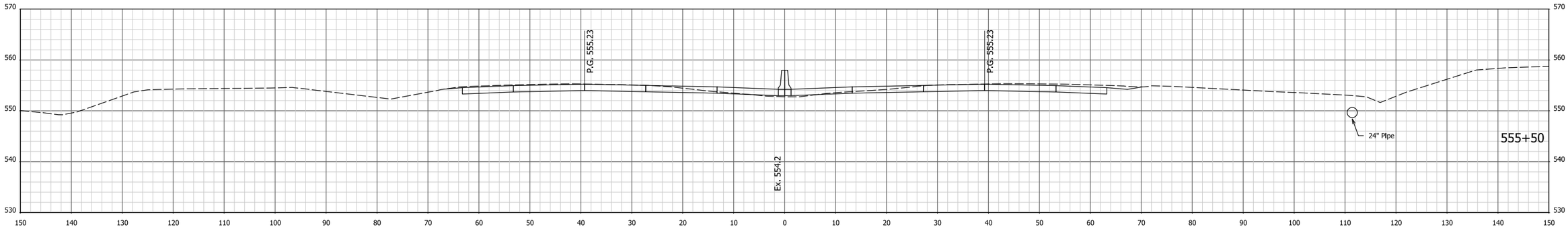

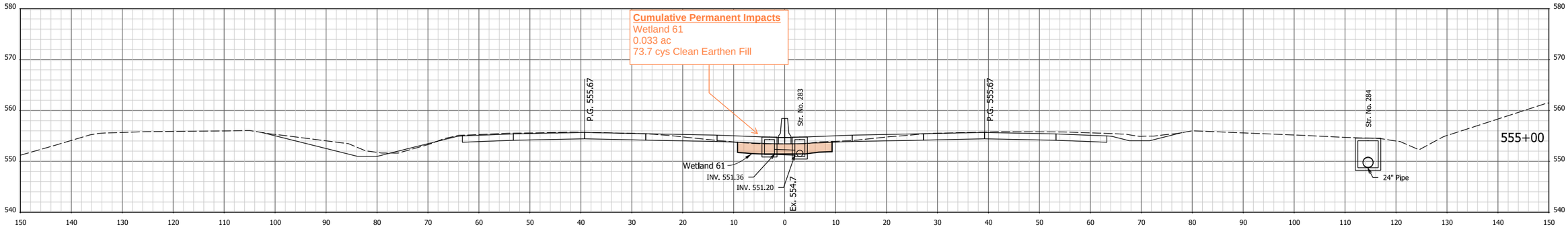

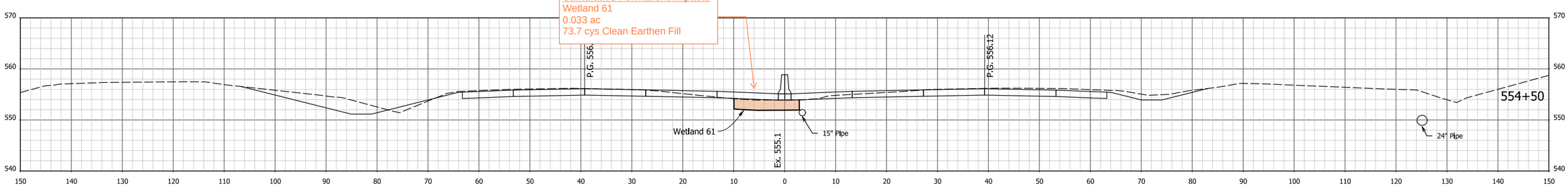

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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

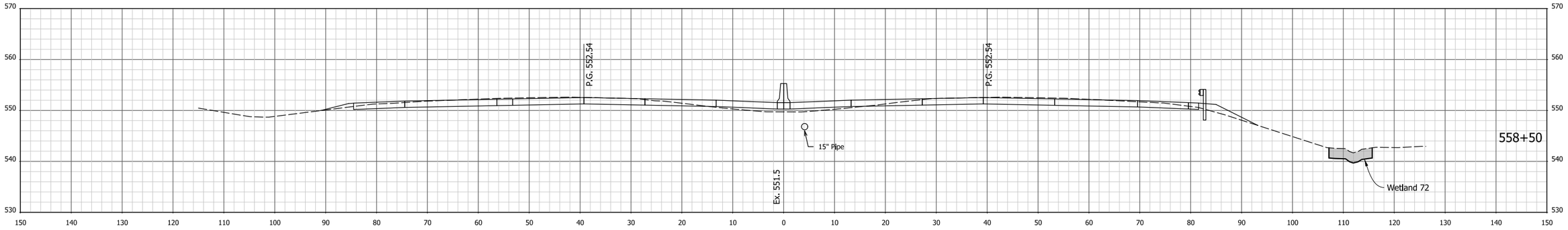
CHECKED: DJG CHECKED: DJG

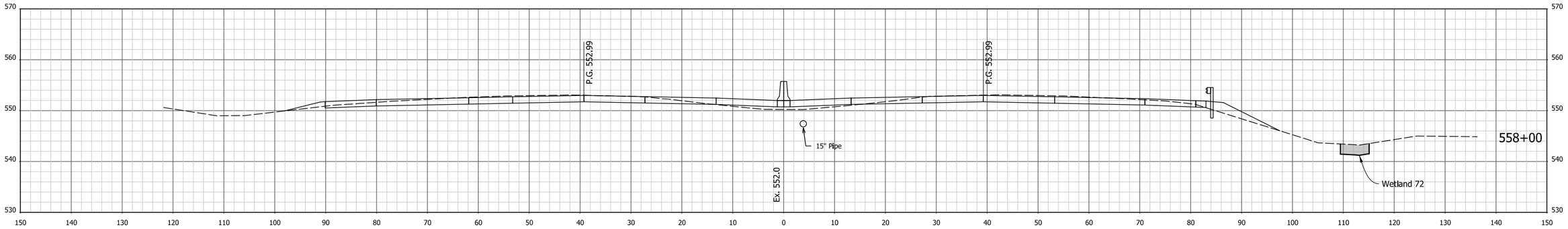
INDIANA
DEPARTMENT OF TRANSPORTATION

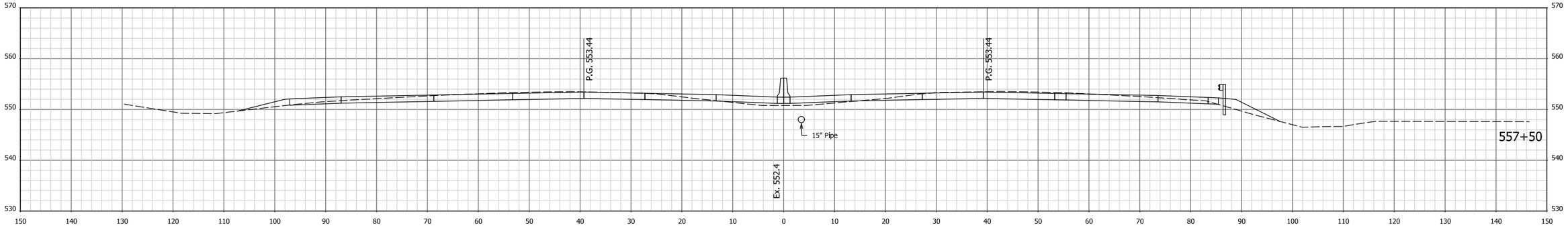
CROSS SECTIONS
STA. 554+50 TO STA. 555+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	68	of	246
CONTRACT	PROJECT		
R-41529	1700135		







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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 557+50 TO STA. 558+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
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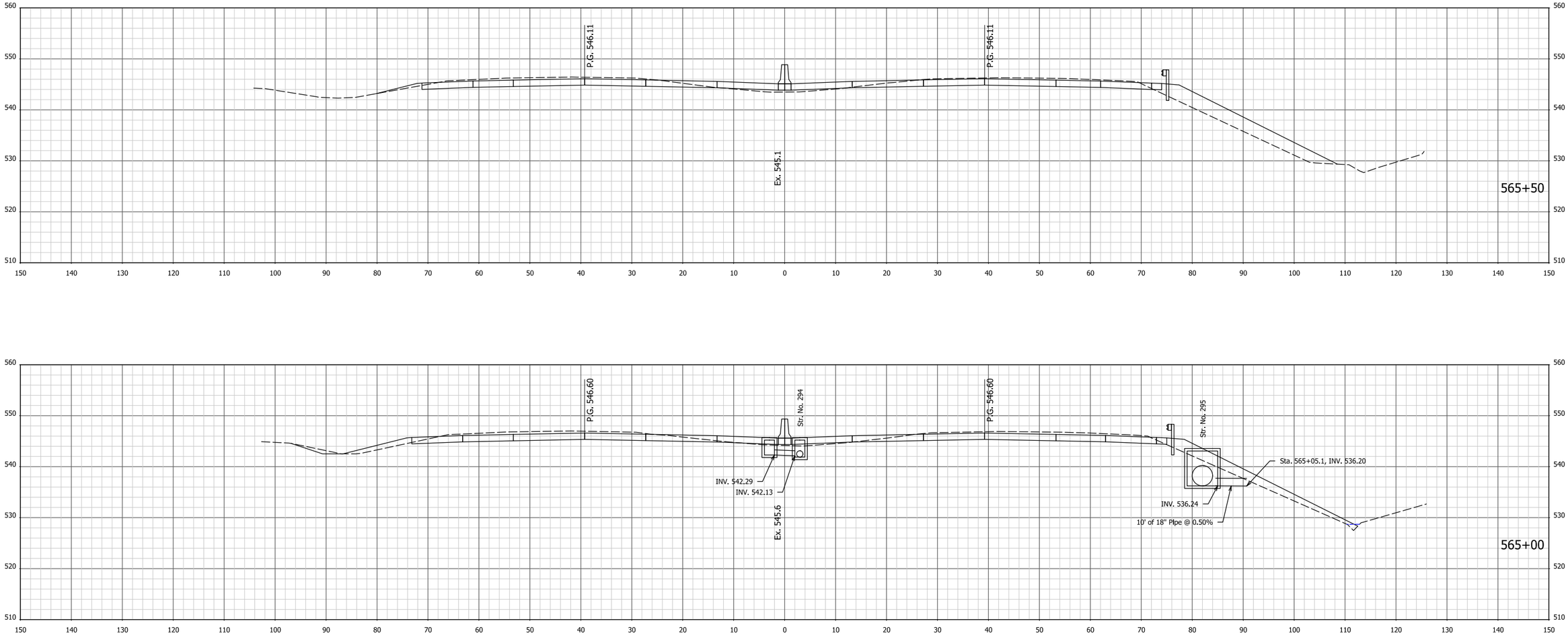
SURVEY BOOK	SHEETS
Electronic	69 of 246
CONTRACT	PROJECT
R-41529	1700135



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 565+00 TO STA. 565+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	70 of 246
CONTRACT	PROJECT
R-41529	1700135

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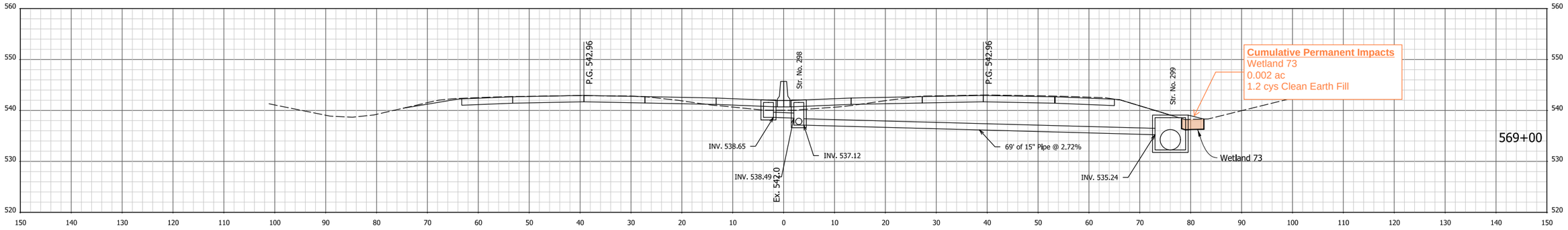

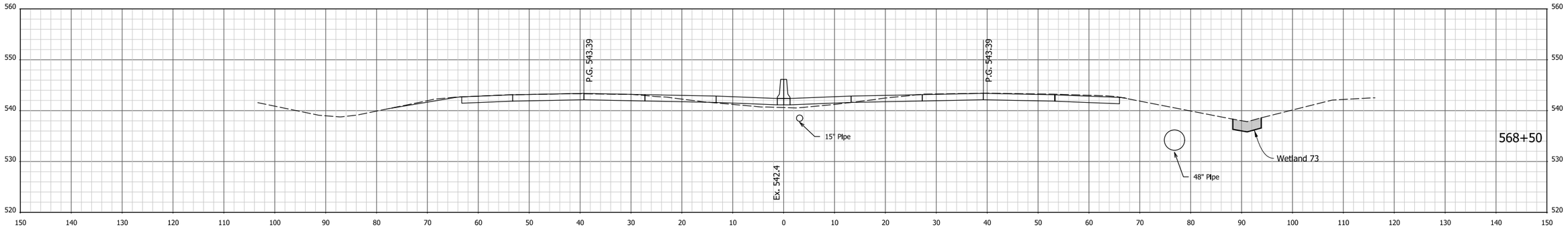

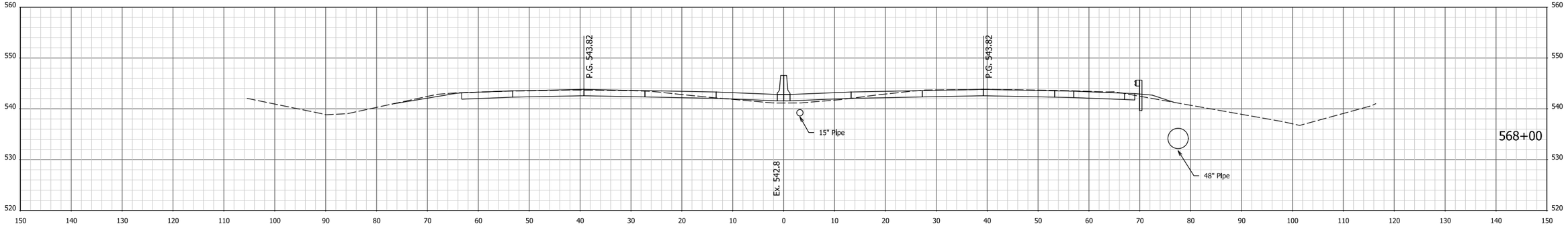

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

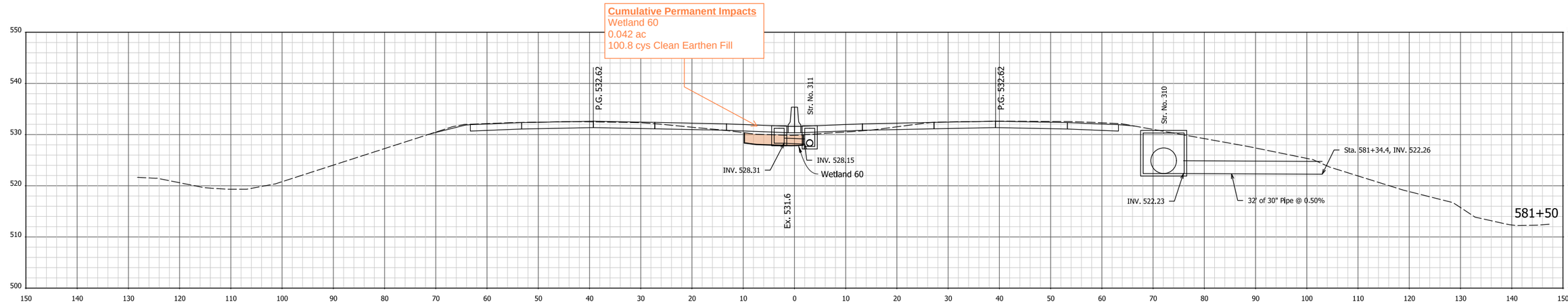
CHECKED: DJG | CHECKED: DJG

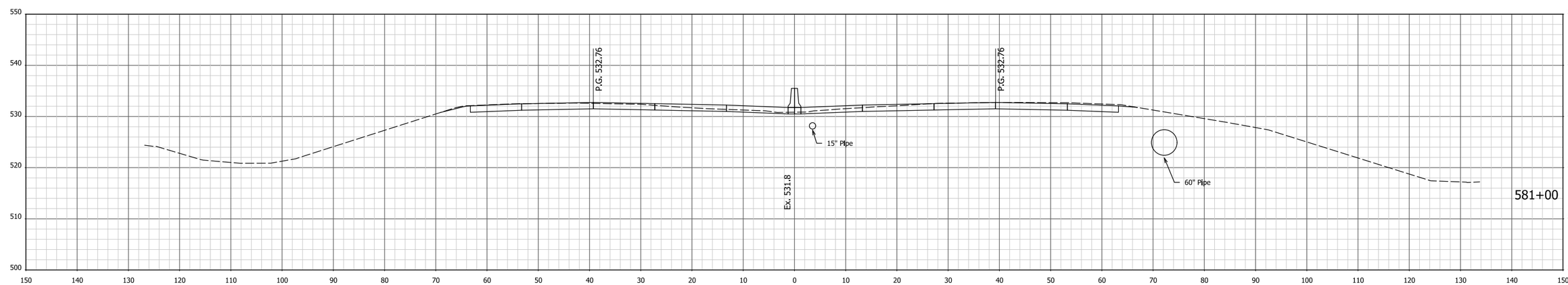
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 568+00 TO STA. 569+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	71 of 246
CONTRACT	PROJECT
R-41529	1700135





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 581+00 TO STA. 581+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	72 of 246
CONTRACT	PROJECT
R-41529	1700135

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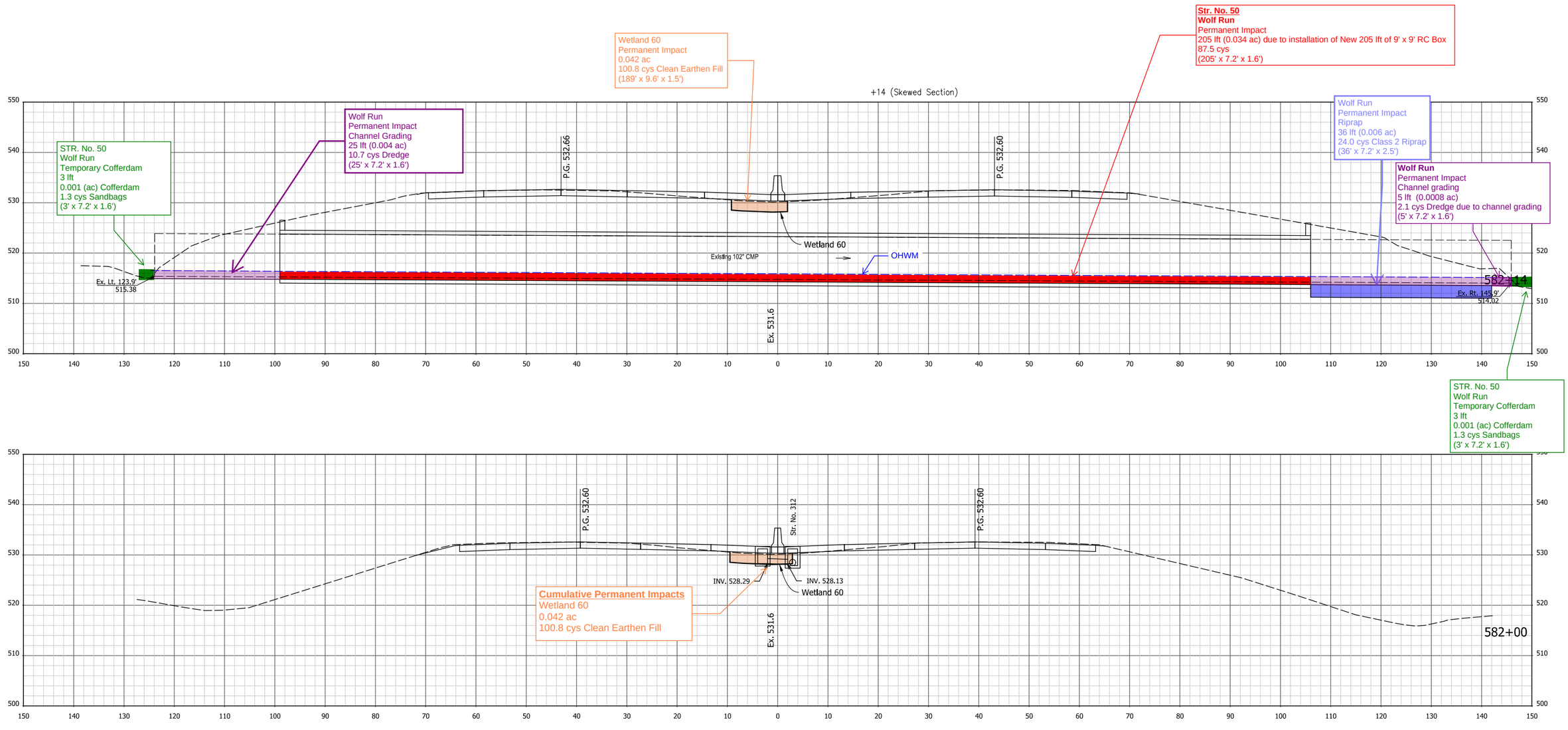

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 582+00 TO STA. 582+14 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	73	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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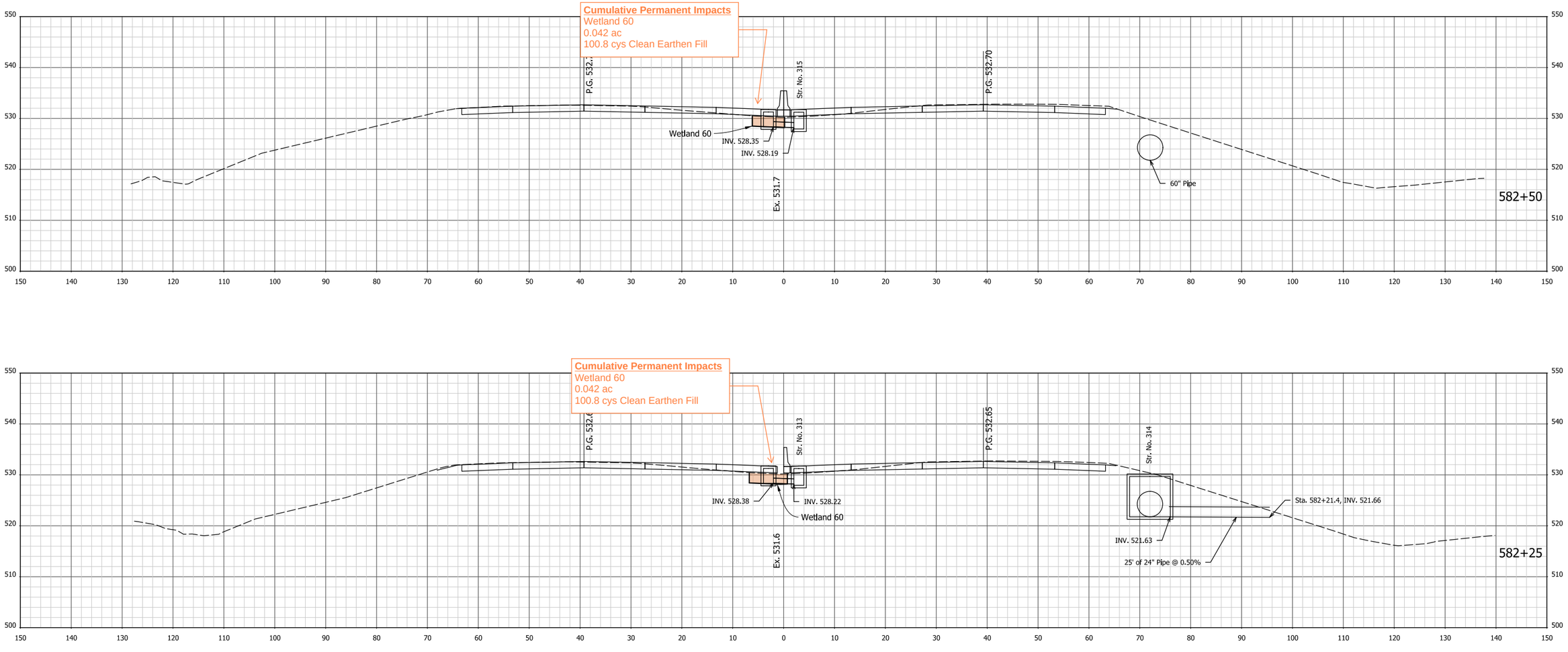

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 582+25 TO STA. 582+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	74 of 246
CONTRACT	PROJECT
R-41529	1700135

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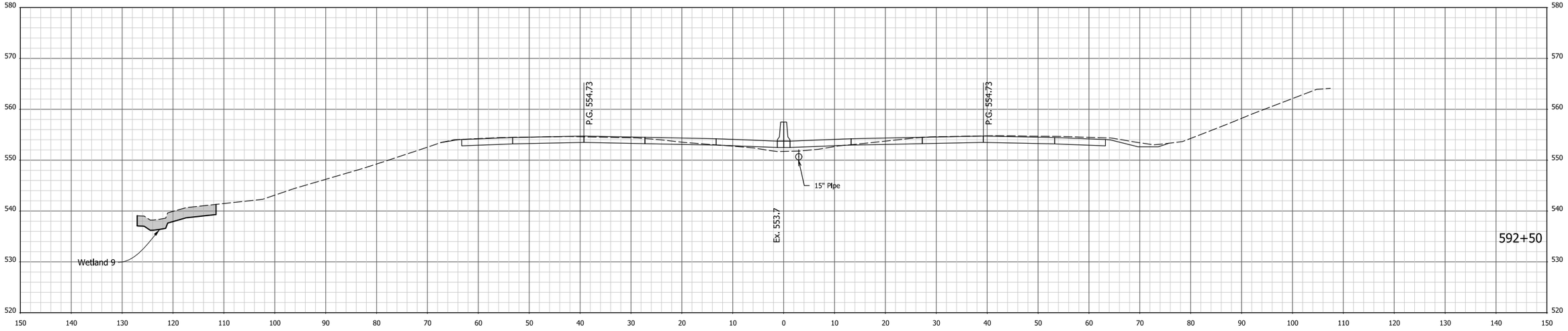

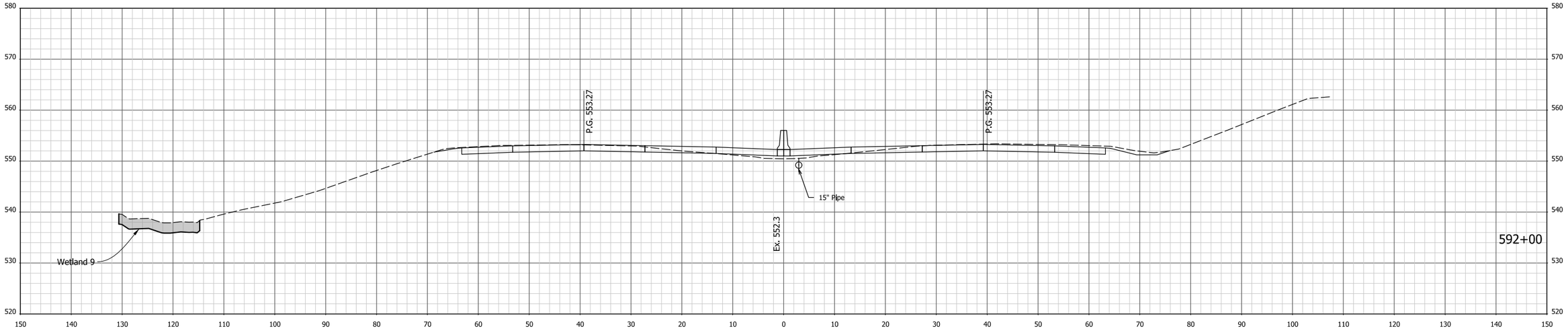

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

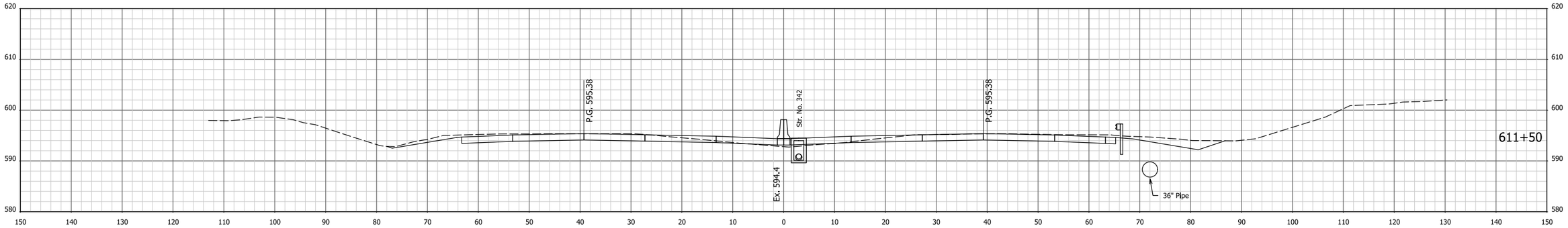
CHECKED: DJG | CHECKED: DJG

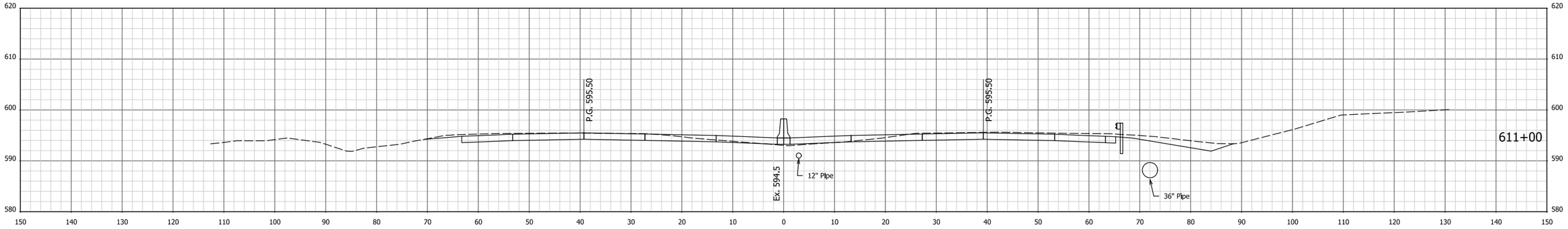
INDIANA
DEPARTMENT OF TRANSPORTATION

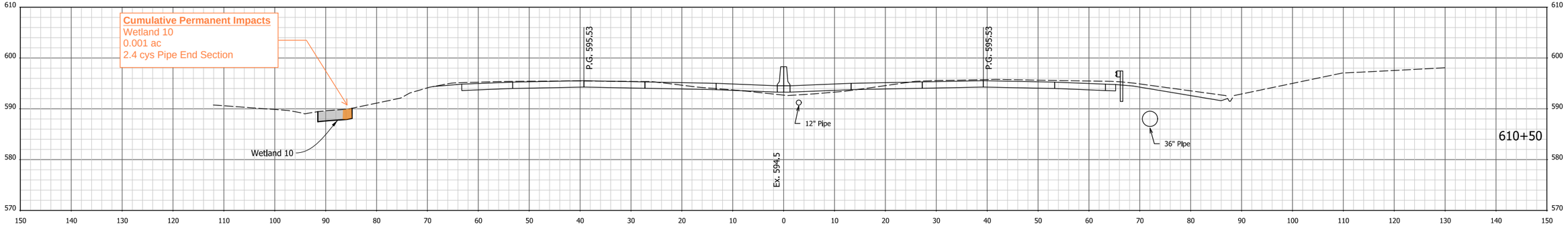
CROSS SECTIONS
STA. 592+00 TO STA. 592+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	75	of	246
CONTRACT	PROJECT		
R-41529	1700135		







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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

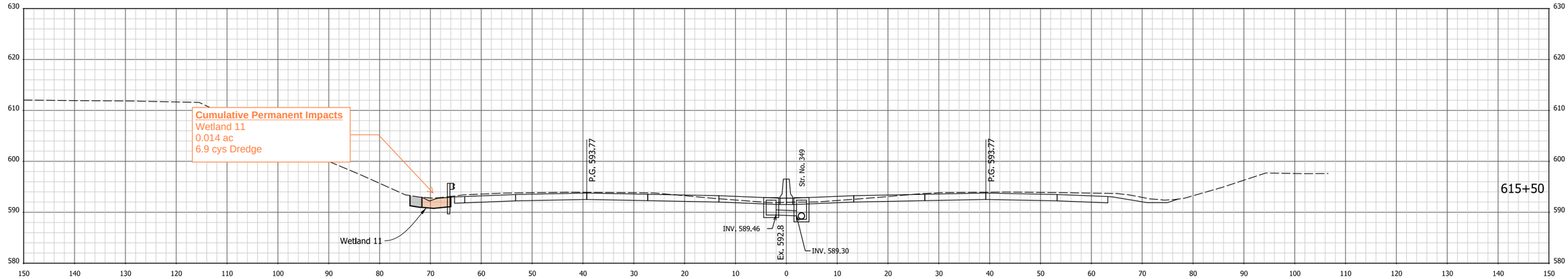
DESIGNED: AMD DRAWN: JJP

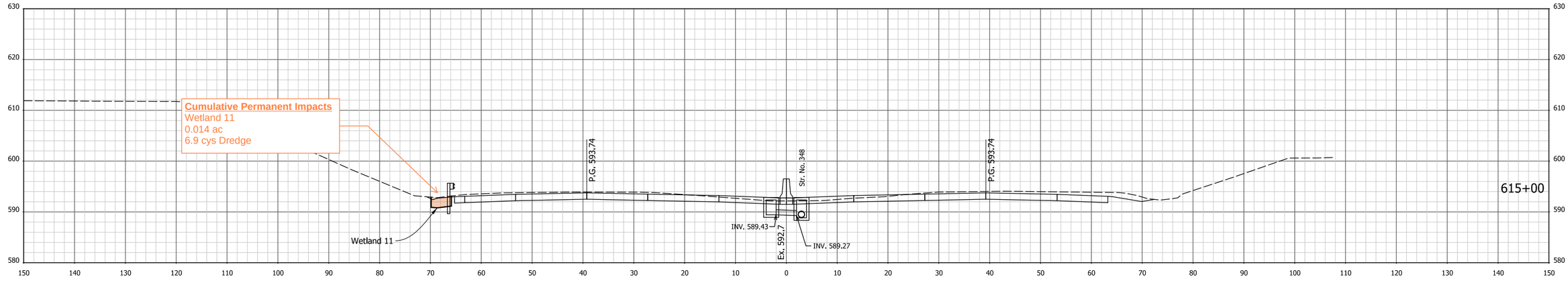
CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 610+50 TO STA. 611+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	76 of 246
CONTRACT	PROJECT
R-41529	1700135





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 615+00 TO STA. 615+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	77 of 246
CONTRACT	PROJECT
R-41529	1700135

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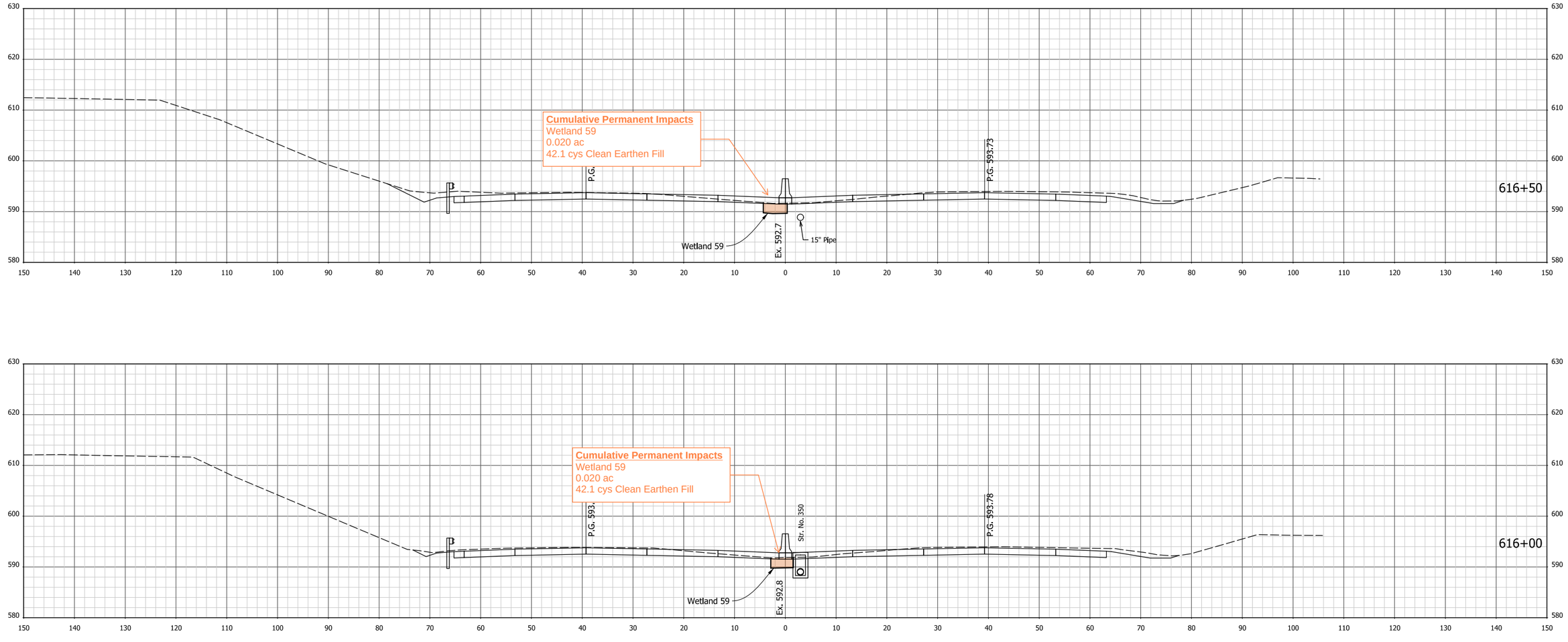

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

STA. 616+00 TO STA. 616+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	78	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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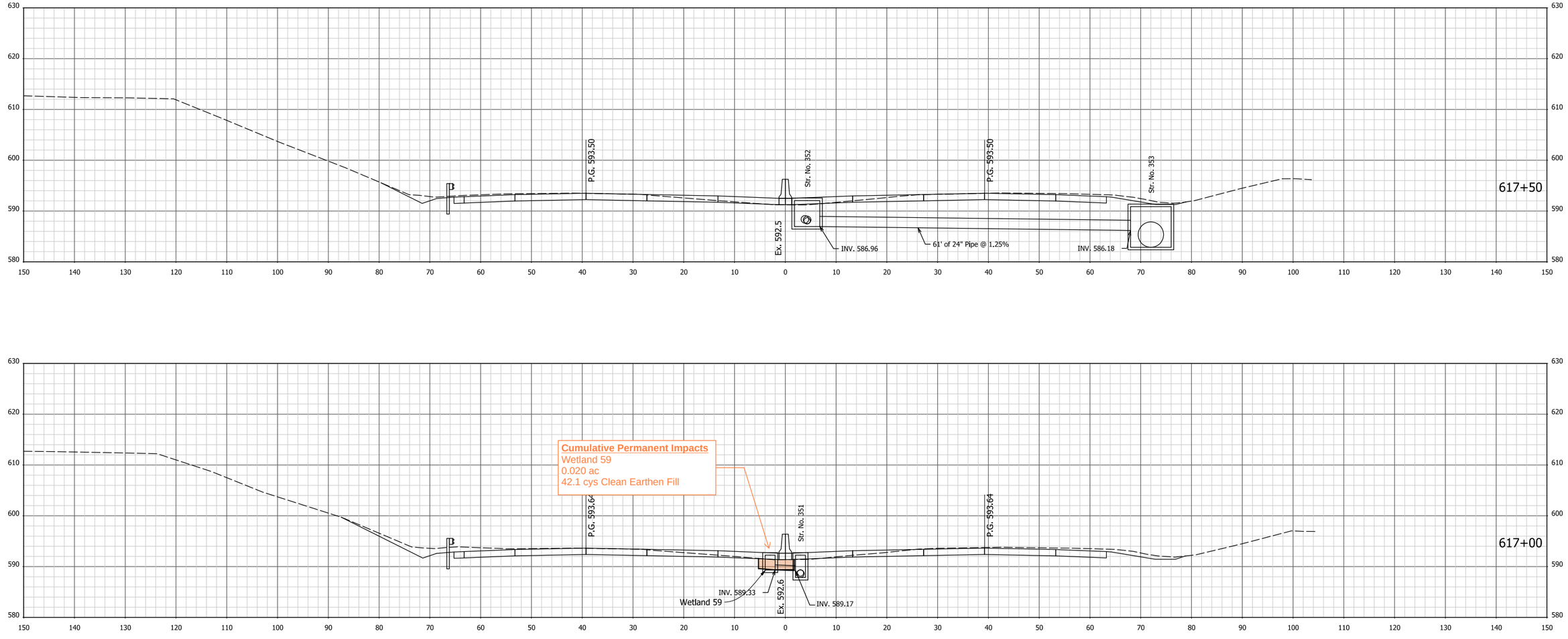

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 617+00 TO STA. 617+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	79 of 246
CONTRACT	PROJECT
R-41529	1700135

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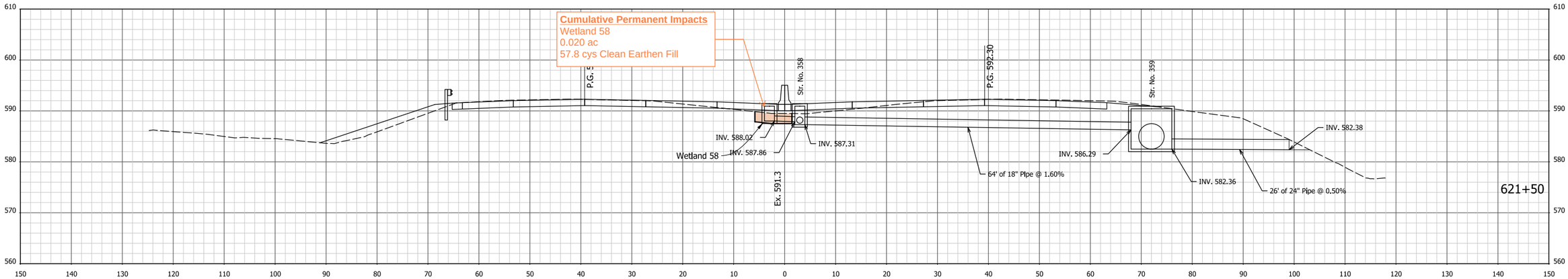

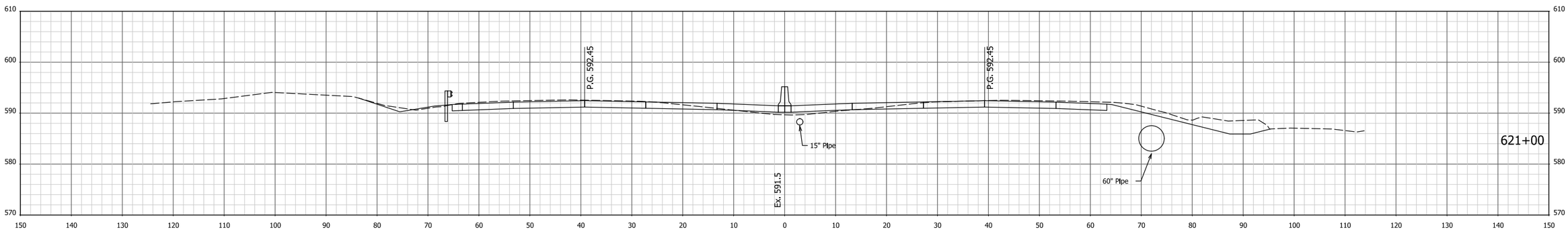

Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 621+00 TO STA. 621+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
ElectronIc	80	of	246
CONTRACT	PROJECT		
R-41529	1700135		

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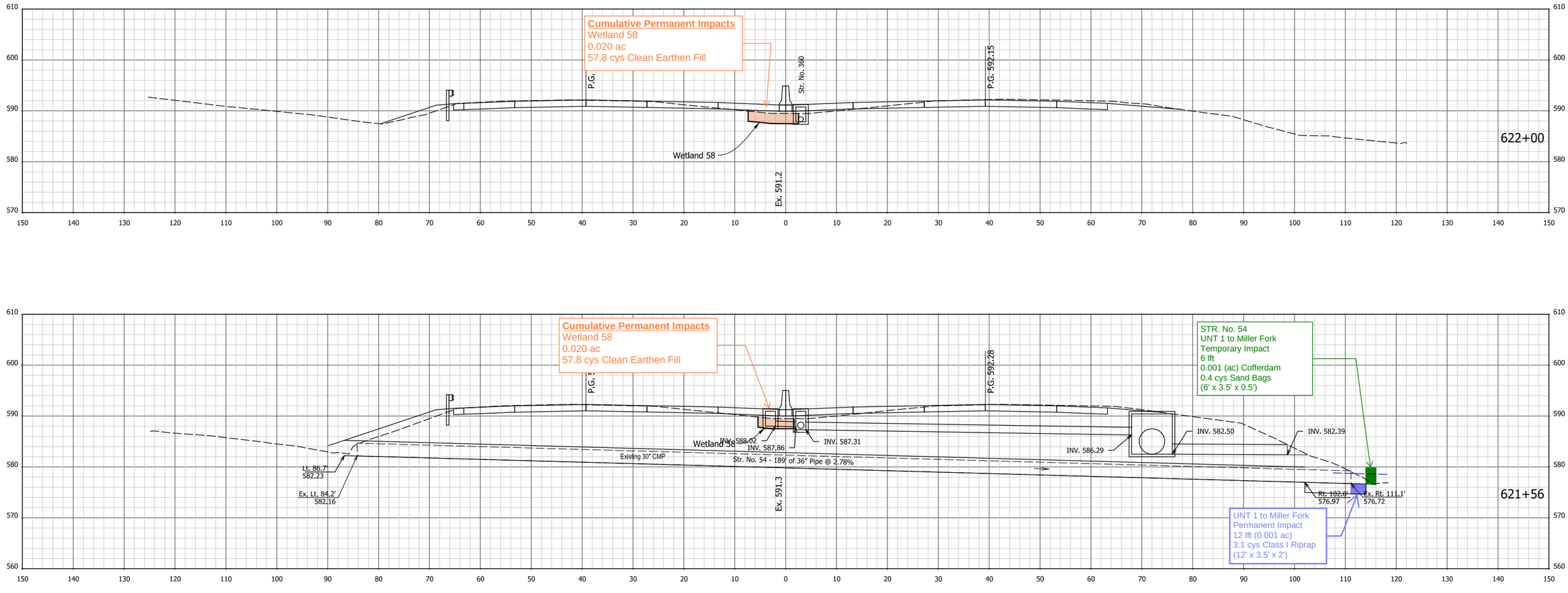

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

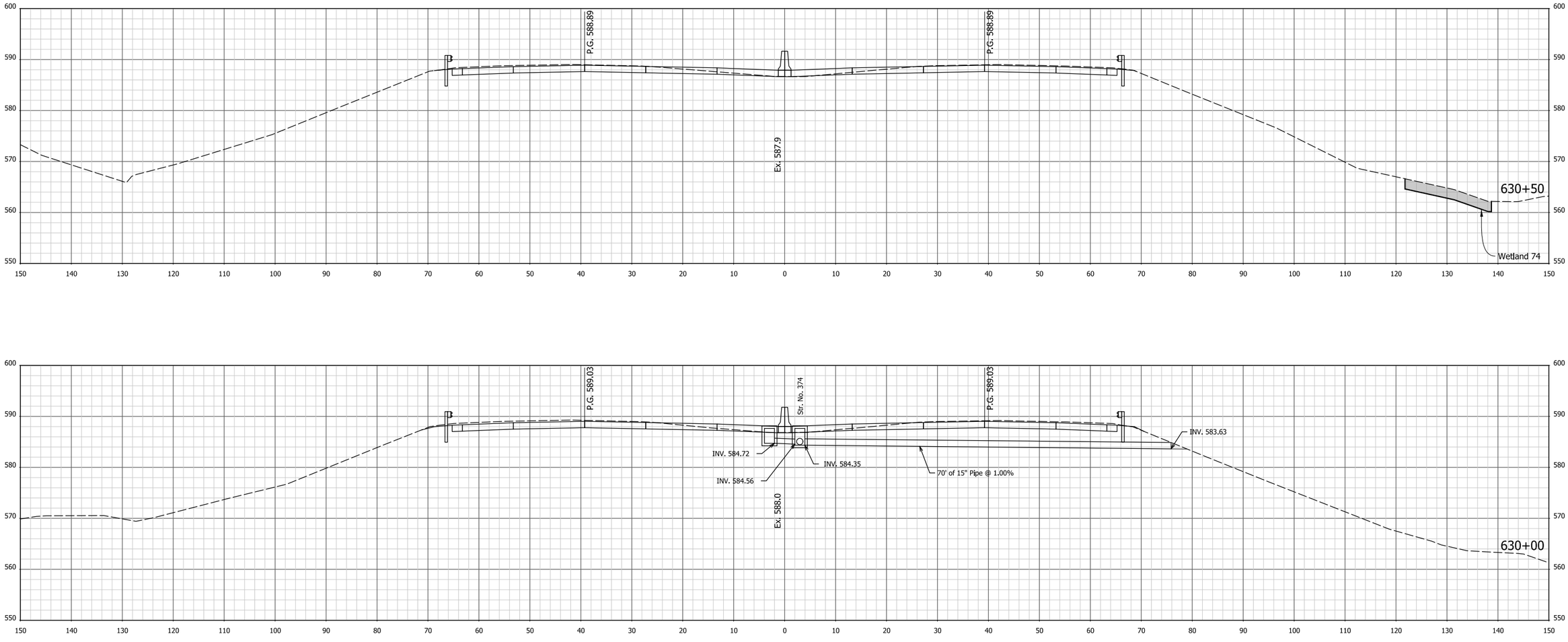
CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 621+56 TO STA. 622+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	81	of	246
CONTRACT	PROJECT		
R-41529	1700135		



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 630+00 TO STA. 630+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	82 of 246
CONTRACT	PROJECT
R-41529	1700135

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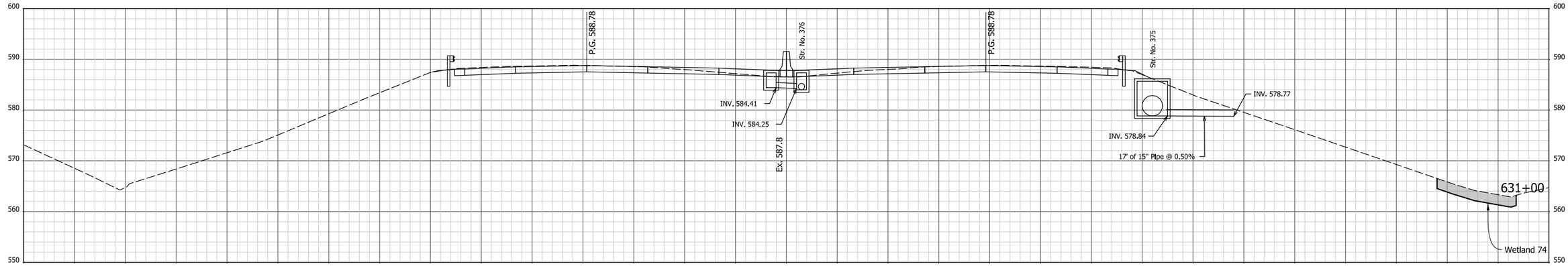

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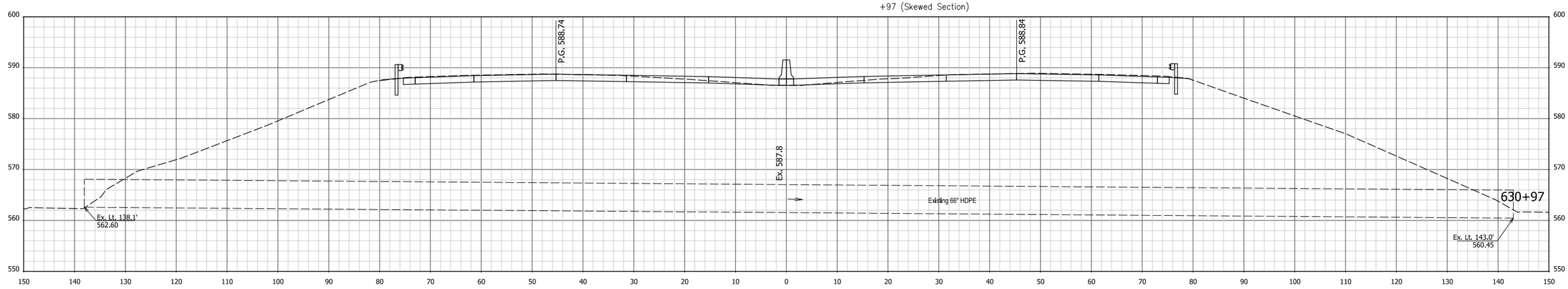

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 630+97 TO STA. 631+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	83 of 246
CONTRACT	PROJECT
R-41529	1700135

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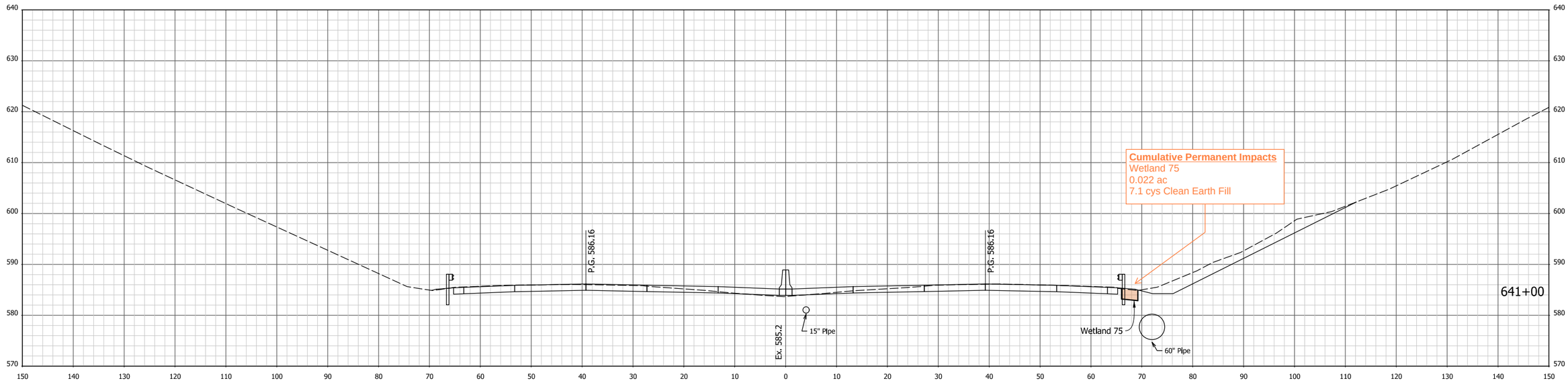

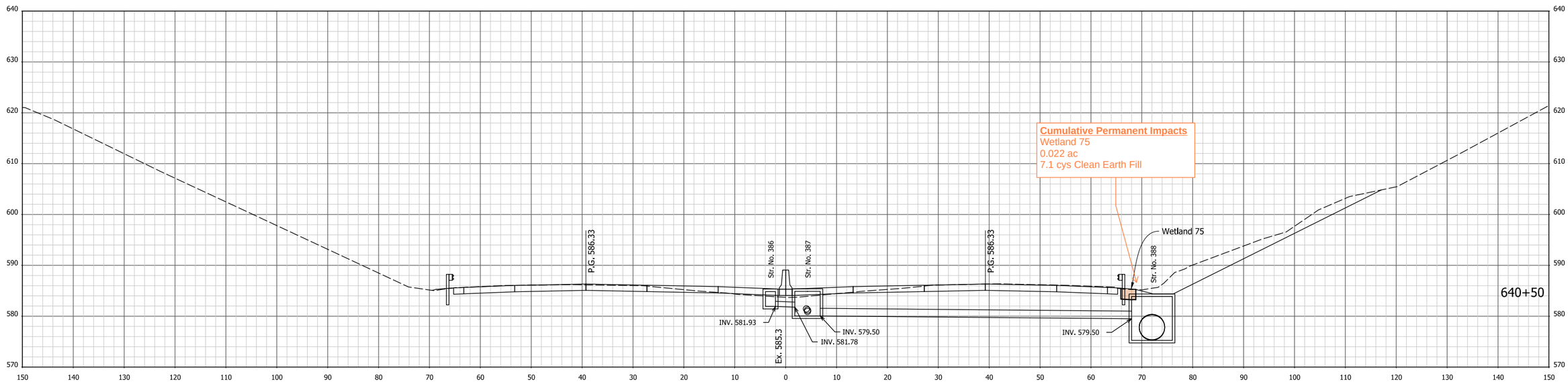

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

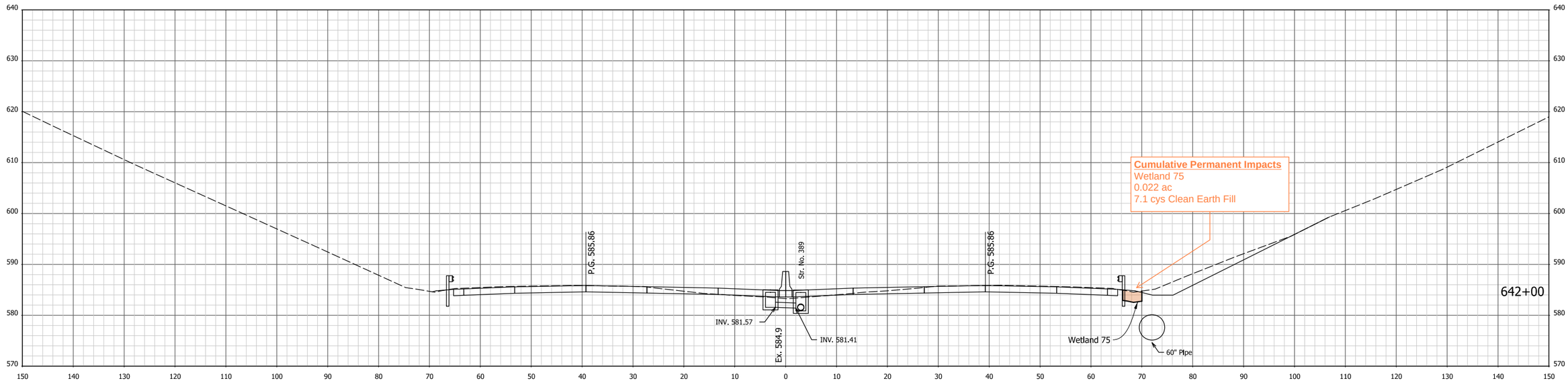
CHECKED: DJG CHECKED: DJG

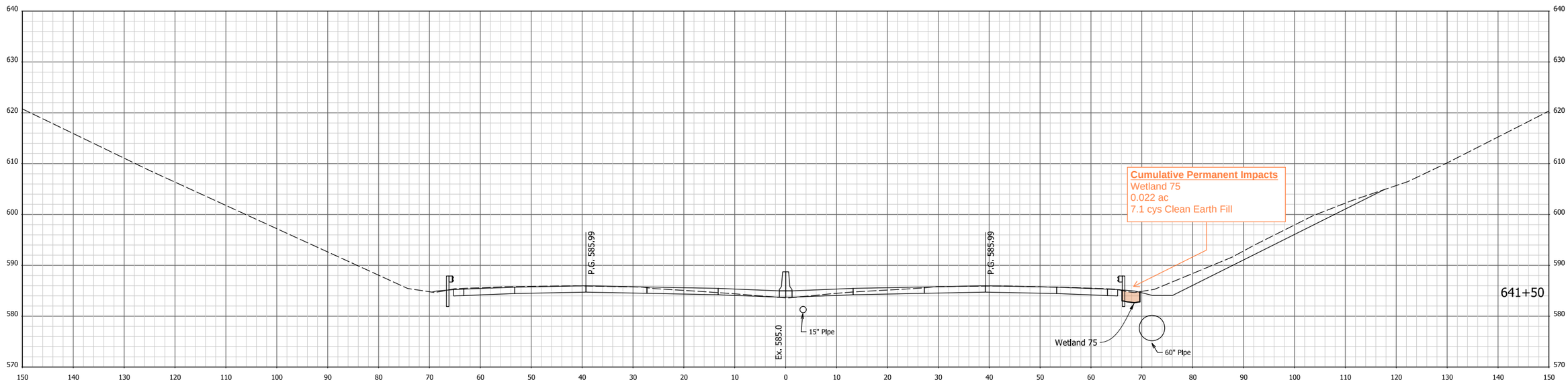
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 640+50 TO STA. 641+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	84	of	246
CONTRACT	PROJECT		
R-41529	1700135		





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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

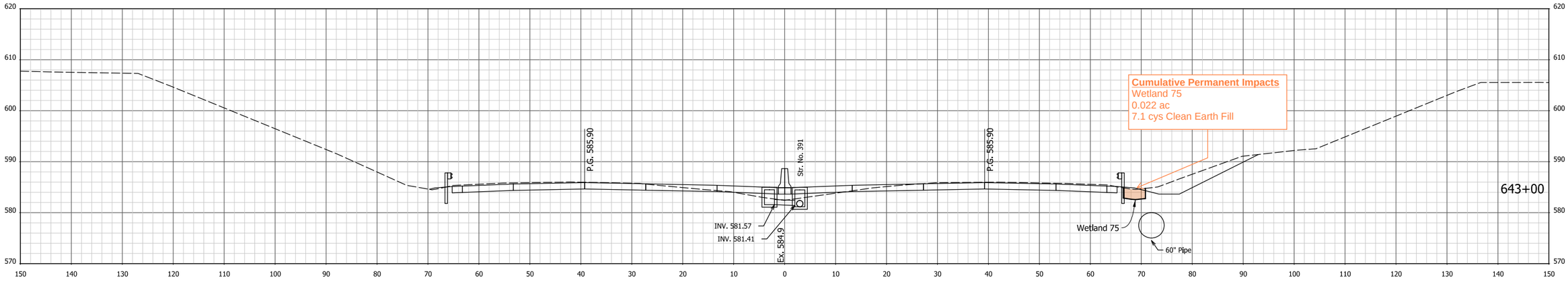
CHECKED: DJG CHECKED: DJG

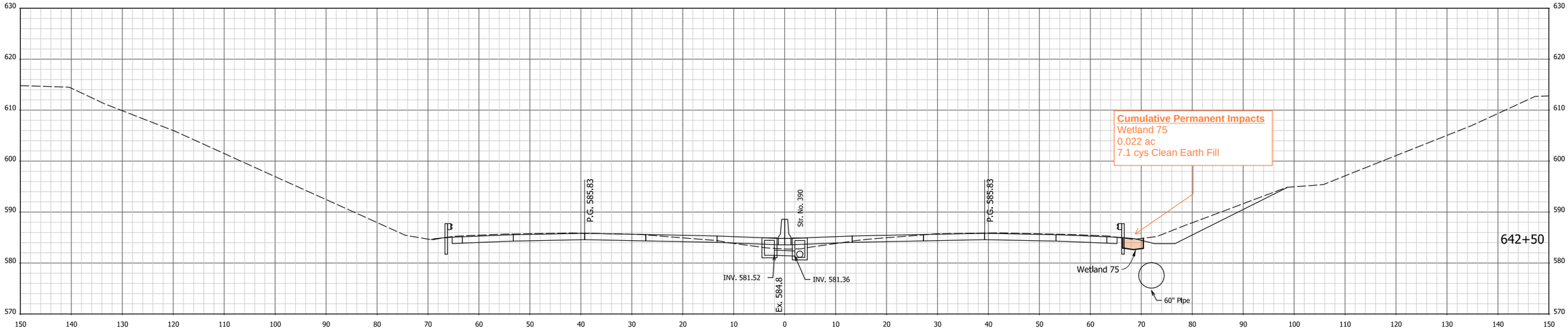
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 641+50 TO STA. 642+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	85 of 246
CONTRACT	PROJECT
R-41529	1700135





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 642+50 TO STA. 643+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	86 of 246
CONTRACT	PROJECT
R-41529	1700135

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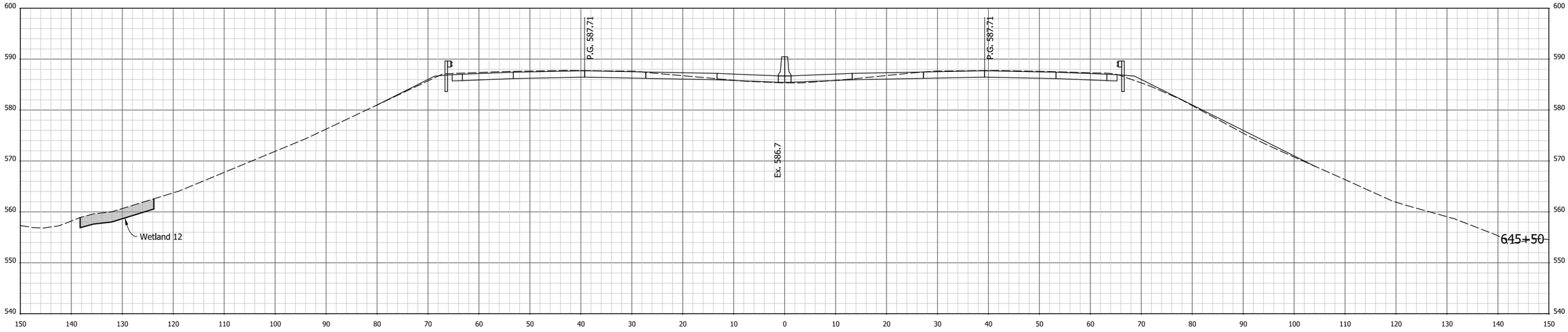

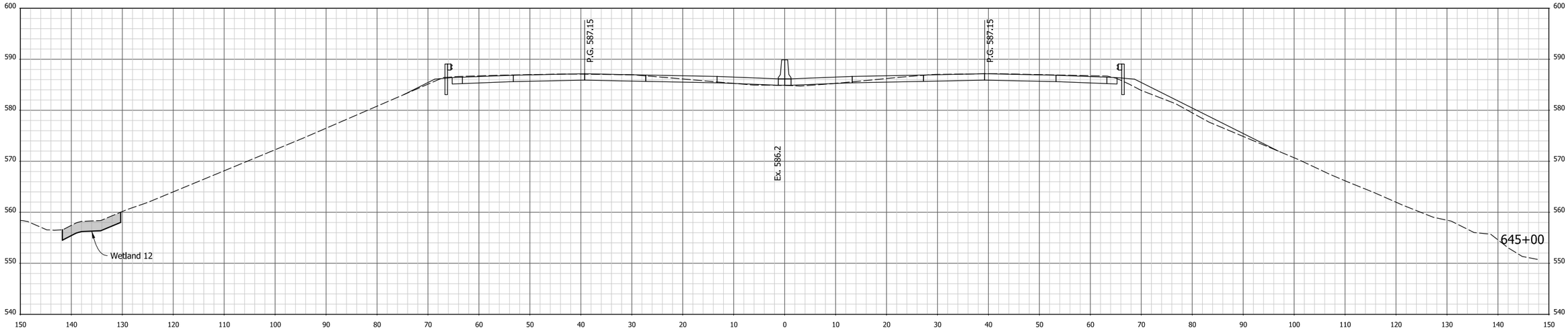

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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD | DRAWN: JJP

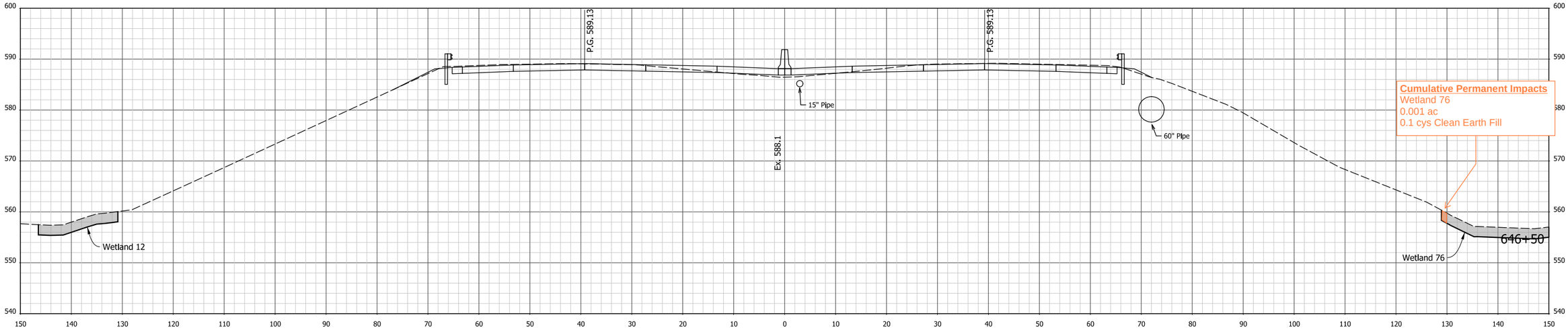
CHECKED: DJG | CHECKED: DJG

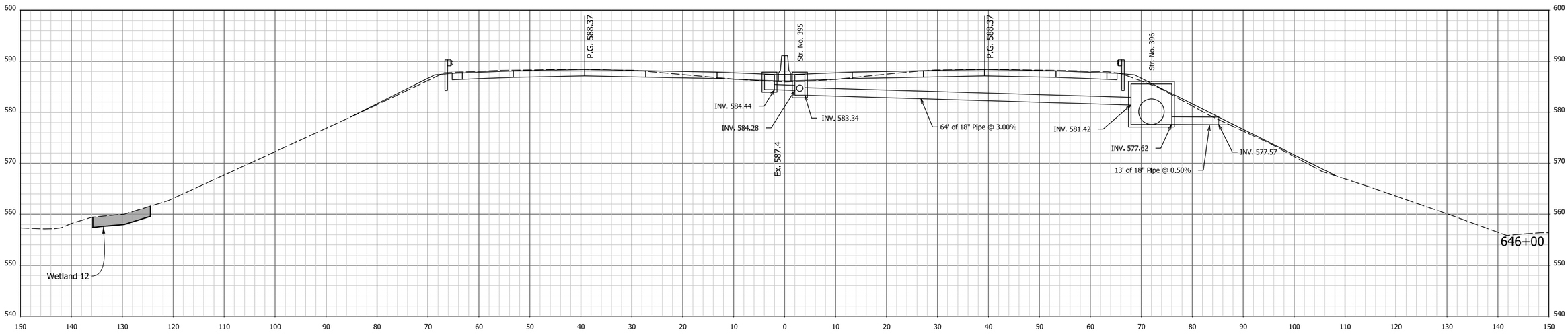
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 645+00 TO STA. 645+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
Electronic	87	of	246
CONTRACT	PROJECT		
R-41529	1700135		





Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 646+00 TO STA. 646+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	88 of 246
CONTRACT	PROJECT
R-41529	1700135

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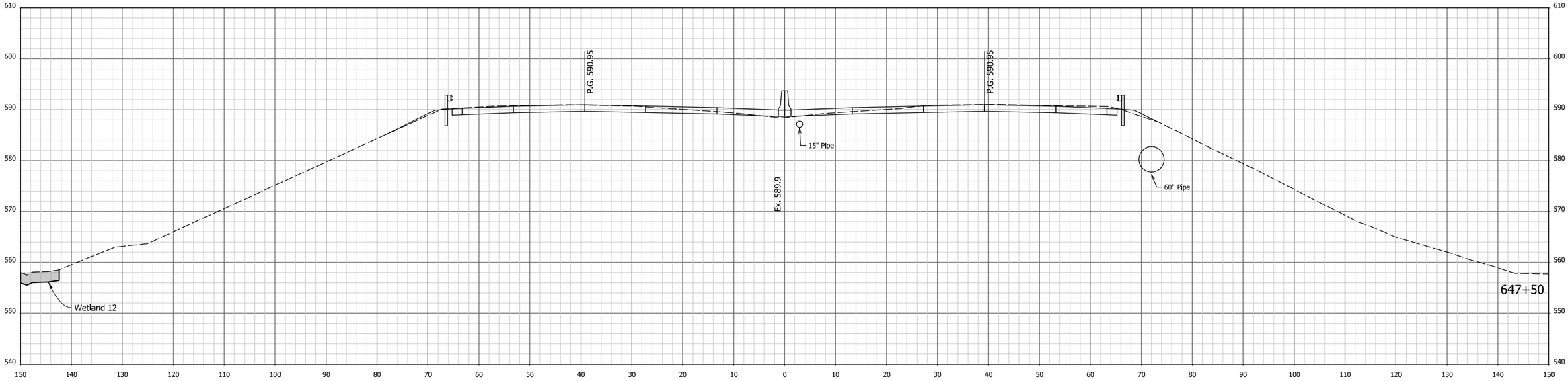

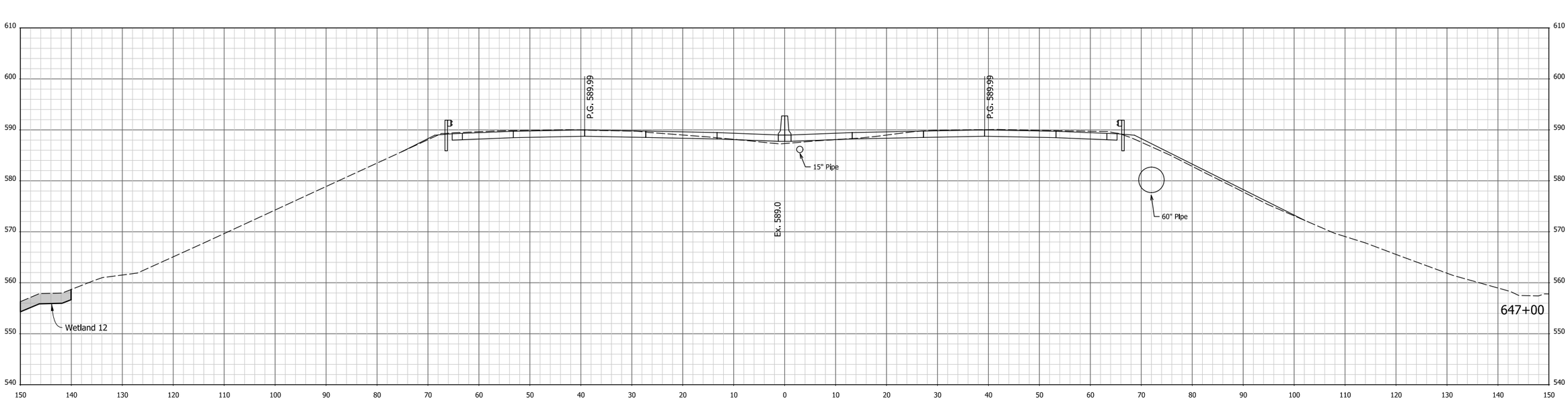

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Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

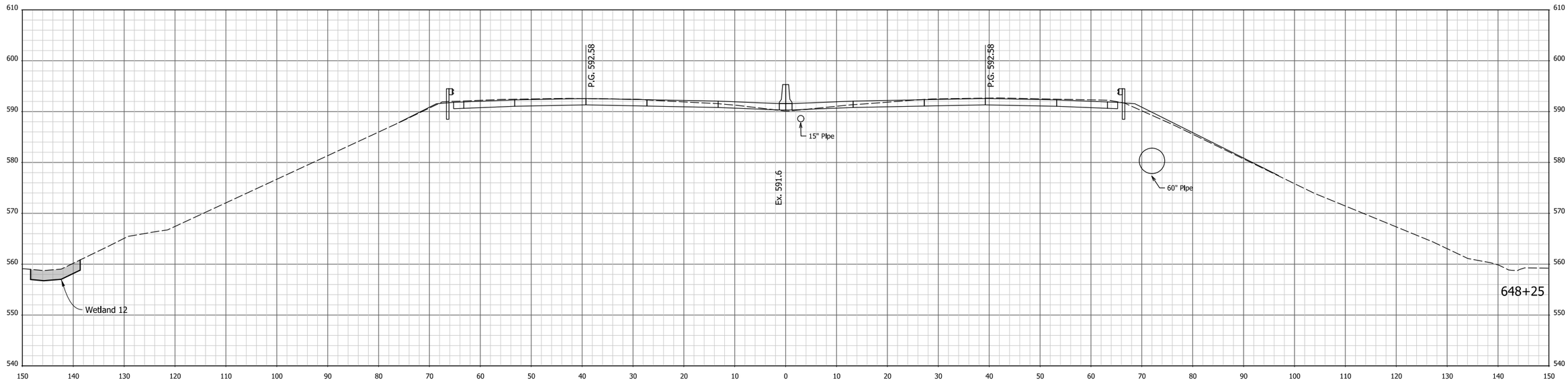
CHECKED: DJG CHECKED: DJG

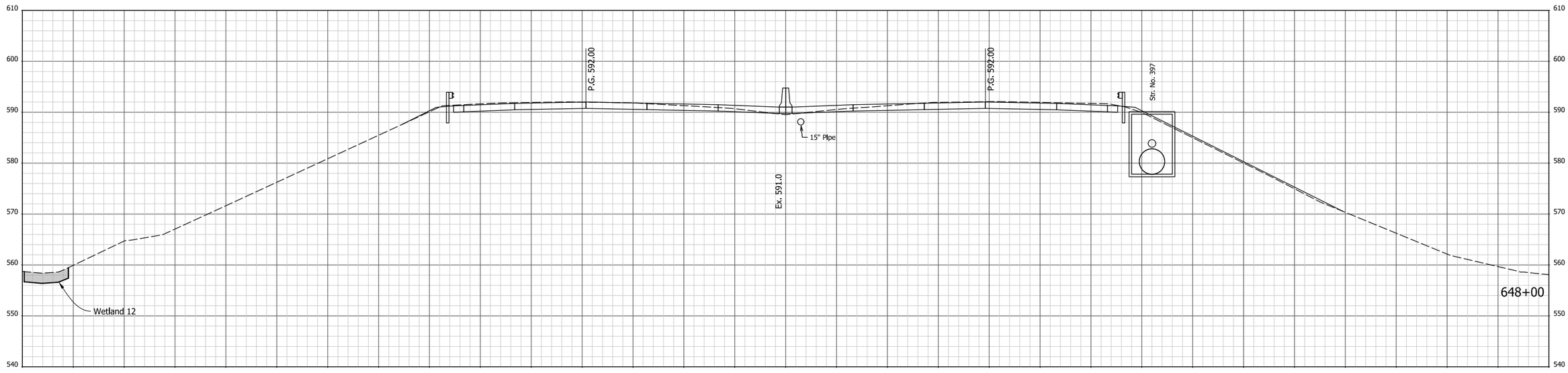
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 647+00 TO STA. 647+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
ElectronIc	89 of 246
CONTRACT	PROJECT
R-41529	1700135





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Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

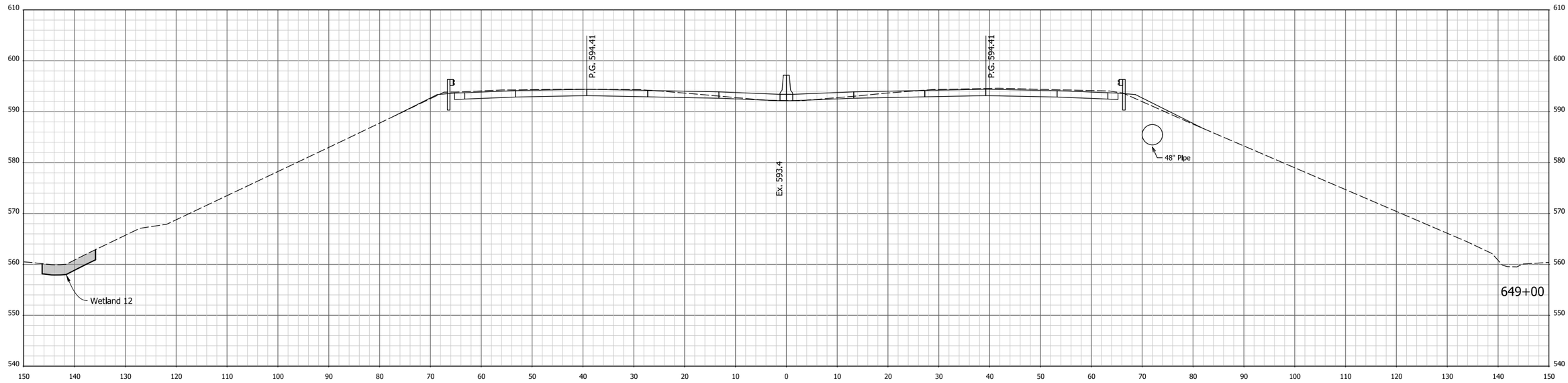
CHECKED: DJG CHECKED: DJG

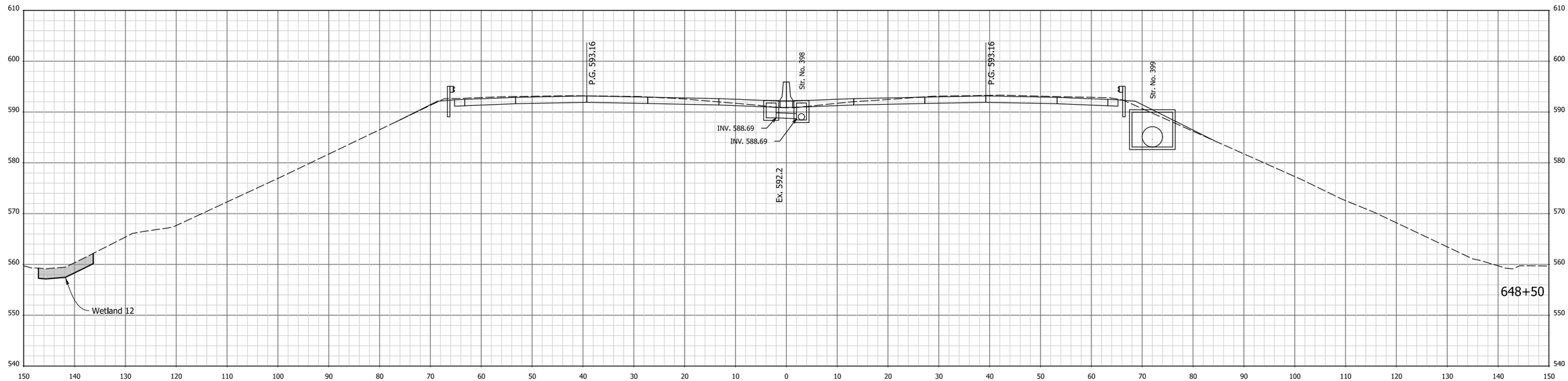
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 648+00 TO STA. 648+25 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	90 of 246
CONTRACT	PROJECT
R-41529	1700135





Attachment 14-1

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 648+50 TO STA. 649+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	91 of 246
CONTRACT	PROJECT
R-41529	1700135

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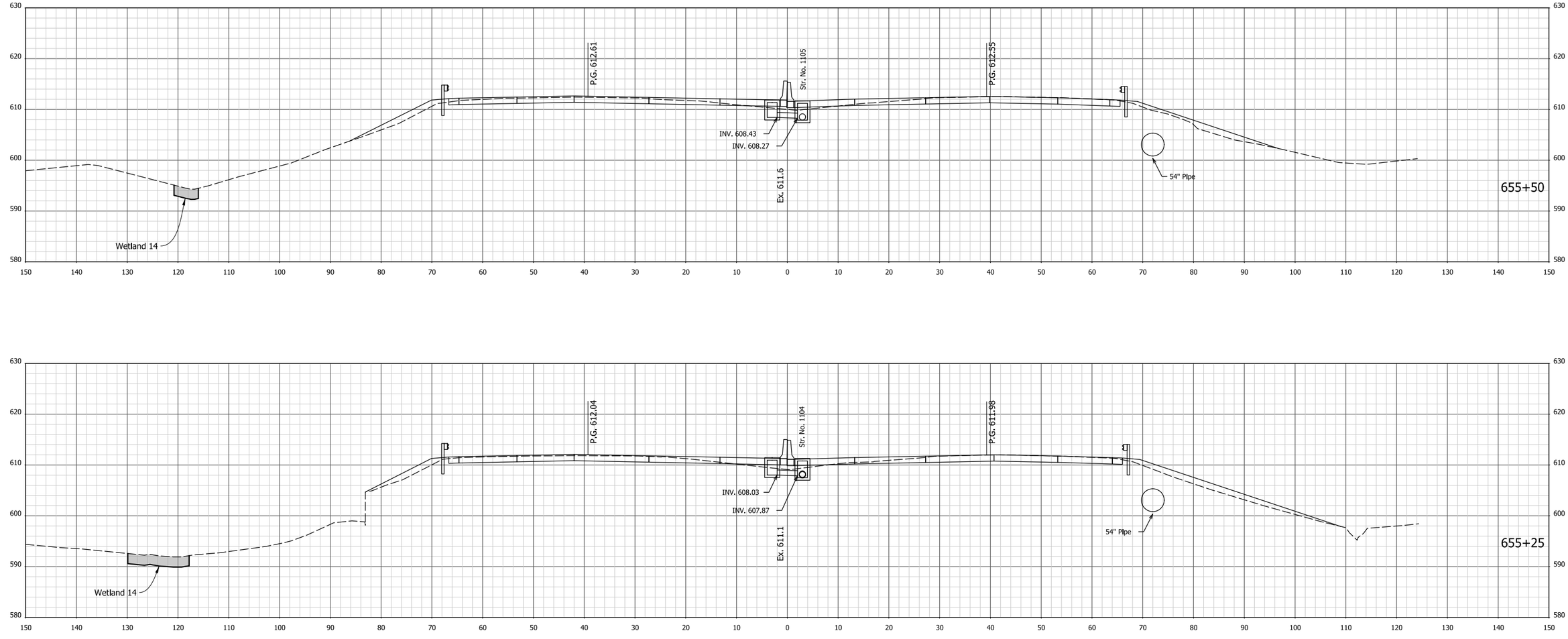


END PAVING LIMITS
STA. 655+23.07 "PR-Q", SB

I 12/9/2021 5:05:28 PM I P:\200035 - I65 ATL\09Road\03 Eng Computations\11 - Permits\Permit Exhibits\Plans\200035_ENV_Xsec_Line PR-Q.dgn

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

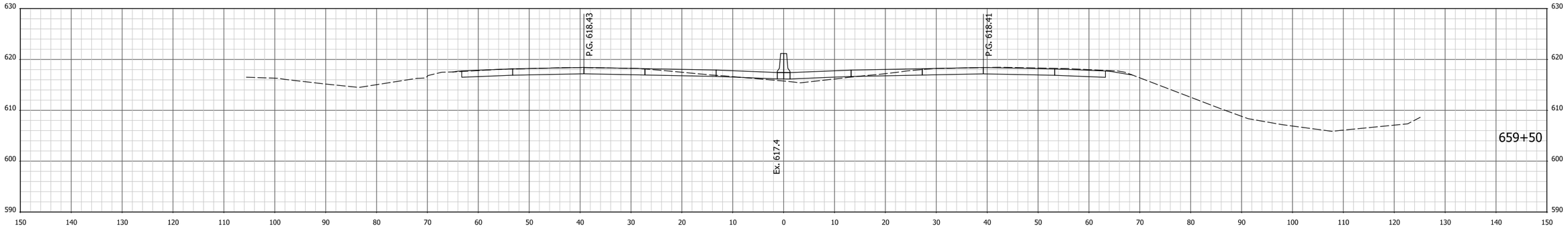
CHECKED: DJG CHECKED: DJG

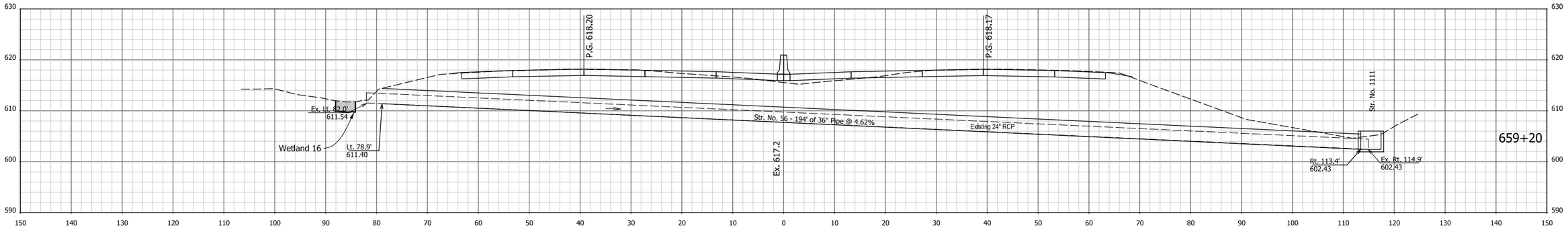
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 655+25 TO STA. 655+50 "PR-Q"

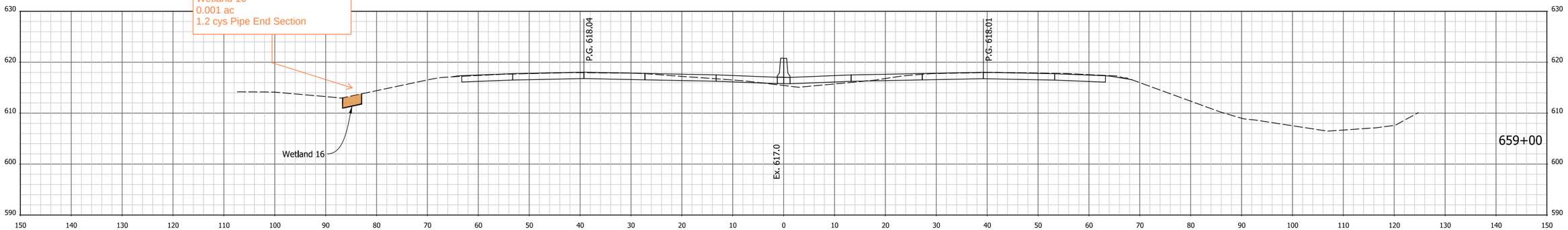
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	92 of 246
CONTRACT	PROJECT
R-41529	1700135





Cumulative Permanent Impacts
Wetland 16
0.001 ac
1.2 cys Pipe End Section



Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: AMD | DRAWN: JJP

CHECKED: DJG | CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 659+00 TO STA. 659+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	93 of 246
CONTRACT	PROJECT
R-41529	1700135

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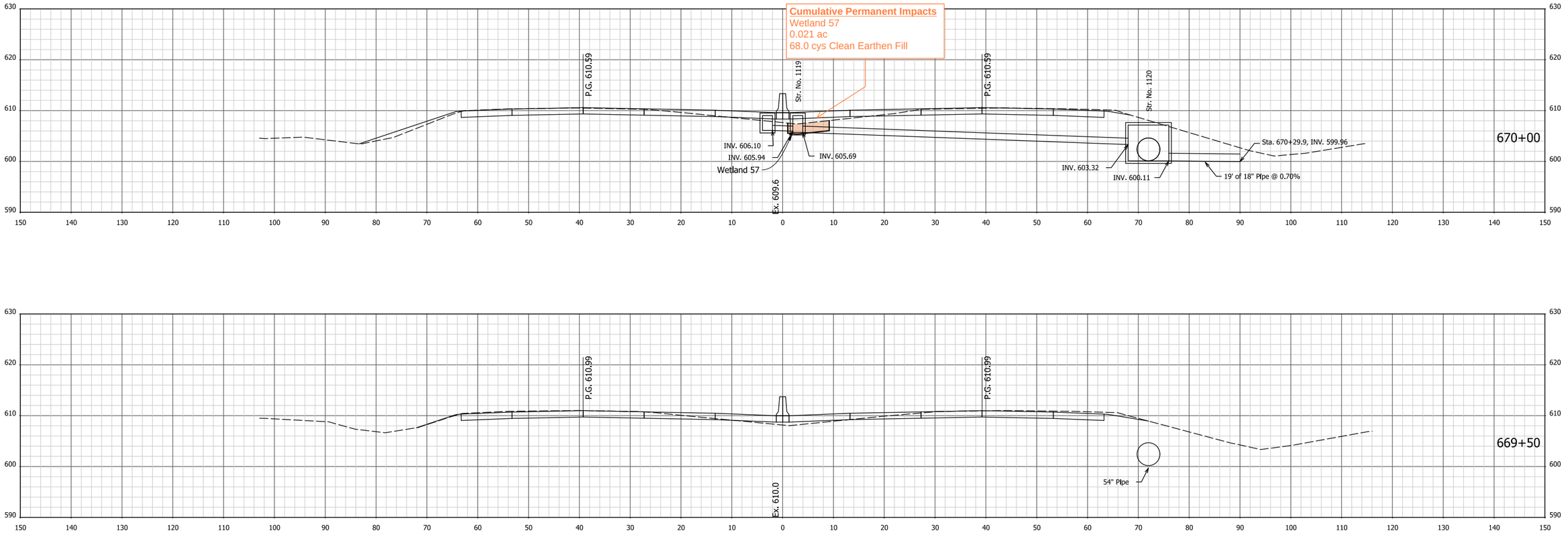

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: AMD DRAWN: JJP	CROSS SECTIONS
CHECKED: DJG CHECKED: DJG	STA. 669+50 TO STA. 670+00 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
Electronic	94 of 246
CONTRACT	PROJECT
R-41529	1700135

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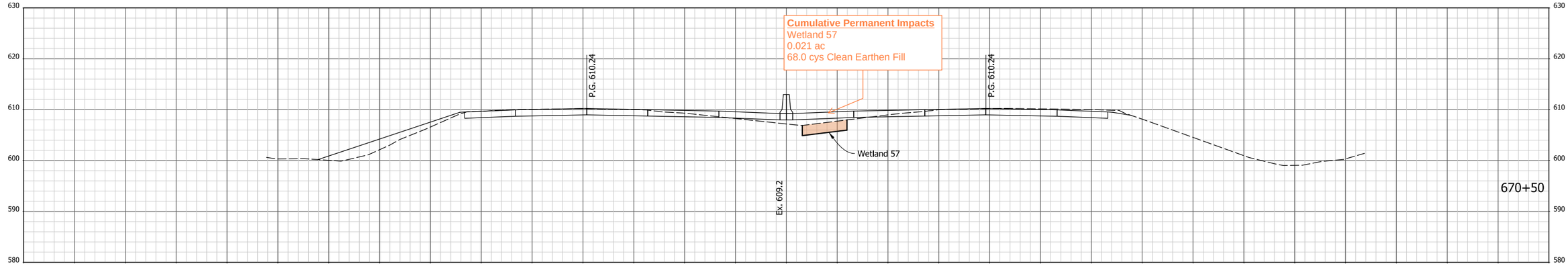

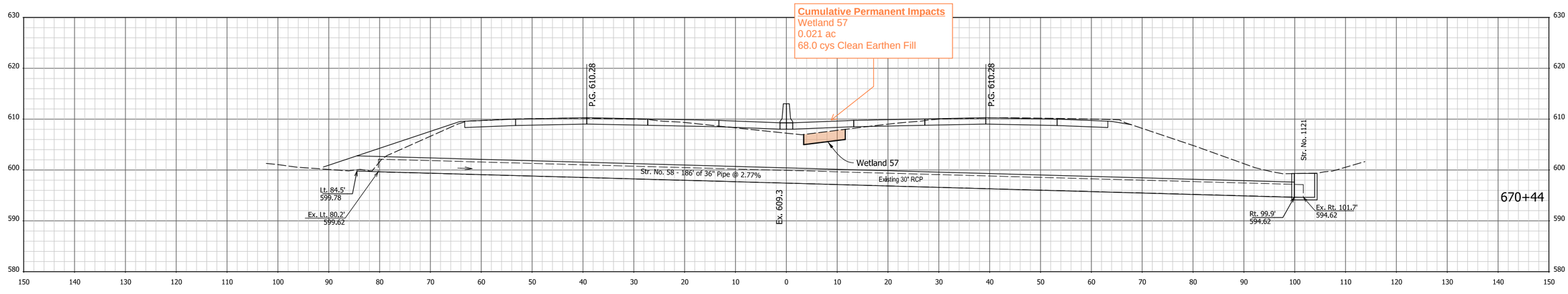

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMD DRAWN: JJP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
STA. 670+44 TO STA. 670+50 "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
Electronic	95 of 246
CONTRACT	PROJECT
R-41529	1700135

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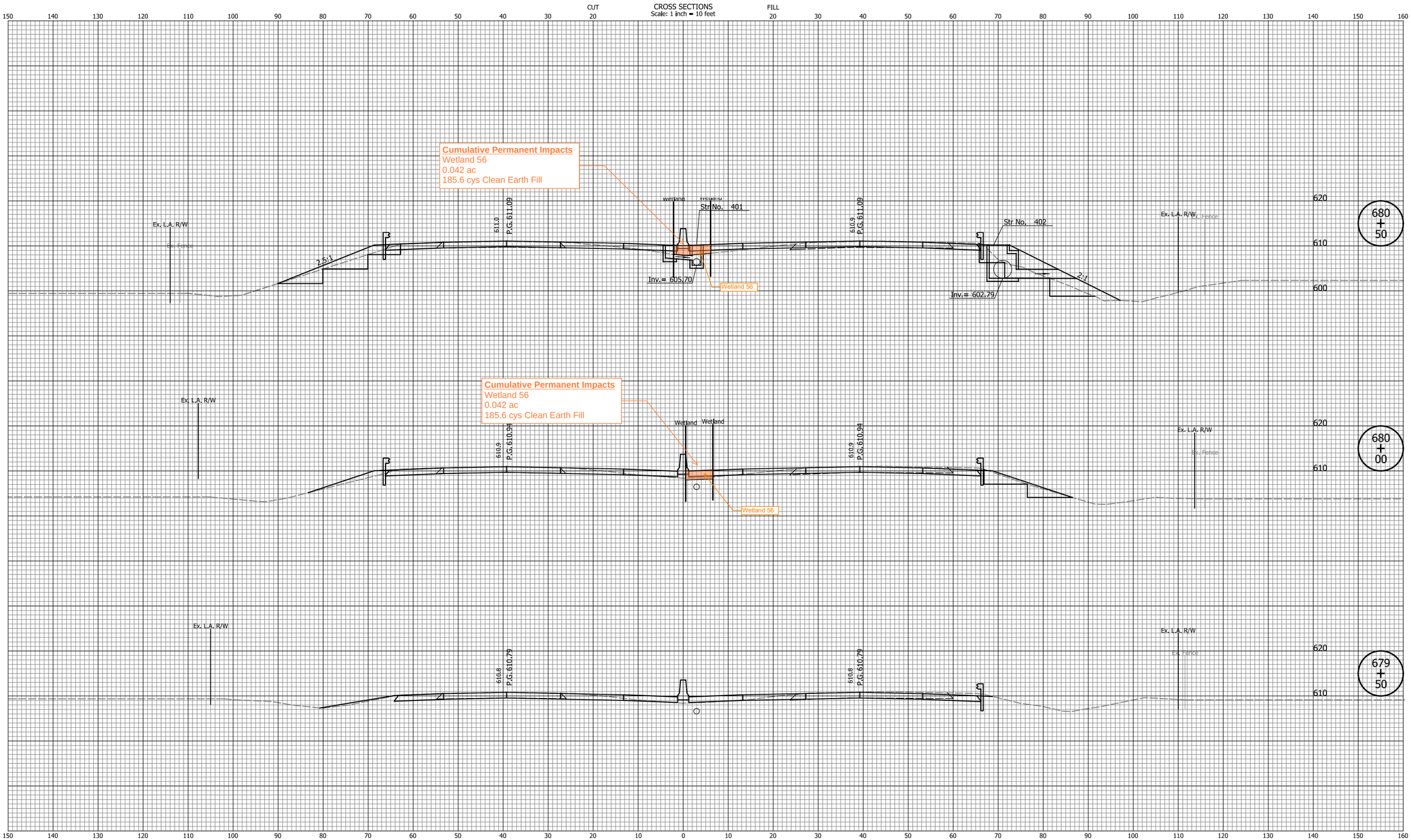


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

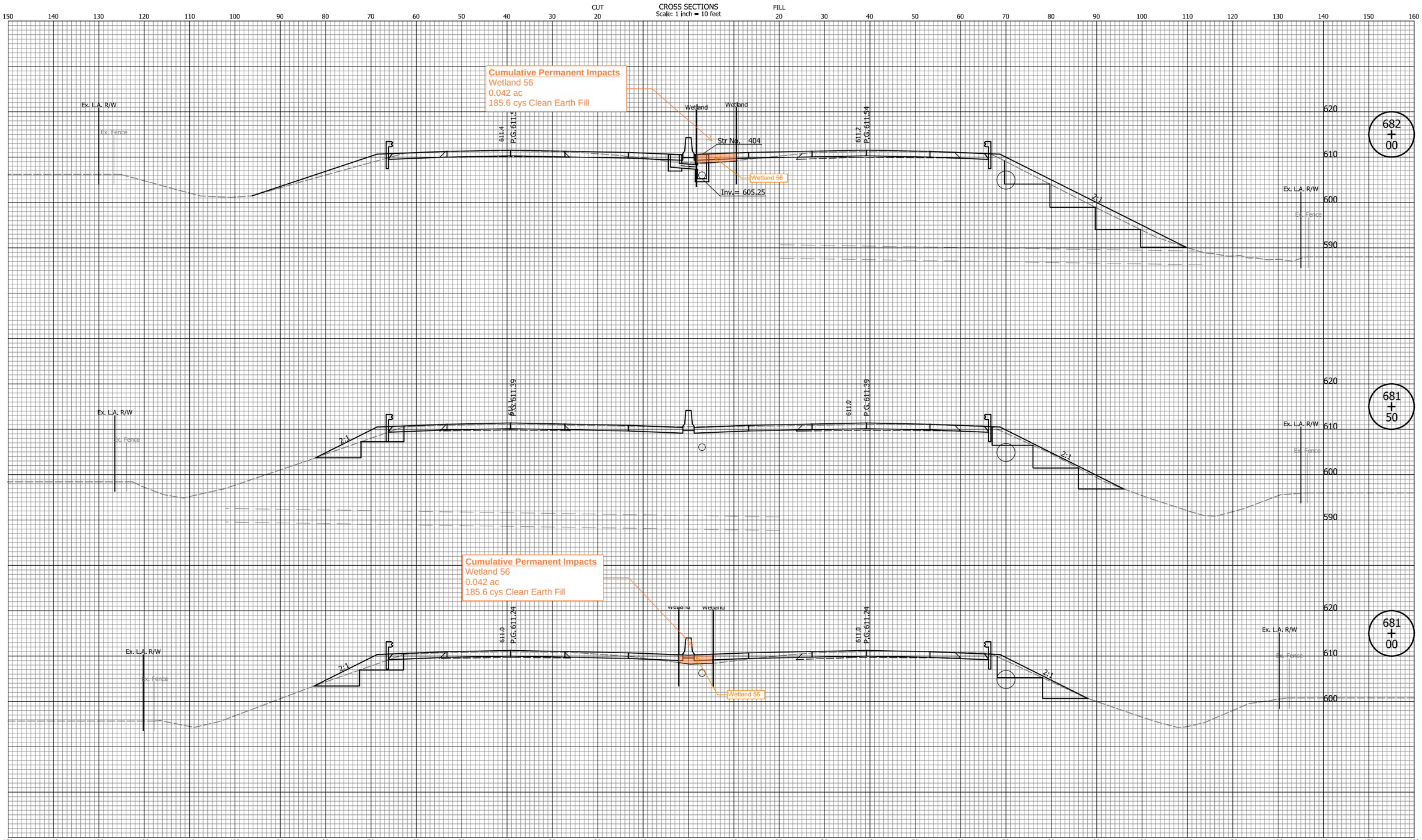
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	96 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:58:32 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

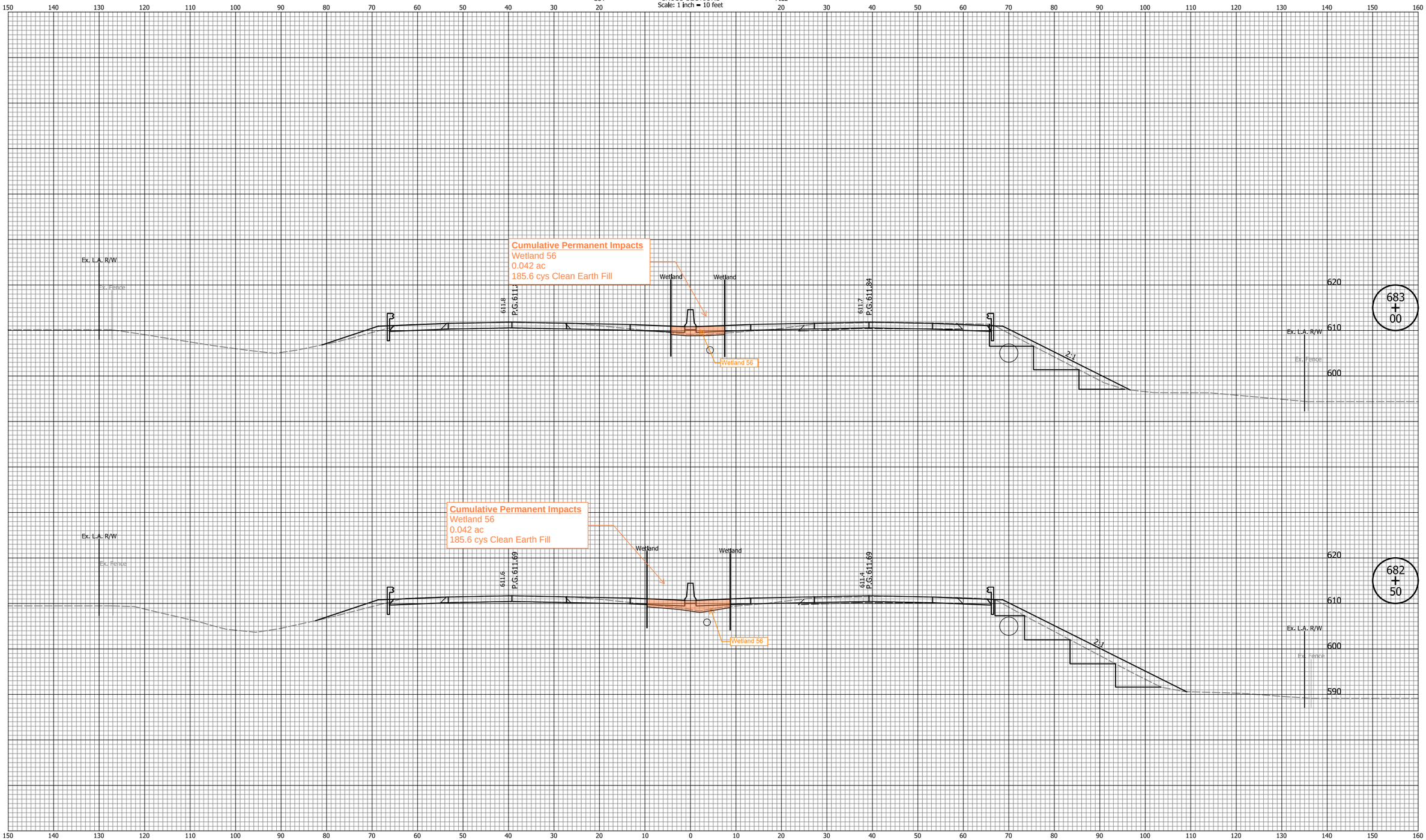
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	97 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:58:33 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	98 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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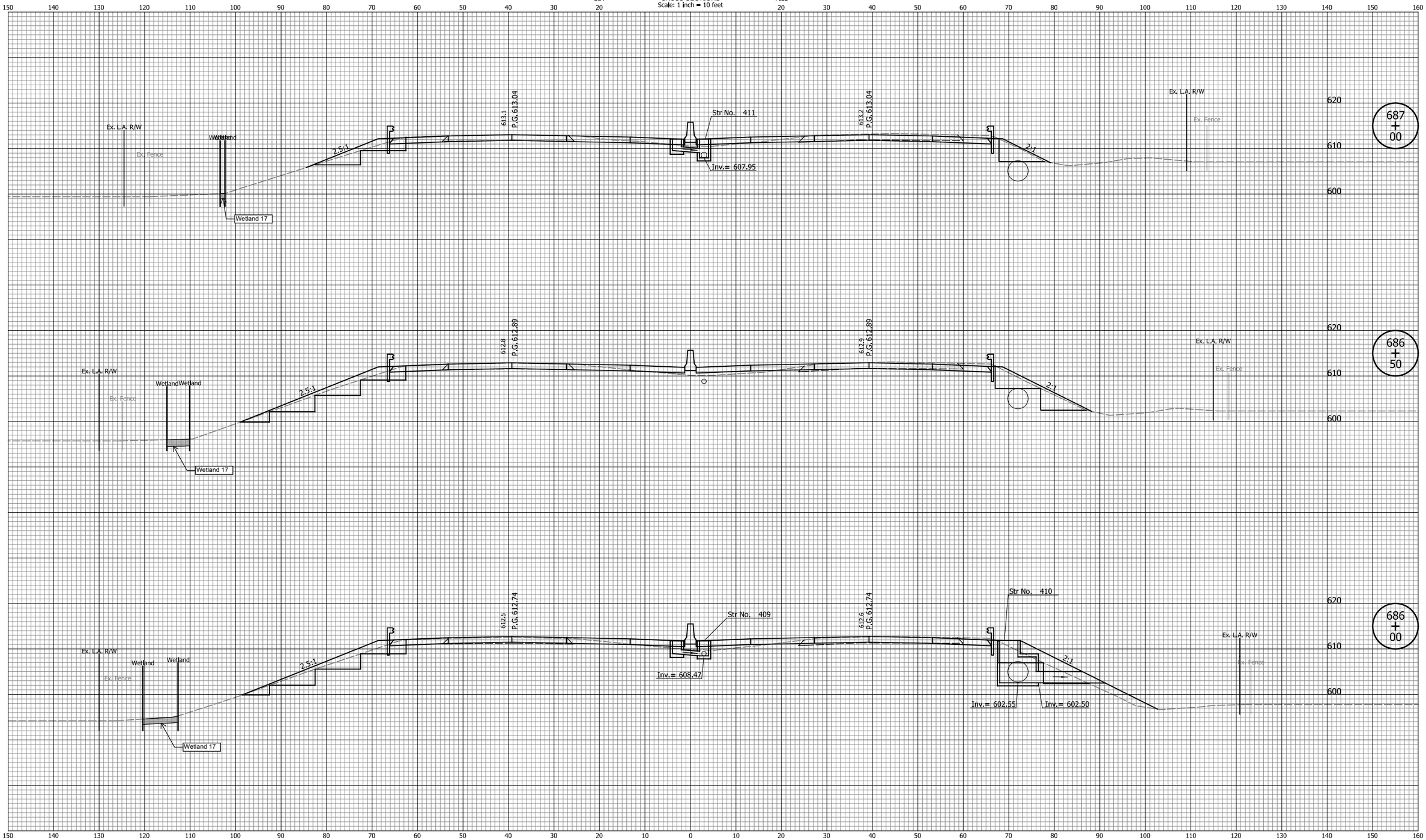


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	99 of 241
CONTRACT	PROJECT
R-41529	1700135

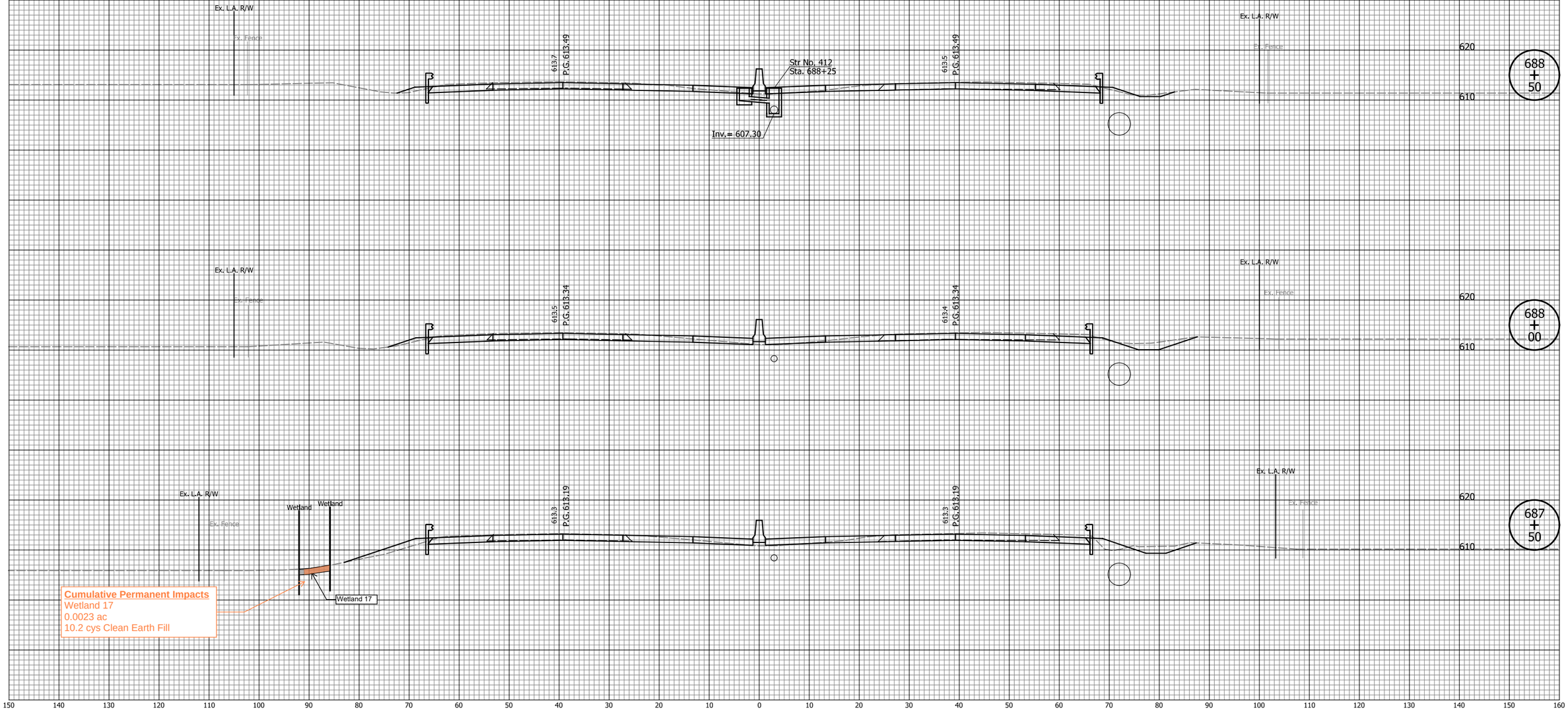
Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:58:41 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 — FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

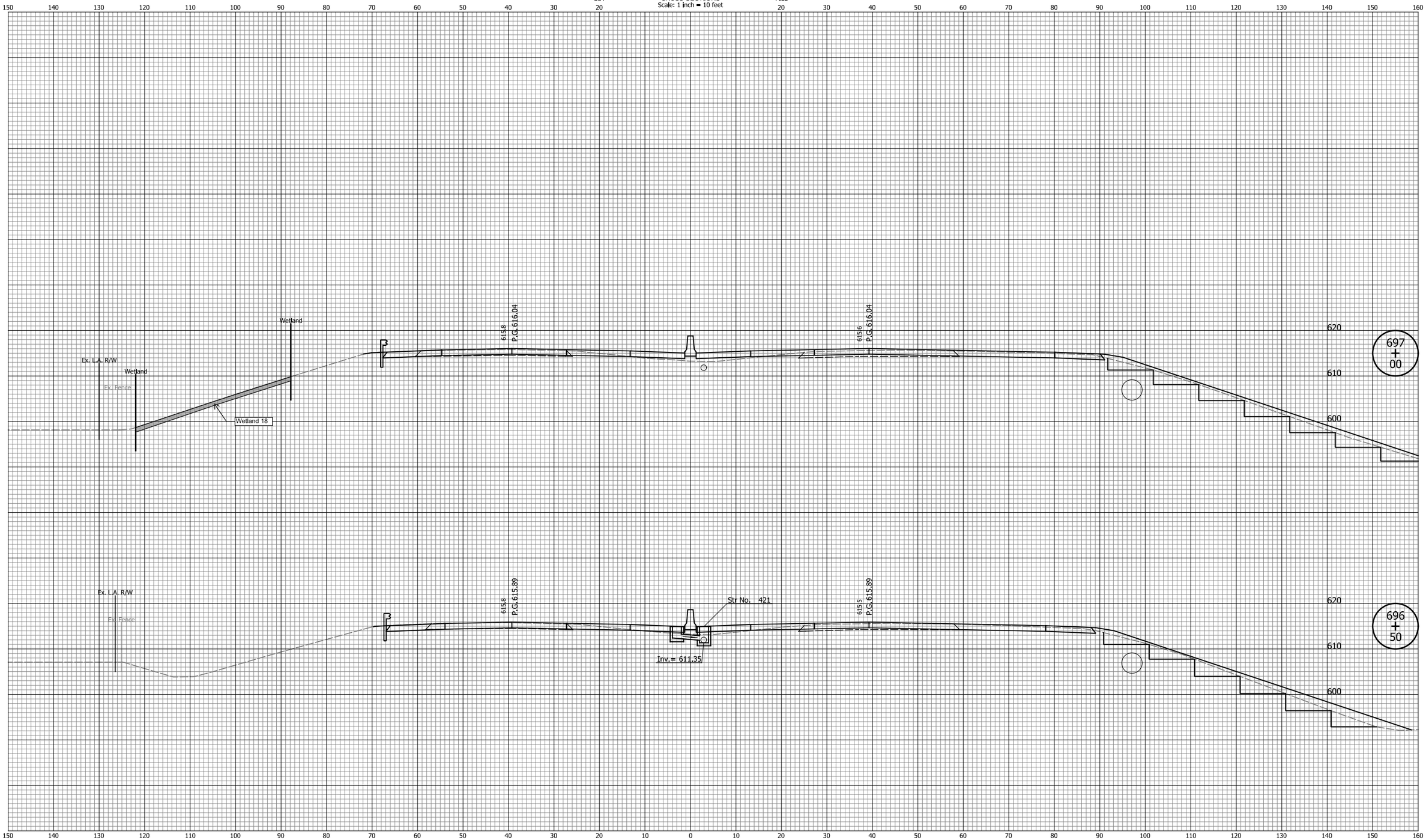
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	100 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-dist_a4crg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:58:43 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	101 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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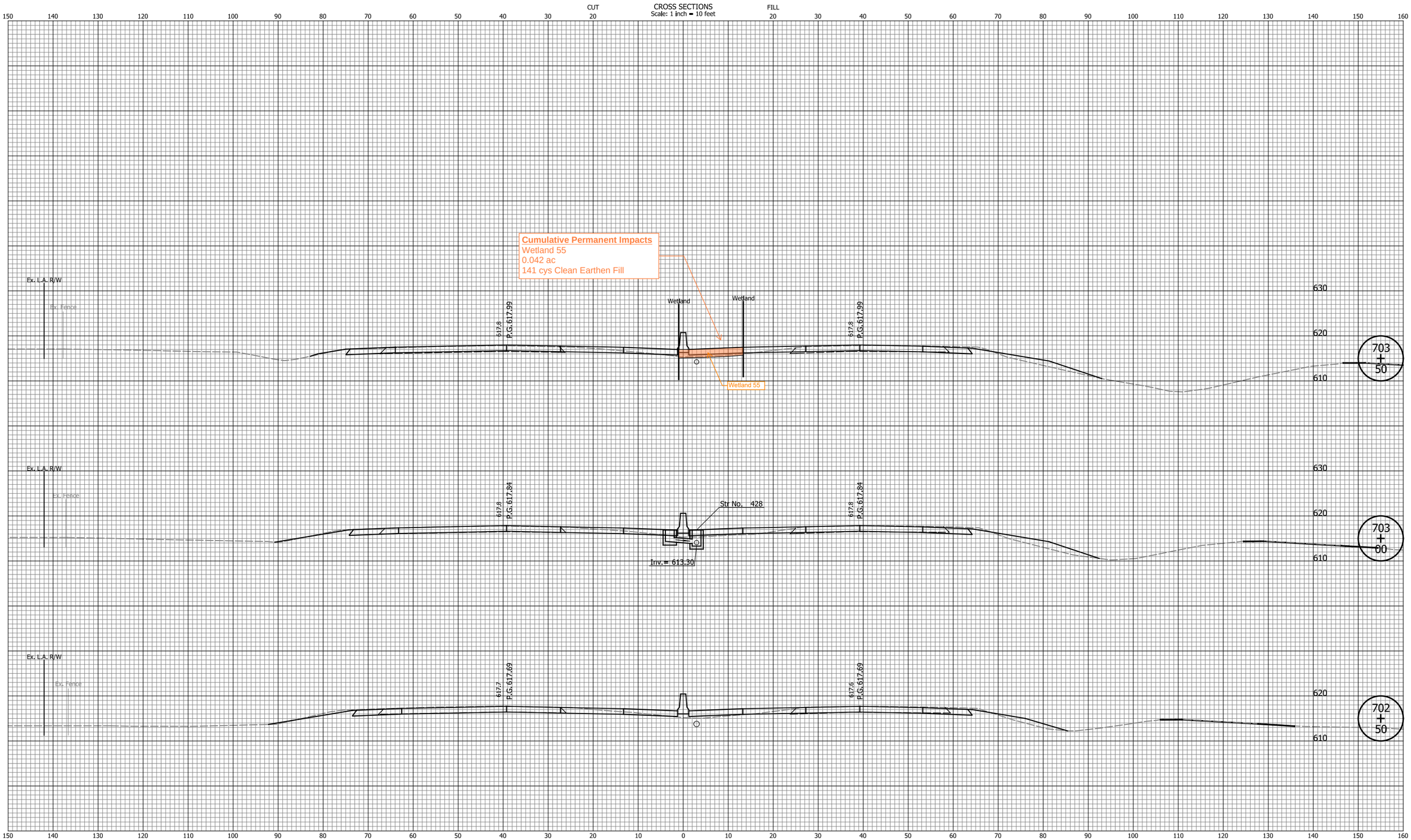


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

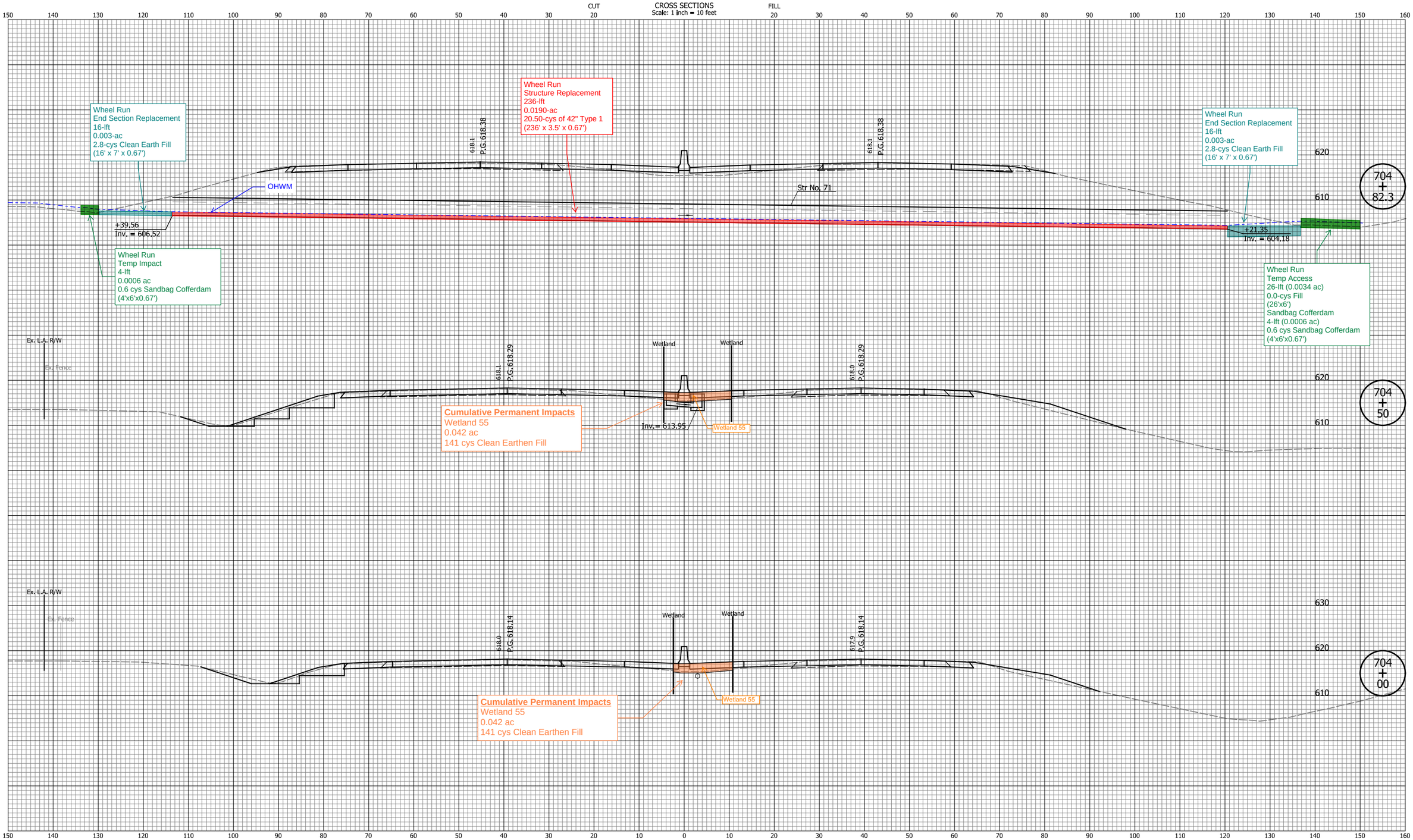
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	102 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:59:01 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	103 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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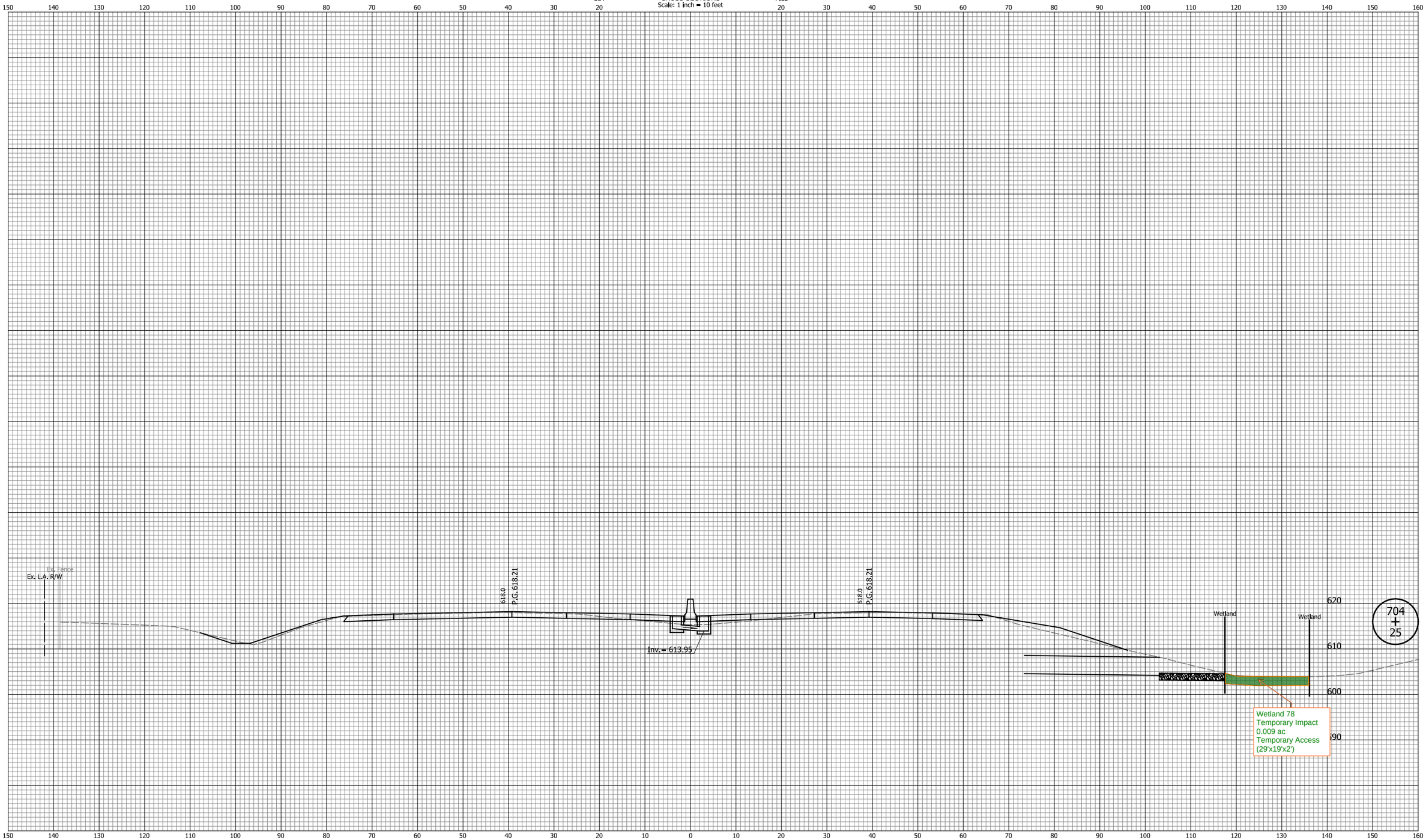

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	104 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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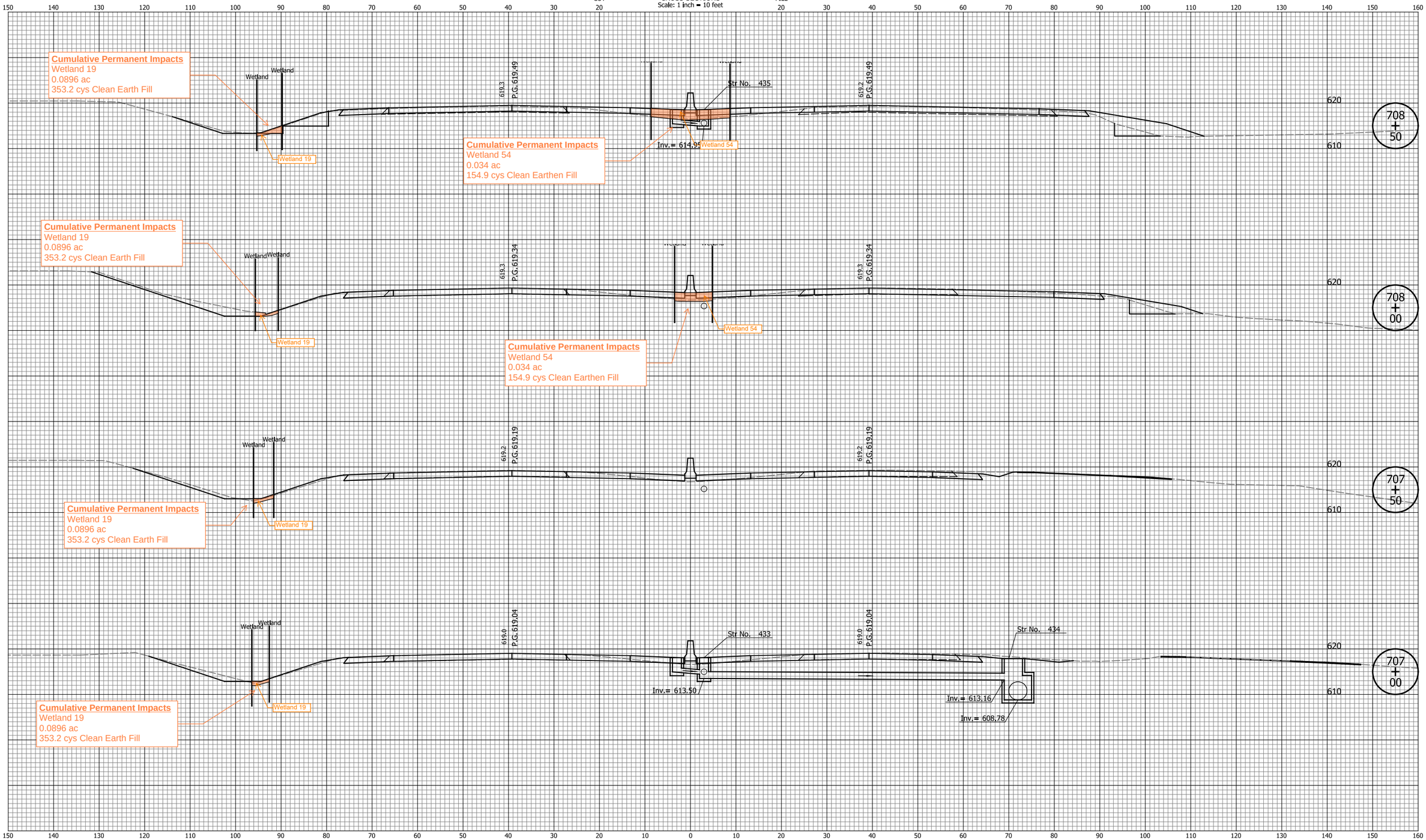

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	105 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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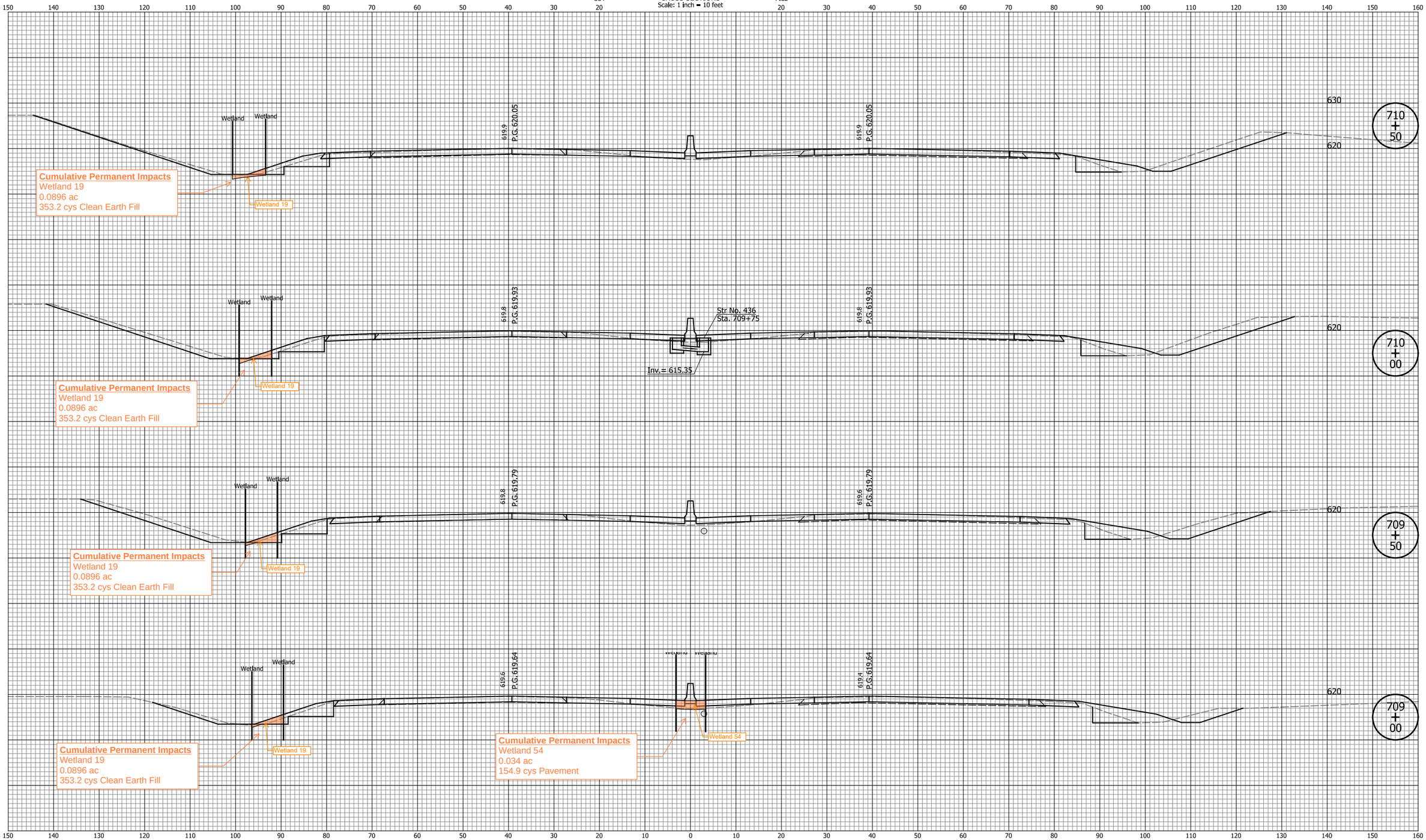


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	106 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

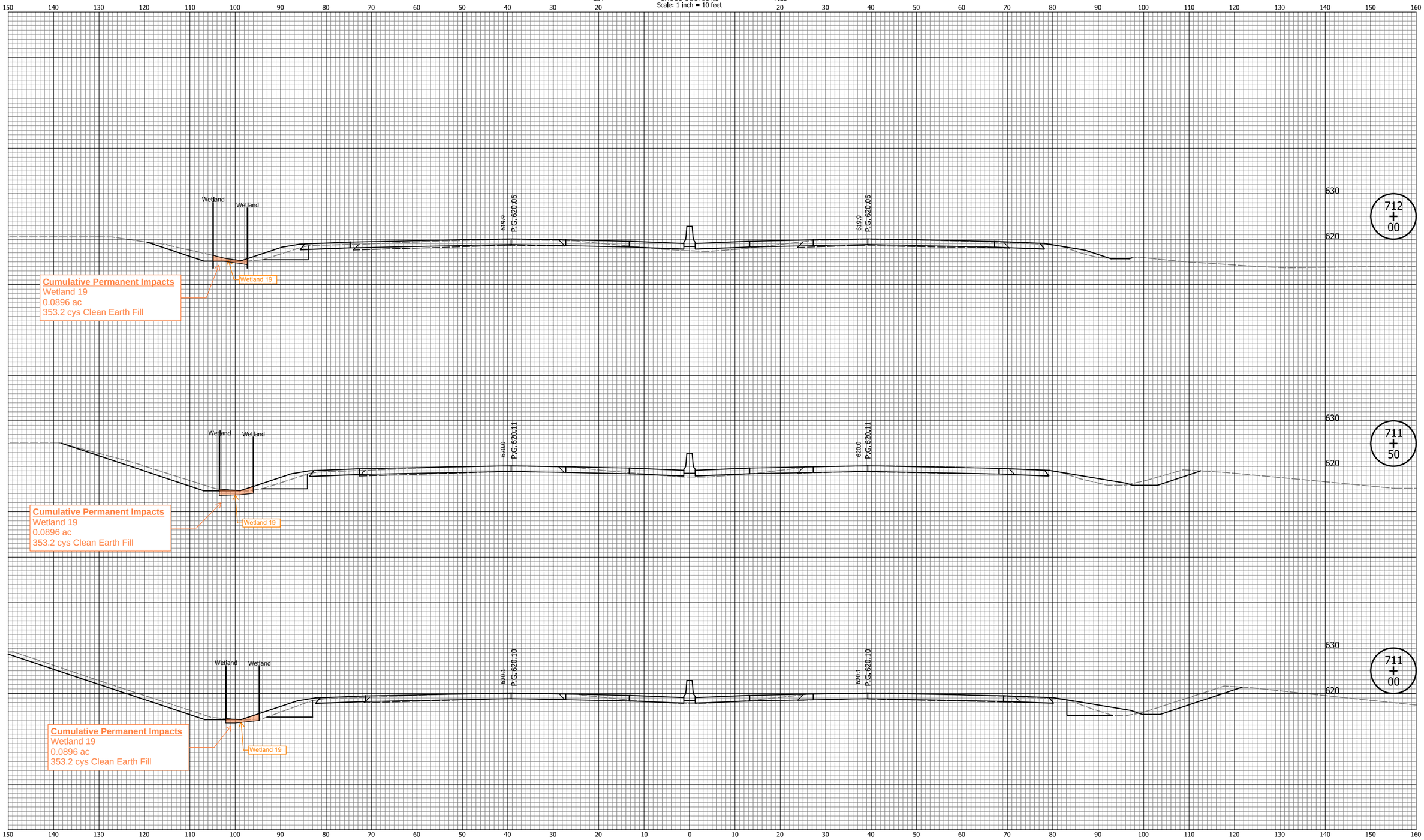
zmurphy 12/6/2021 6:59:08 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	107 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.dfcfg
Indiana_Shade.tbl

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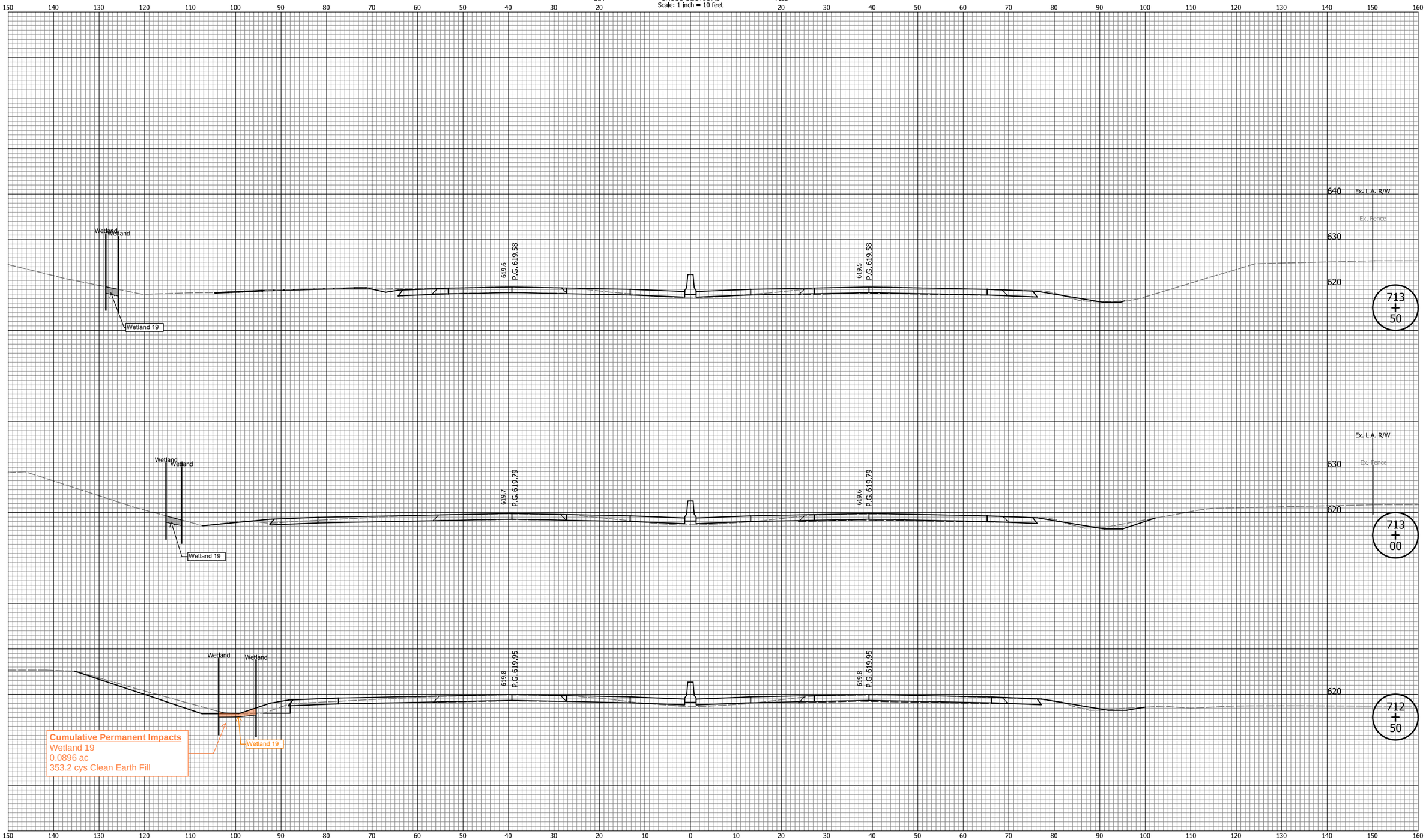


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

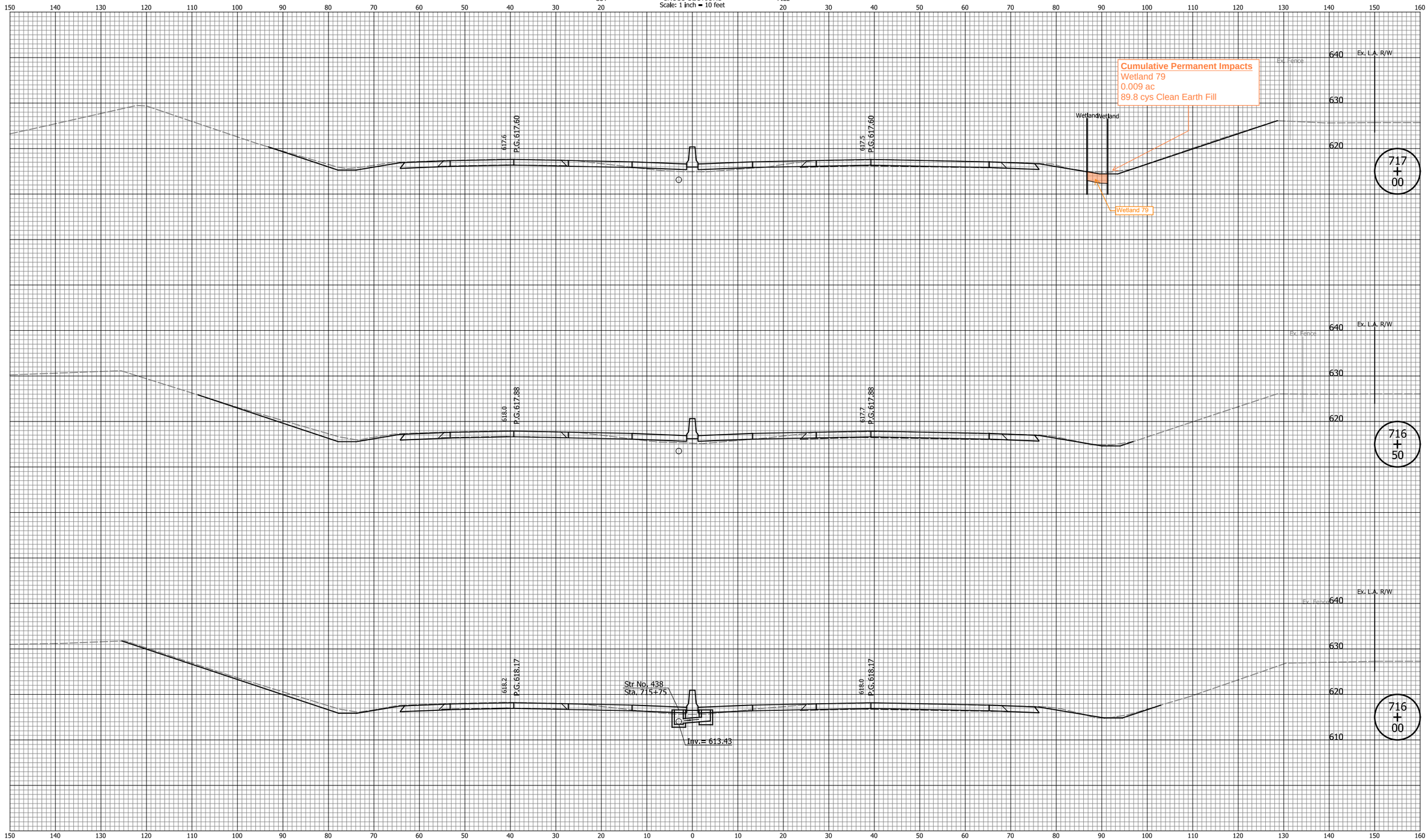
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	108 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:59:12 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	109 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

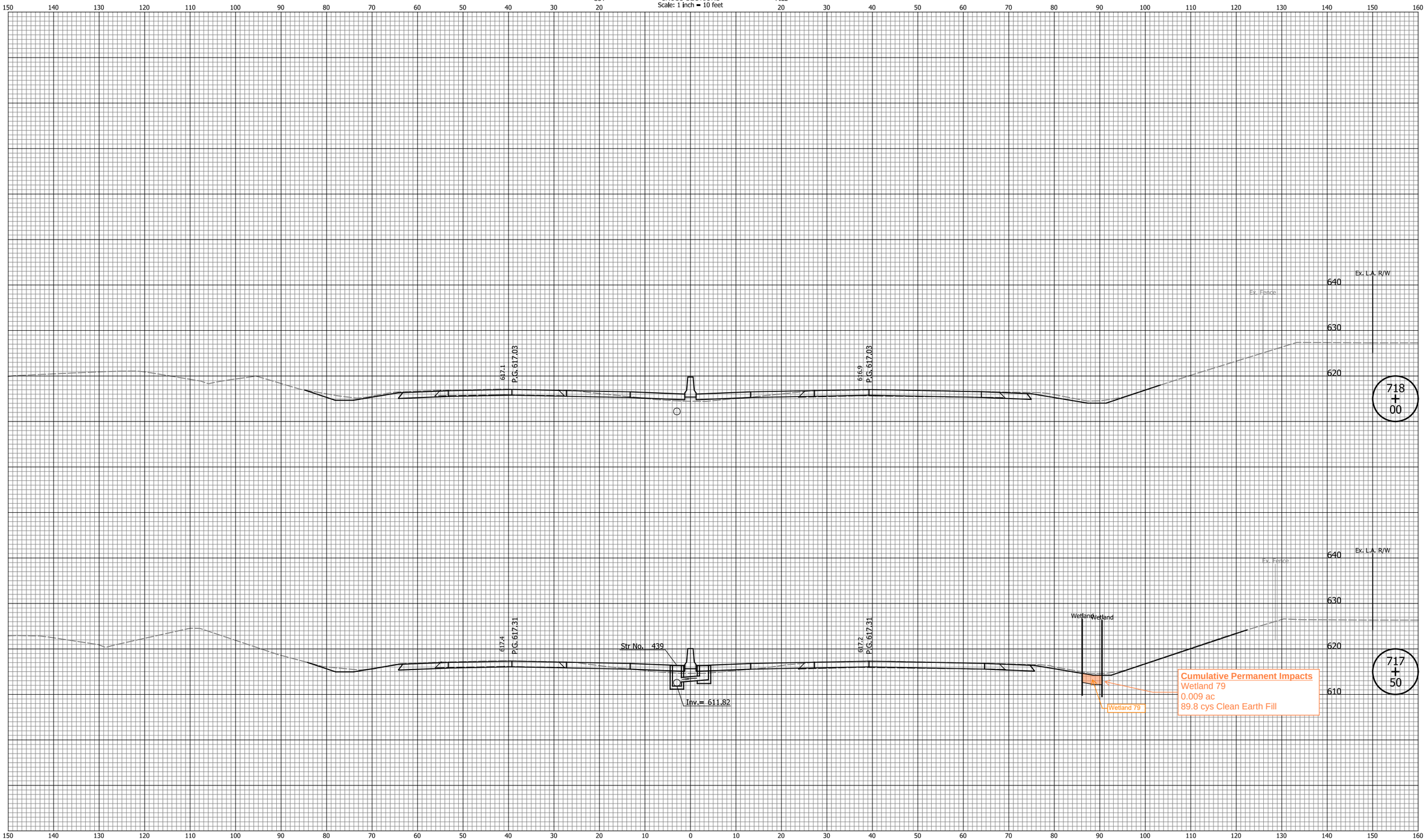
zmurphy 12/6/2021 6:59:18 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
N/A	110	of	241
CONTRACT	PROJECT		
R-41529	1700135		

Indy-shtf.ctb
Indiana_Shade.tbl

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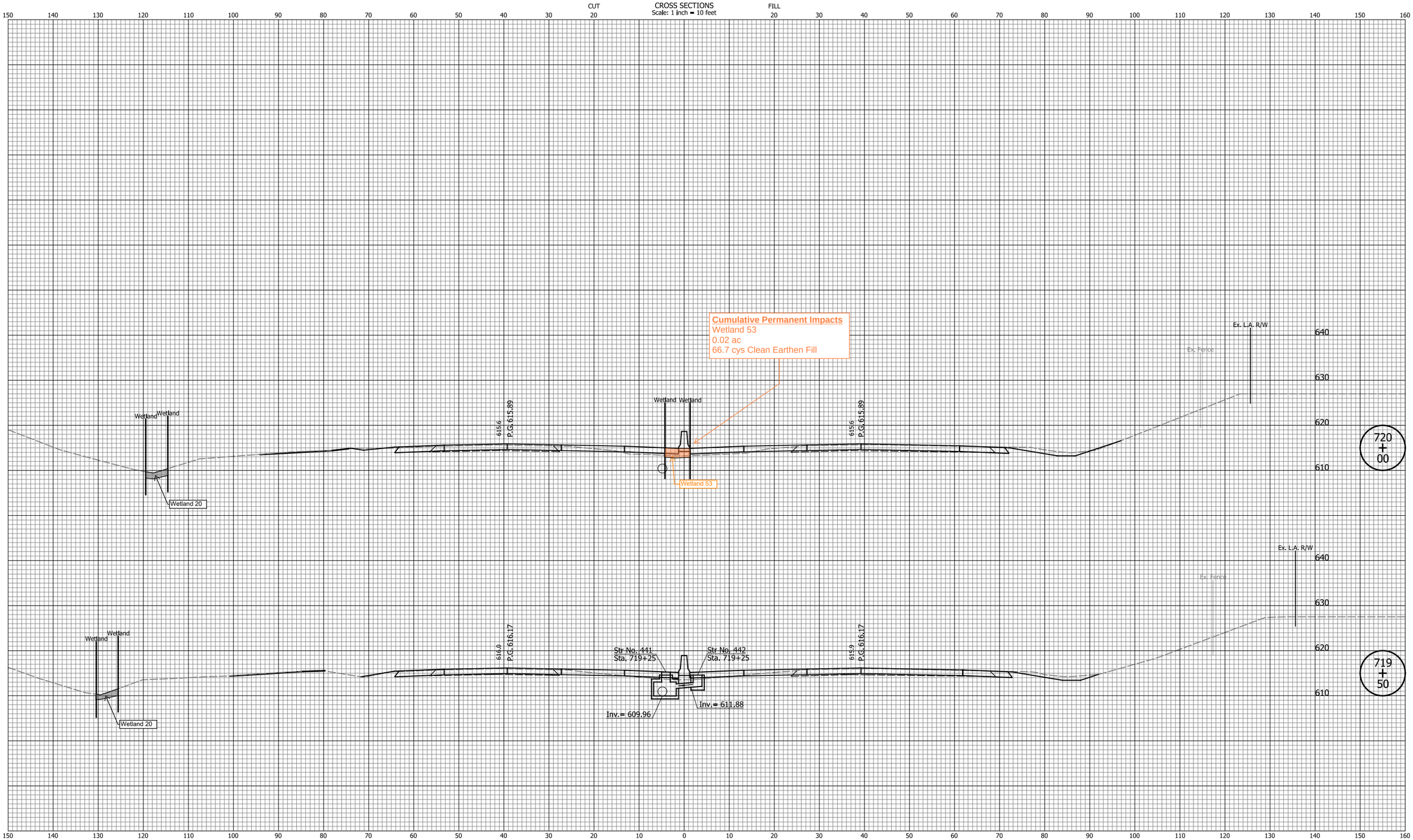

DATE	REVISION

Attachment 14-1

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DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

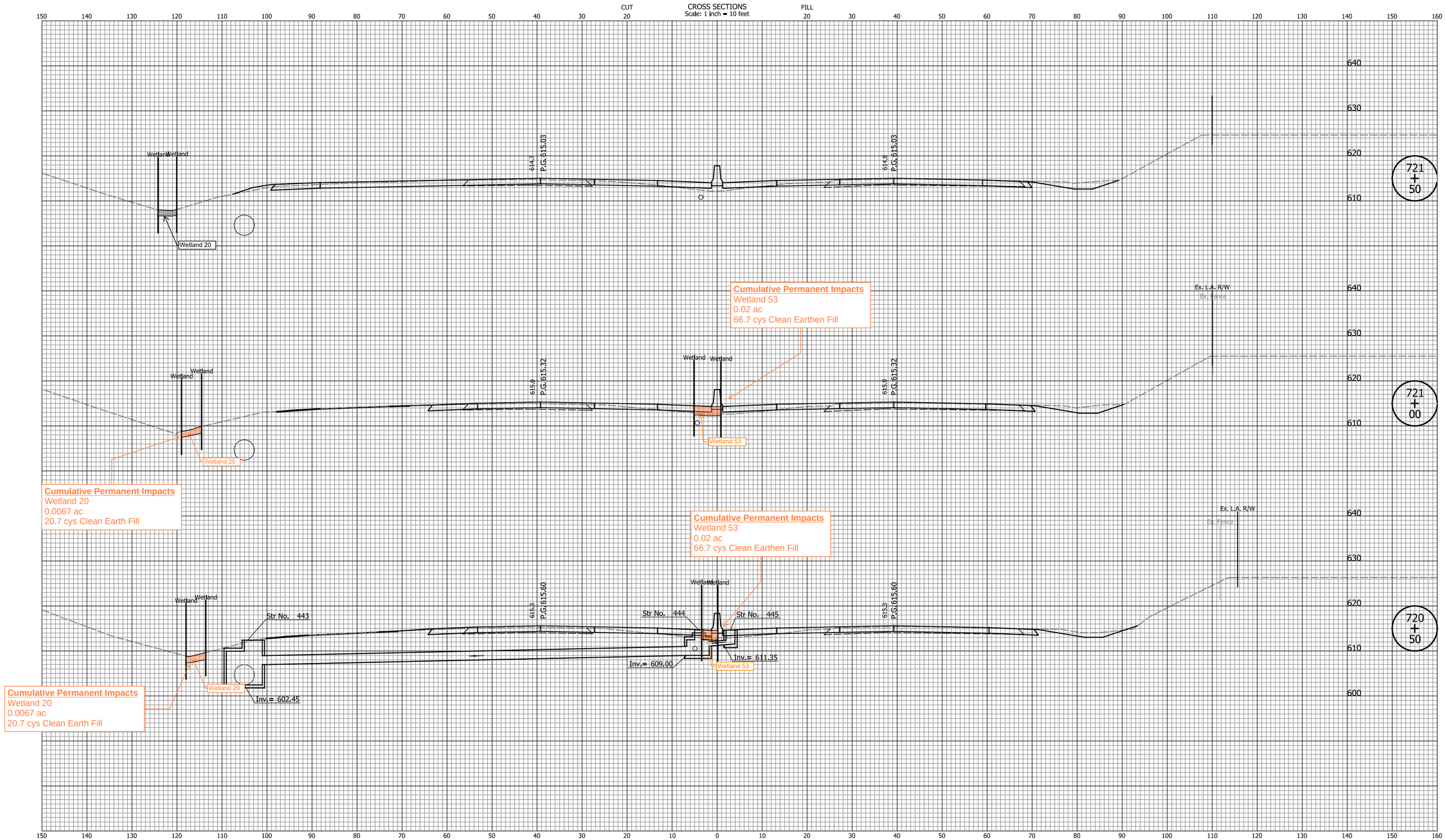
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	111 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:59:24 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	112 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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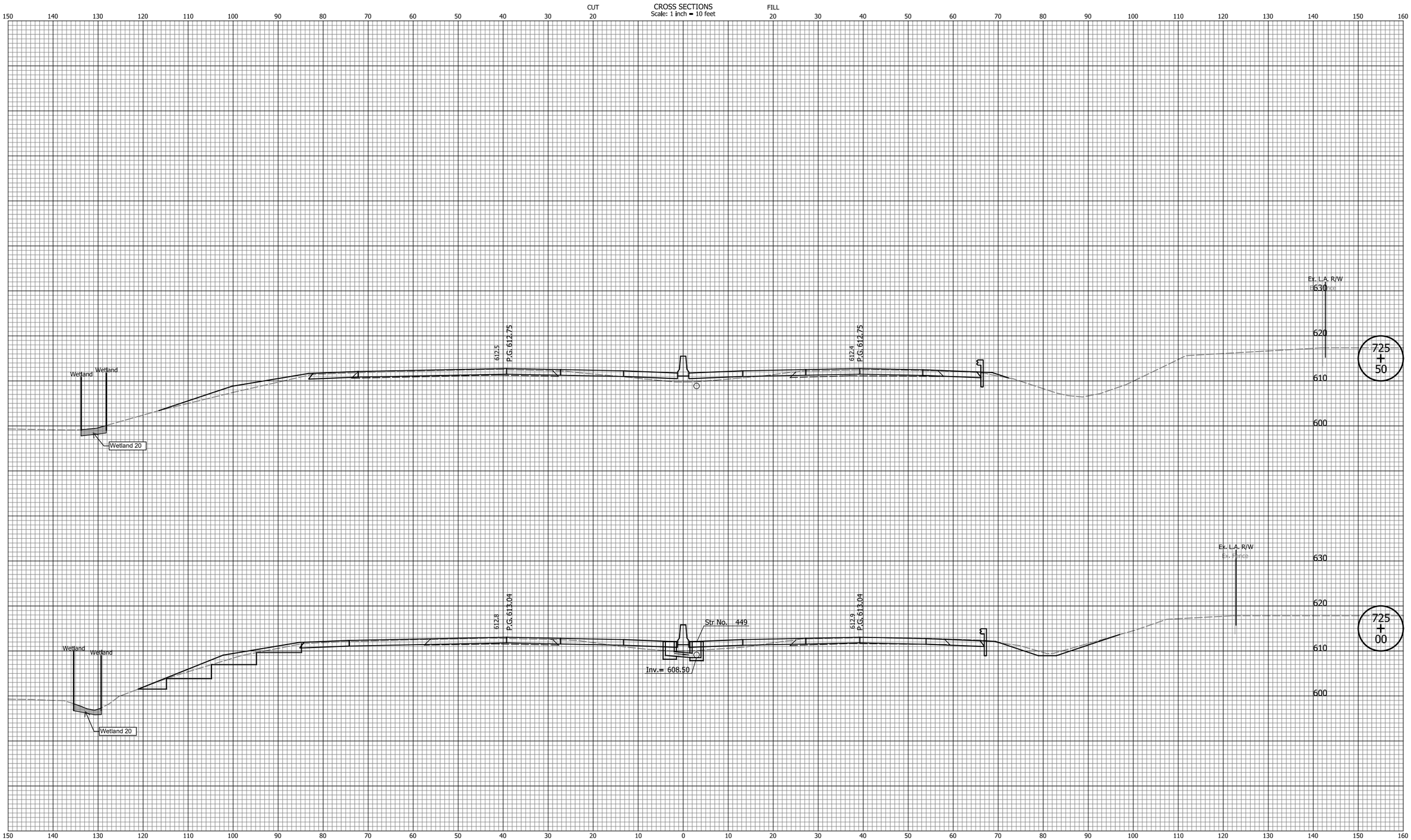

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	113 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:59:33 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS
Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

620 610 600

R/W
Fence
Wetland
Wetland
Wetland 21.1
612.2
P.G.612.27
Str No. 450
Inv.= 607.48
612.0
P.G.612.27
Str No. 451
Sta. 726+25
Inv.= 599.06
726 + 50

630 620 610 600

R/W
Fence
Wetland
Wetland
Wetland 21.1
612.3
P.G.612.48
612.2
P.G.612.48
726 + 00

Cumulative Permanent Impacts
Wetland 21.1
0.0159 ac
10.4 cys Clean Earth Fill

West Fork Silver Creek
Impacts below OHWM
Existing Pipe Abandonment
255 lft existing 72" pipe abandonment
0.035 ac
22.6 cys flowable fill (concrete to backfill existing pipe)
(255'x6'x0.4')

620 610 600

612.4
P.G.612.66
612.3
P.G.612.66
OHWM
Str No. 72
725 + 67.12

West Fork Silver Creek
Permanent Impact
22 lft
0.003 ac
10 cys Class 1 Riprap
(22'x6'x2')

West Fork Silver Creek
Permanent Impact
14 lft
0.002 ac
6.5 cys Class 1 Riprap
(14'x6'x2')

Sta. 724+94.41
Inv. = 596.82

Sta. 726+04.25
Inv. = 594.56

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
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DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	114 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.dgn
Indiana_Shade.tbl

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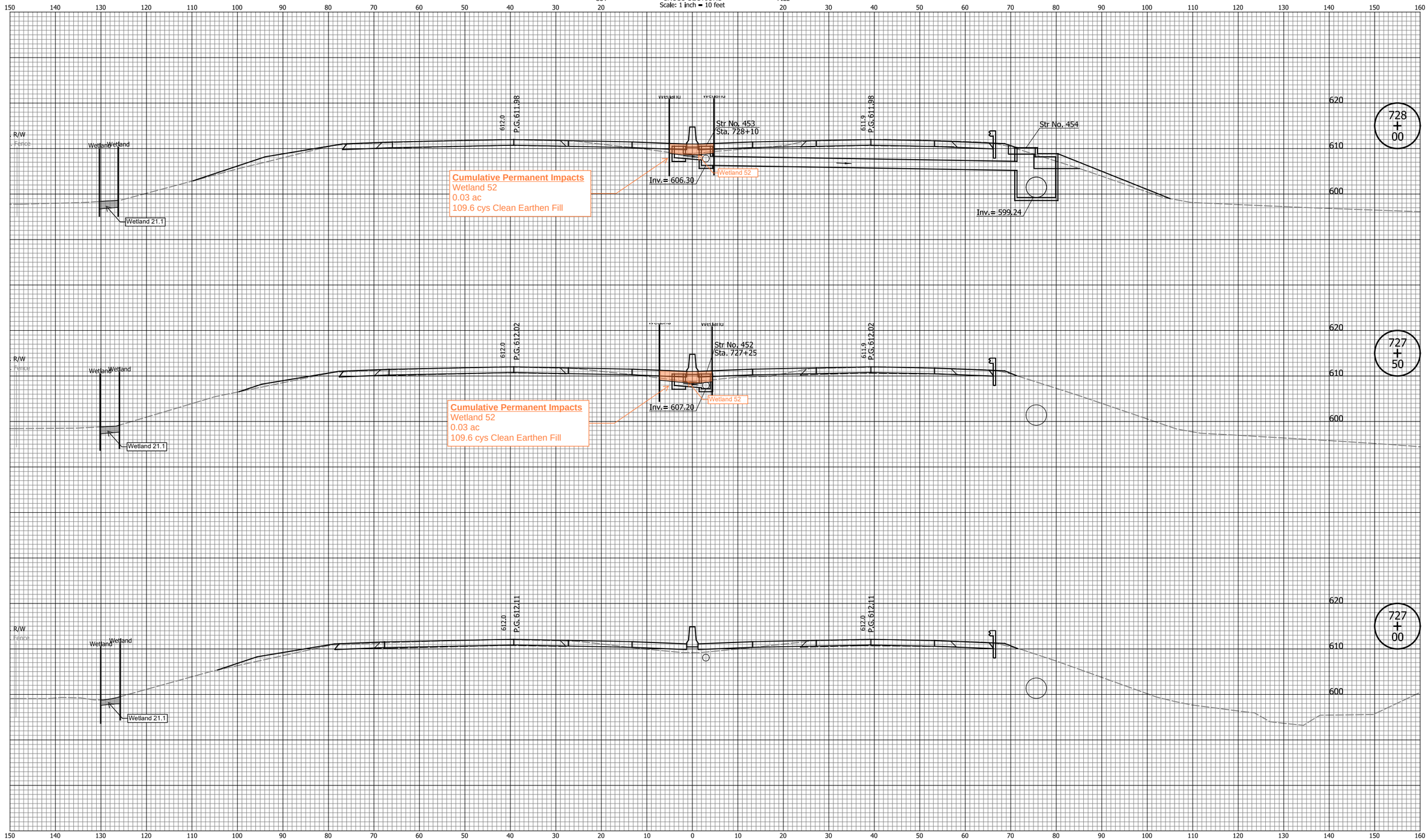

DATE	REVISION

Attachment 14-1

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	115 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 6:59:37 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

620
610
600

Ex. L.A. R/W
Ex. Fence

612.1
P.G.612.21

612.1
P.G.612.21

℄

729 + 50

620
610
600

R/W
Ex. Fence

612.0
P.G.612.07

Str No. 458

Inv.= 607.30

612.0
P.G.612.07

℄

729 + 00

620
610
600

R/W
Fence

612.0
P.G.612.00

Wetland

Wetland

Str No. 456

Inv.= 607.15

Wetland 52

611.9
P.G.612.00

℄

728 + 50

620
610
600

Cumulative Permanent Impacts
Wetland 52
0.03 ac
109.6 cys Clean Earthen Fill

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD

CHECKED: CDH | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	116 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwrg
Indiana_Shade.tbl

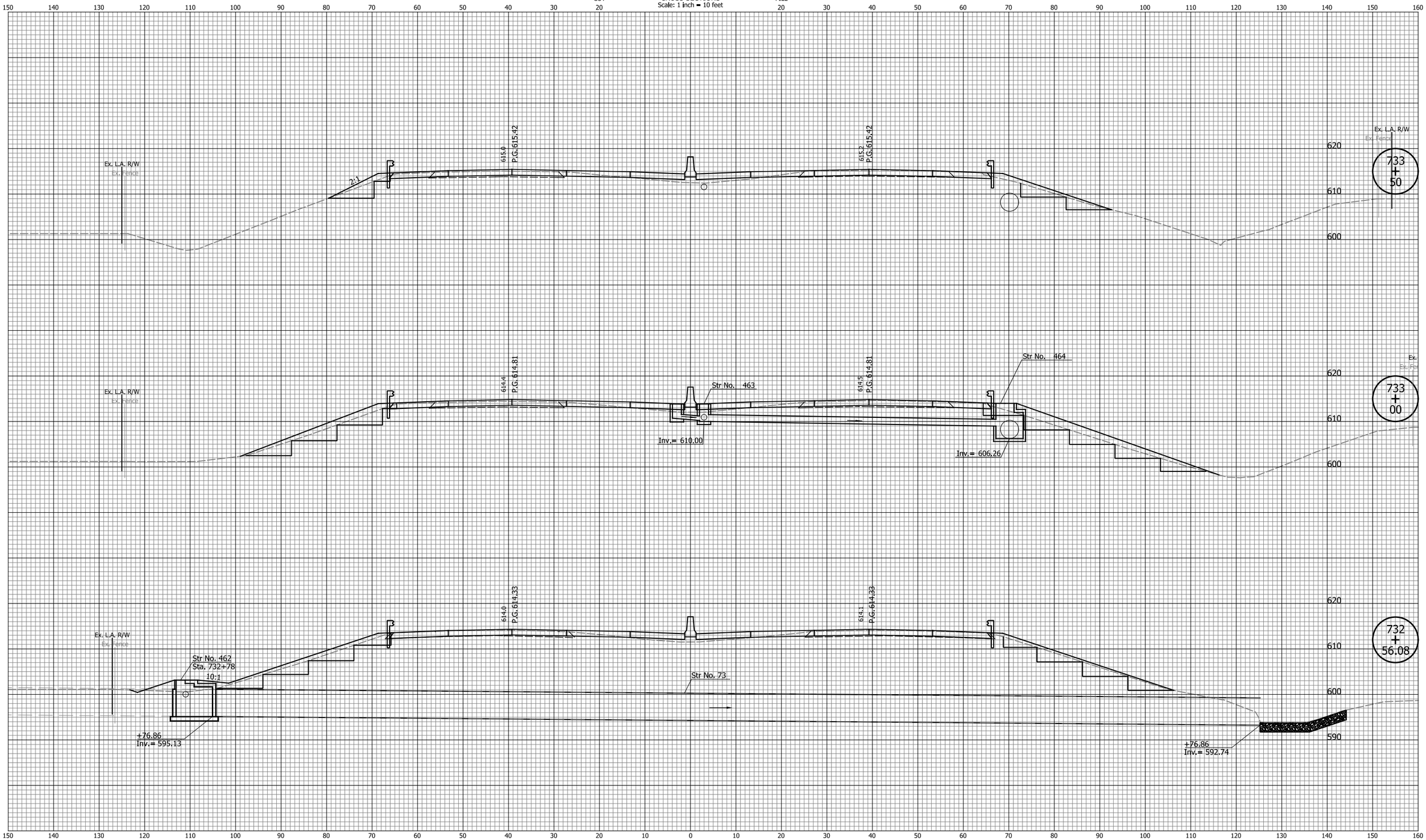
zmurphy 12/6/2021 6:59:39 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

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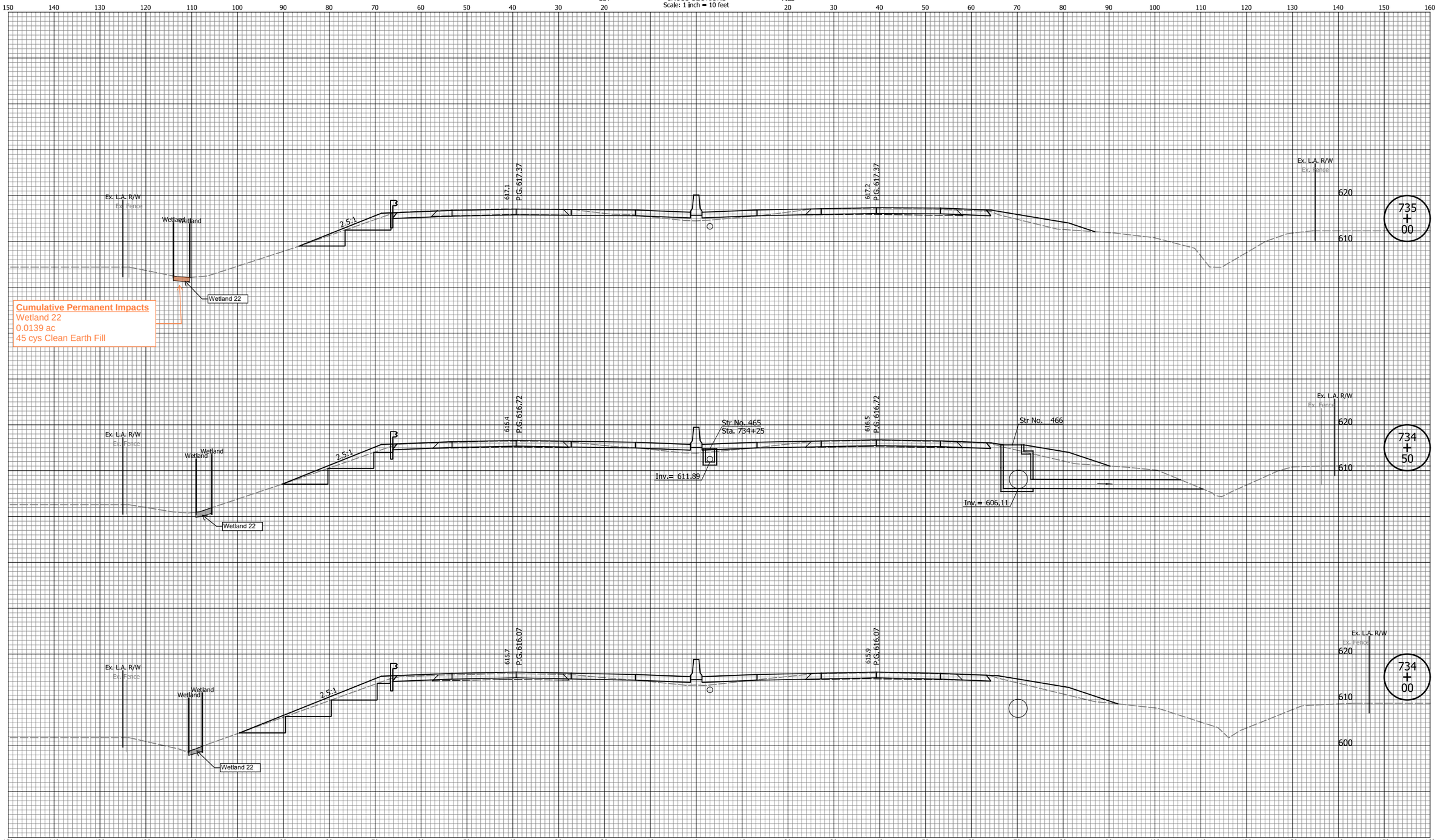
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	117 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 11/29/2021 1:19:12 PM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	118 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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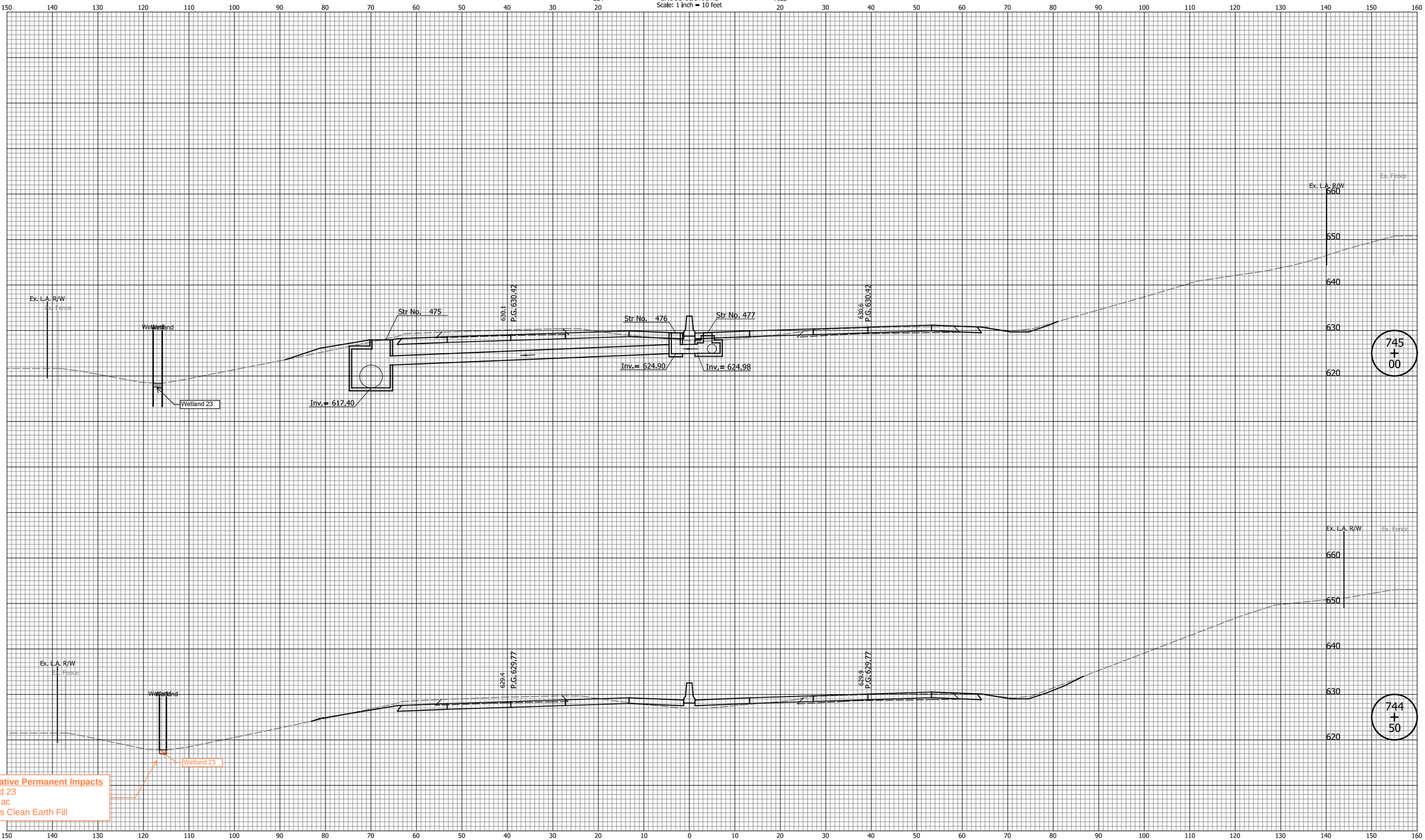

DATE	REVISION

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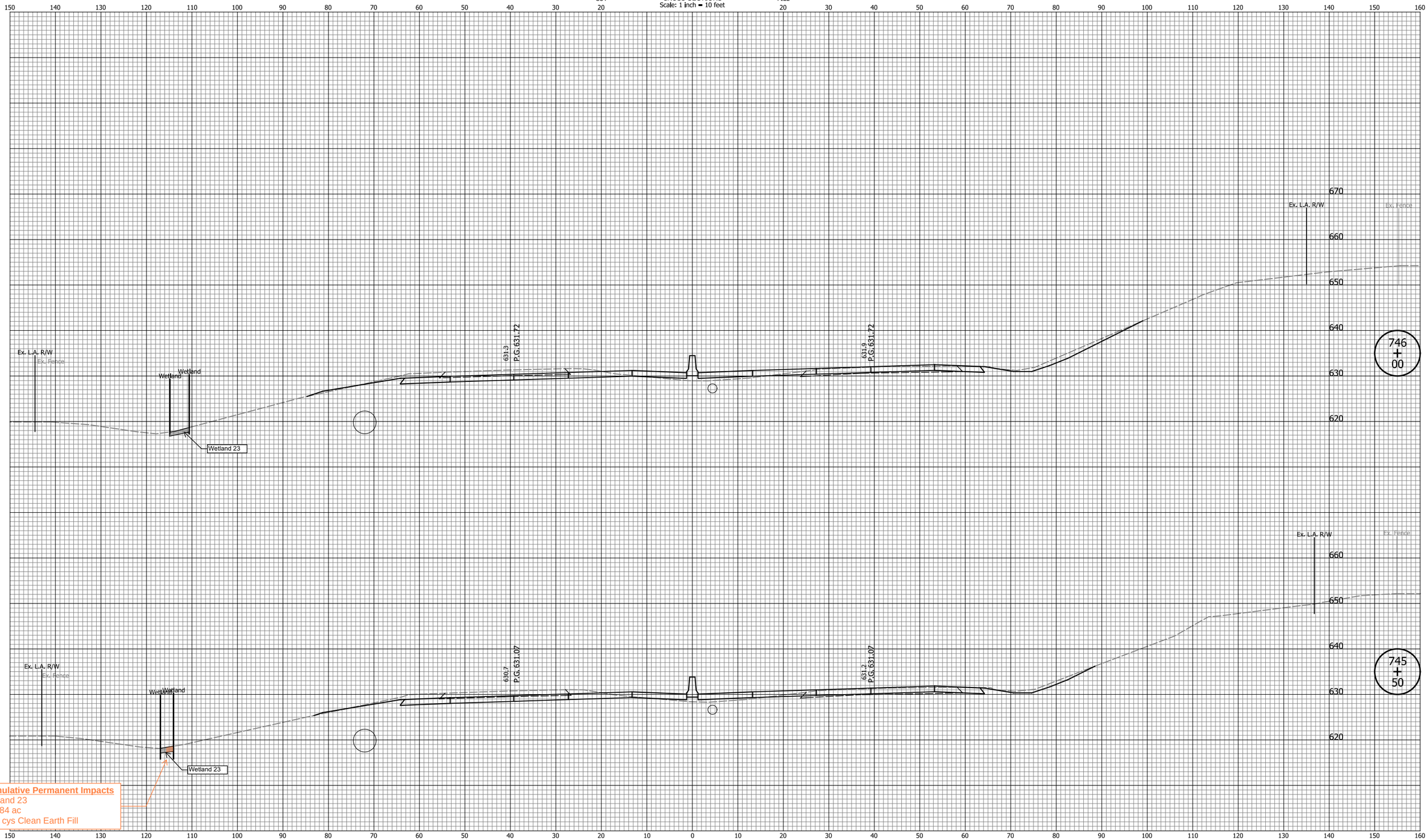
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	119 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:02 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	120 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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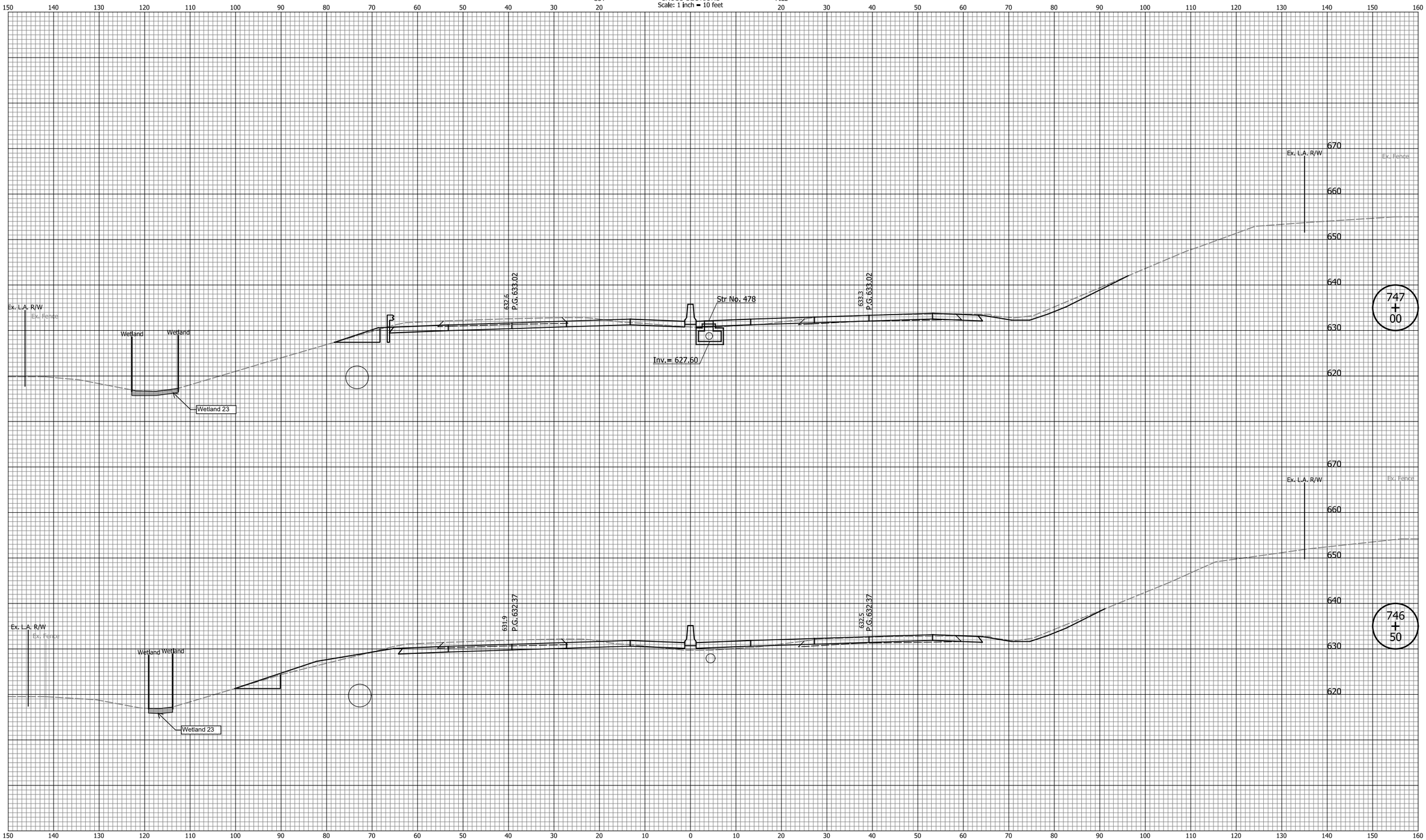

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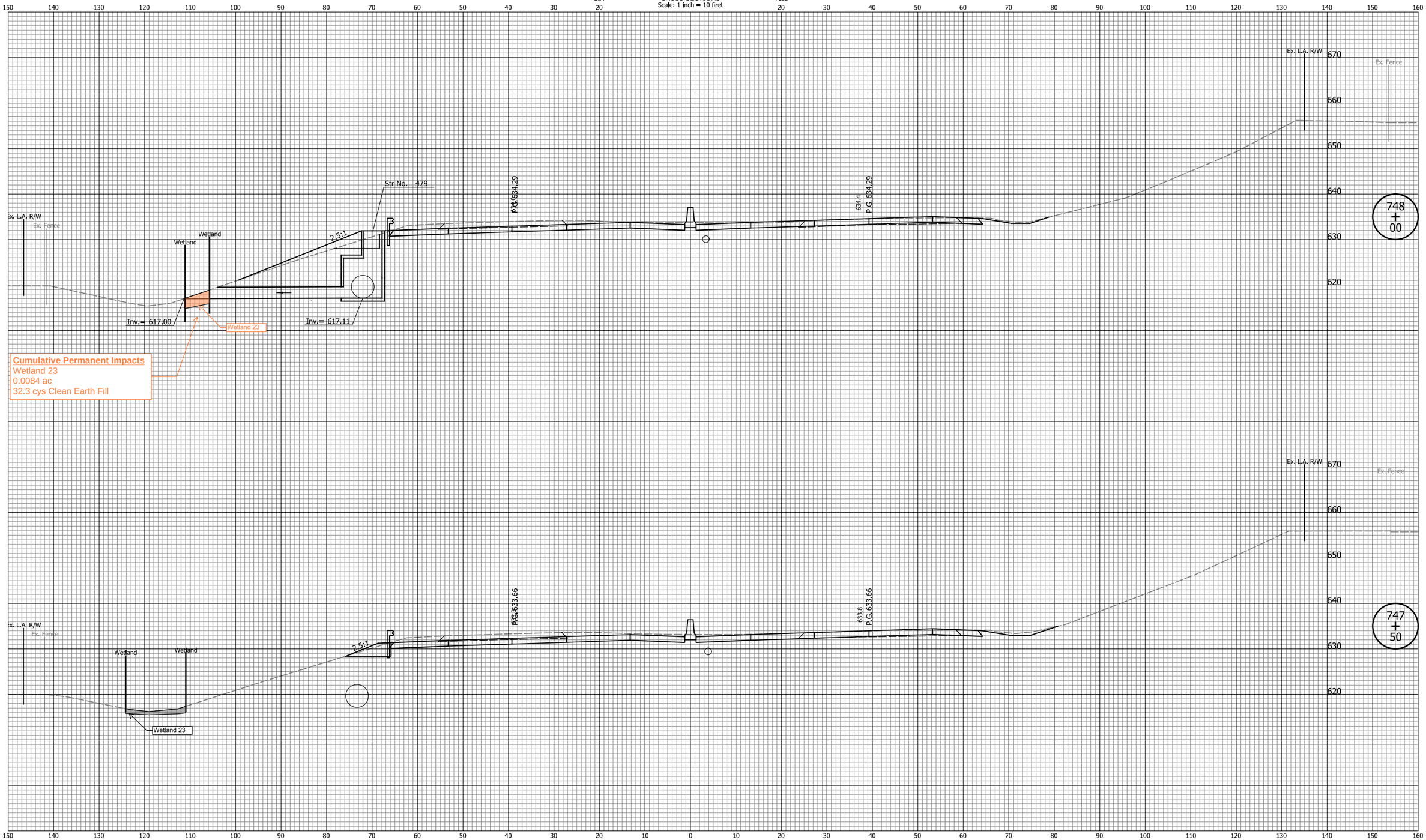
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	121 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:06 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	122 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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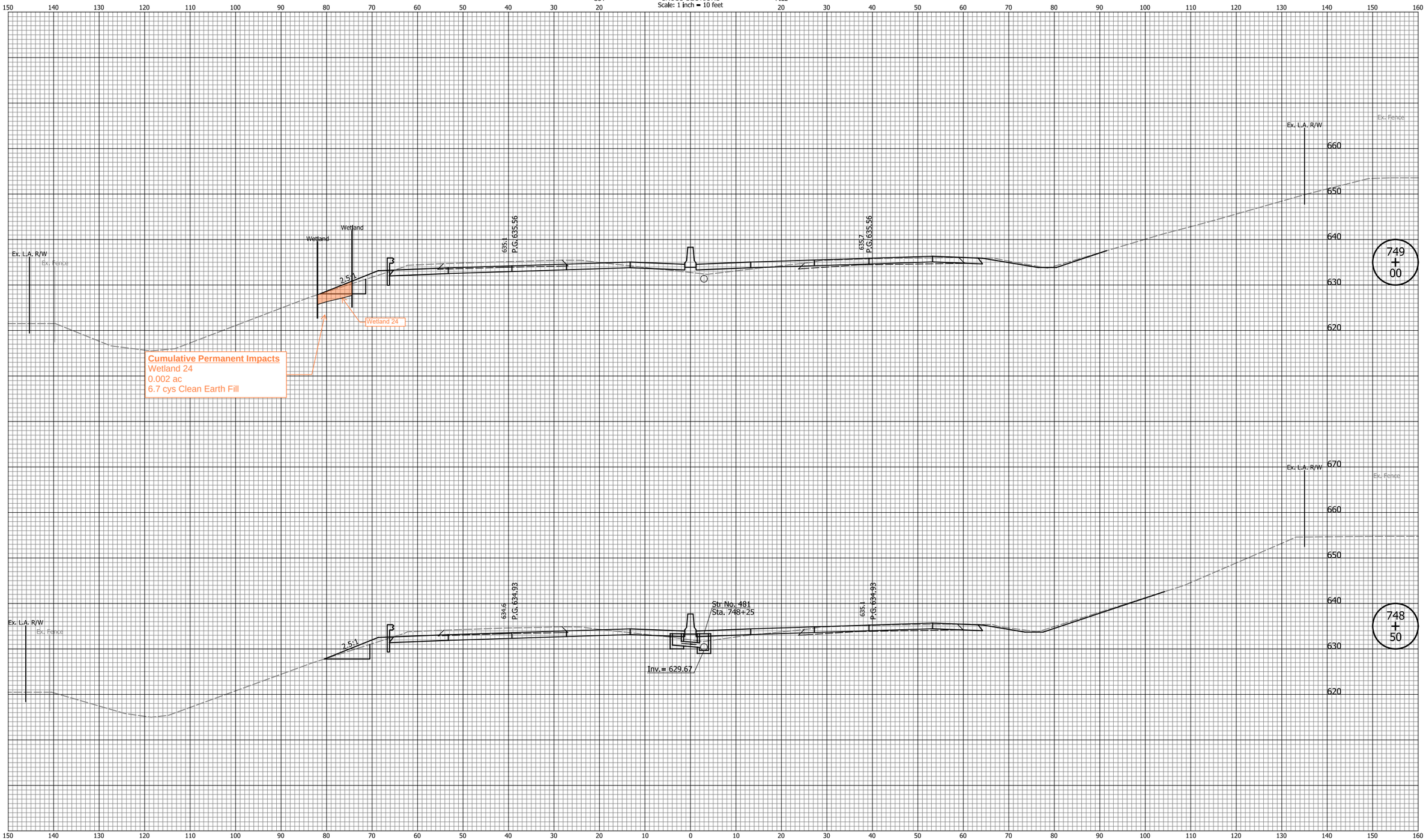

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	123 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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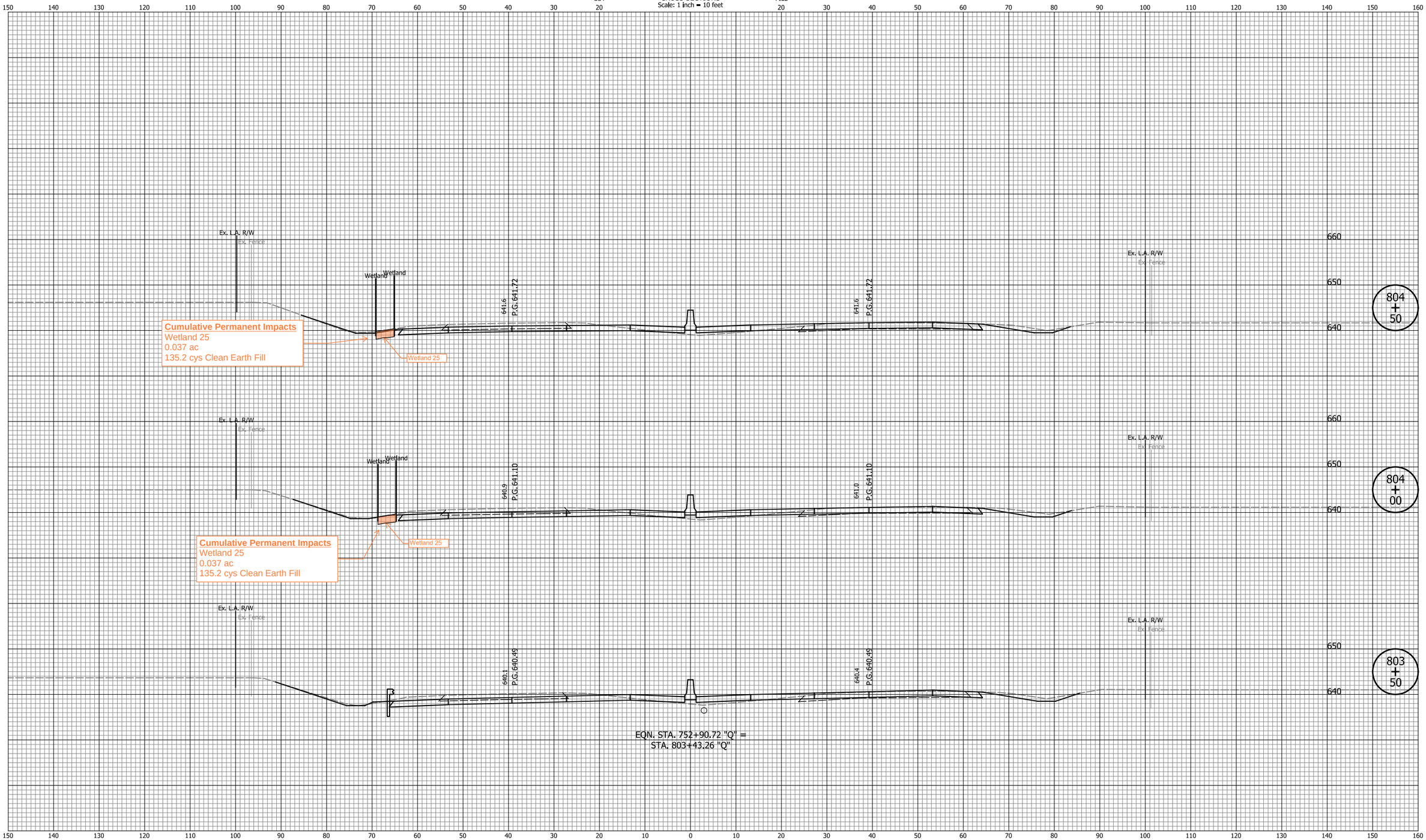


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	124 of 241
CONTRACT	PROJECT
R-41529	1700135

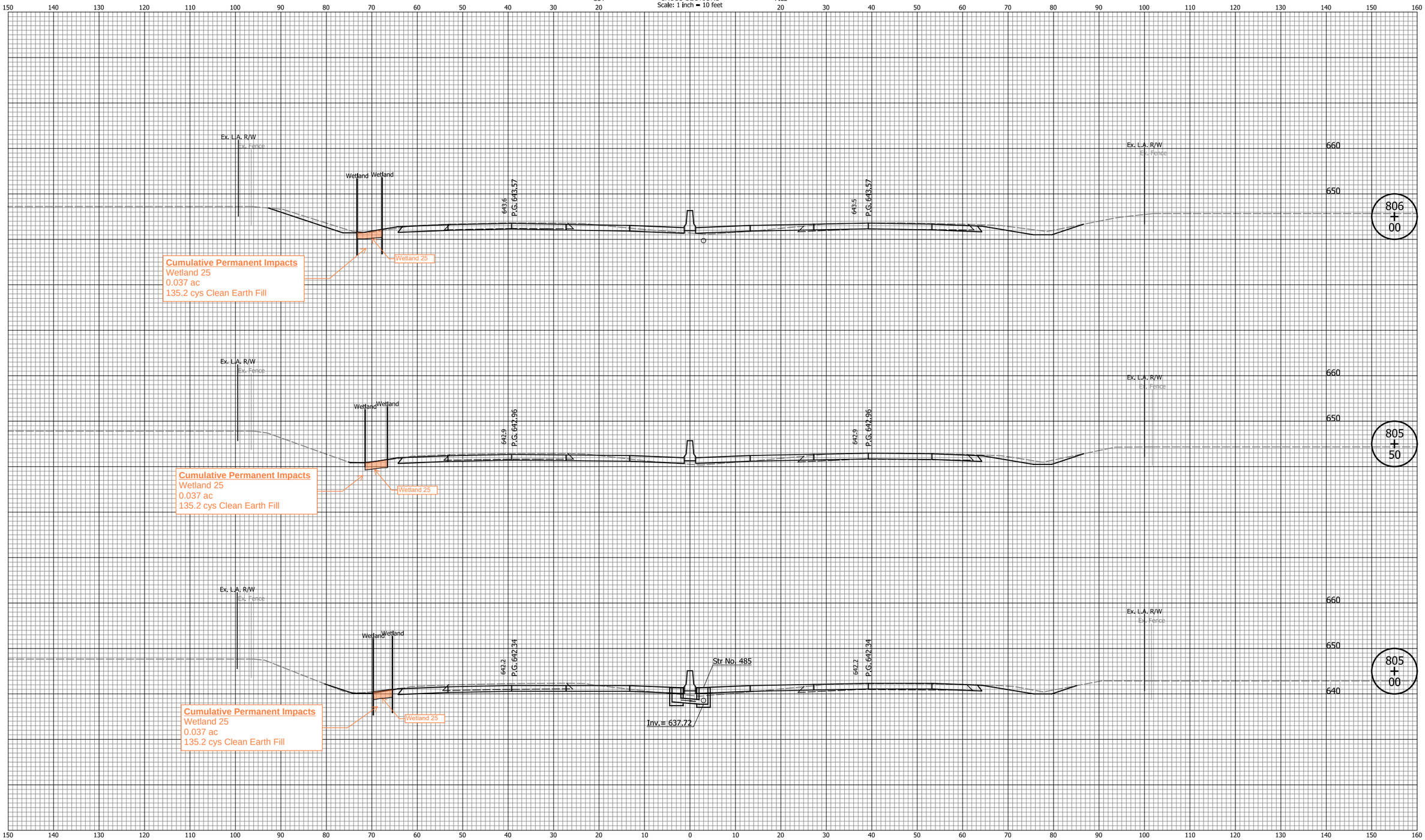
Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:17 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 — FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD
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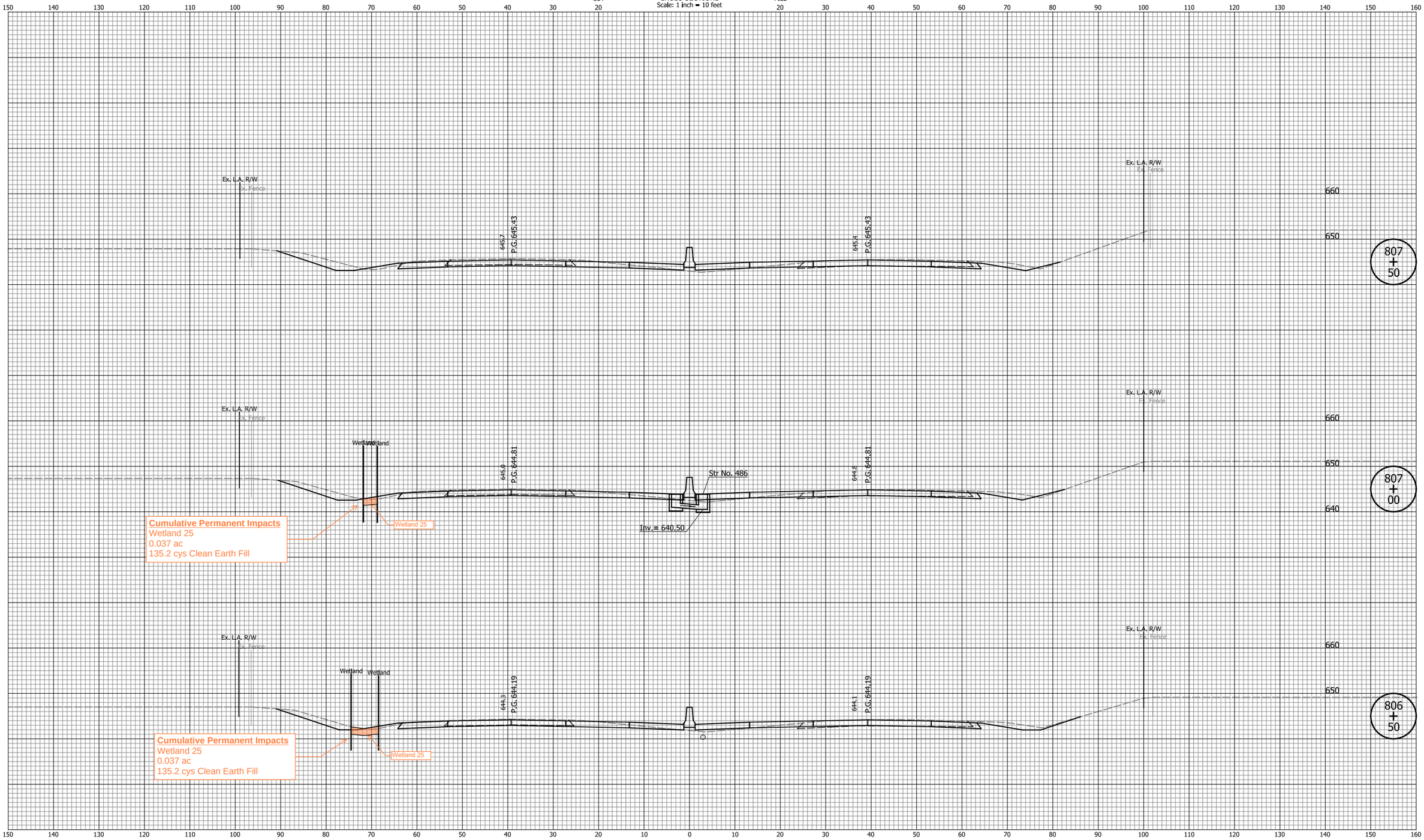
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	125 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:19 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

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DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	126 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

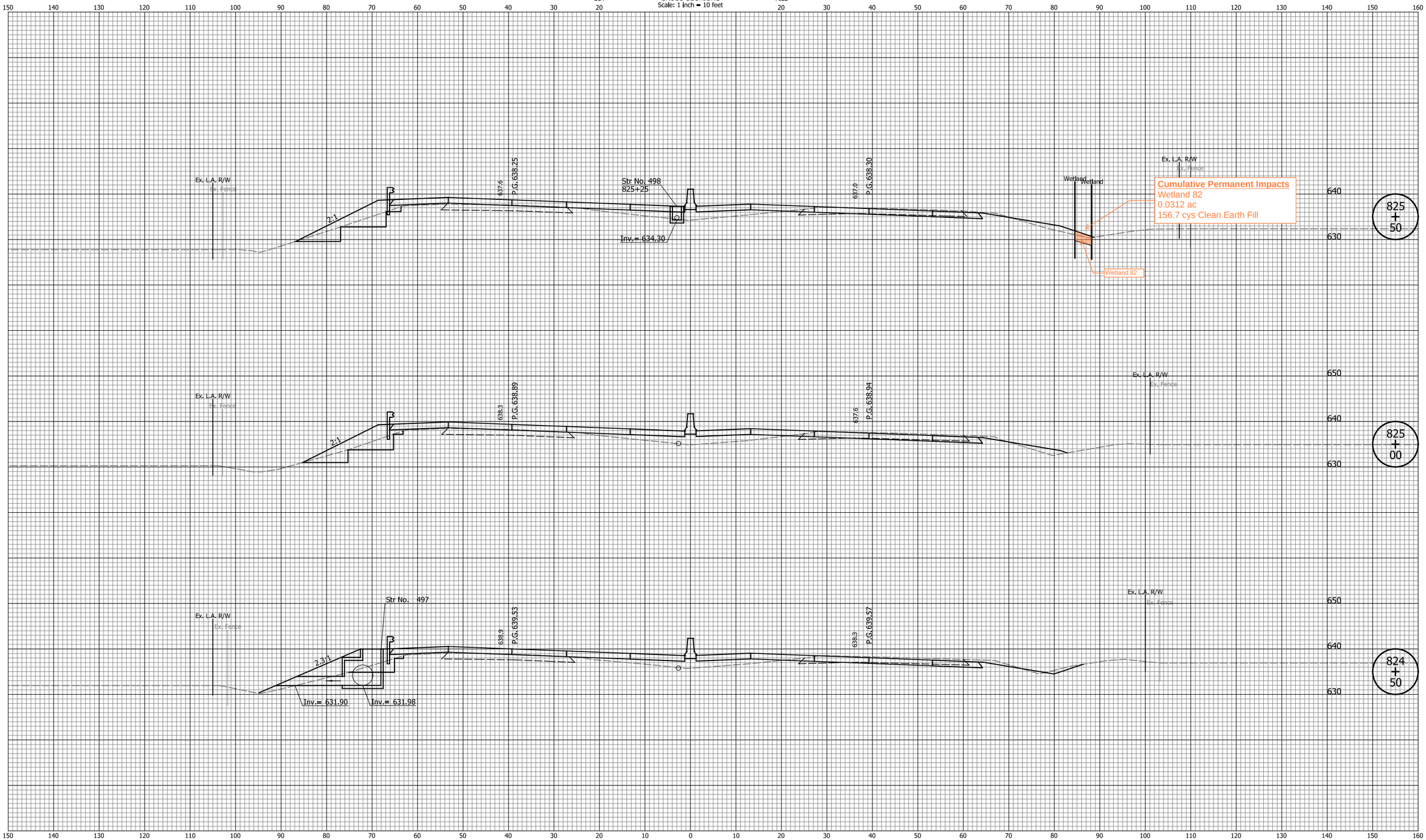
zmurphy 12/6/2021 7:00:21 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	127 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwrg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:43 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT

FILL

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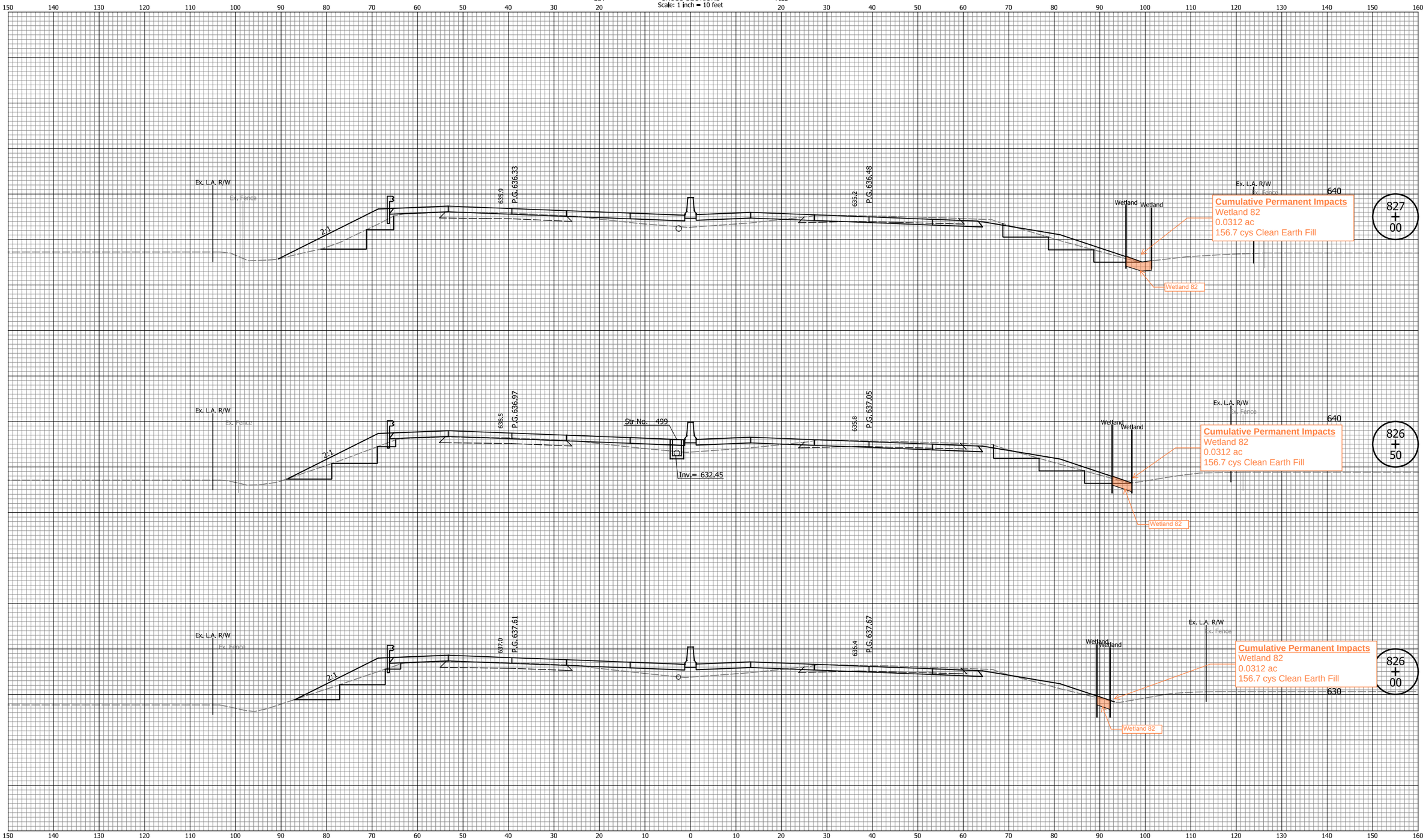

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
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DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	128 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:45 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

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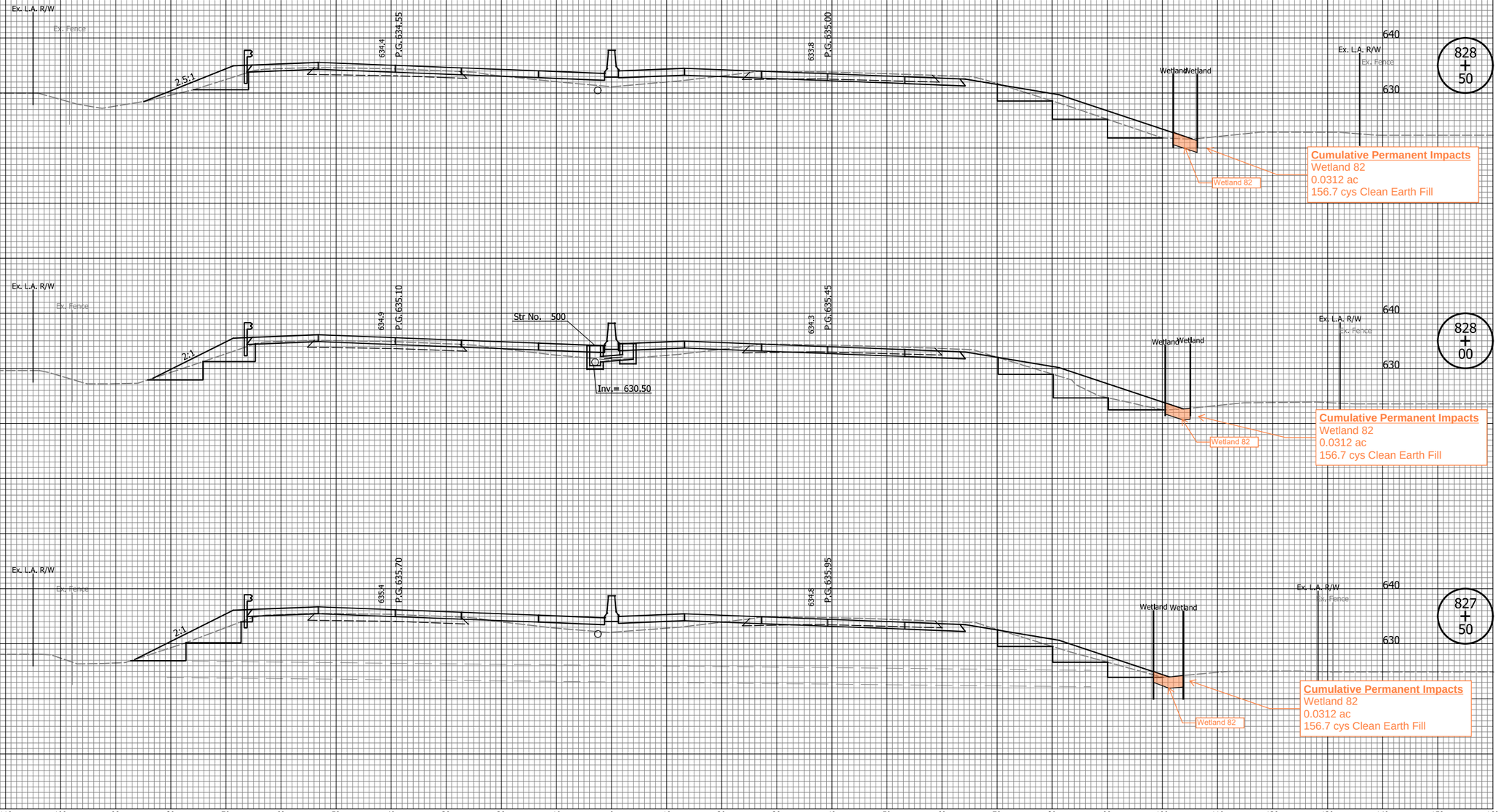
FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

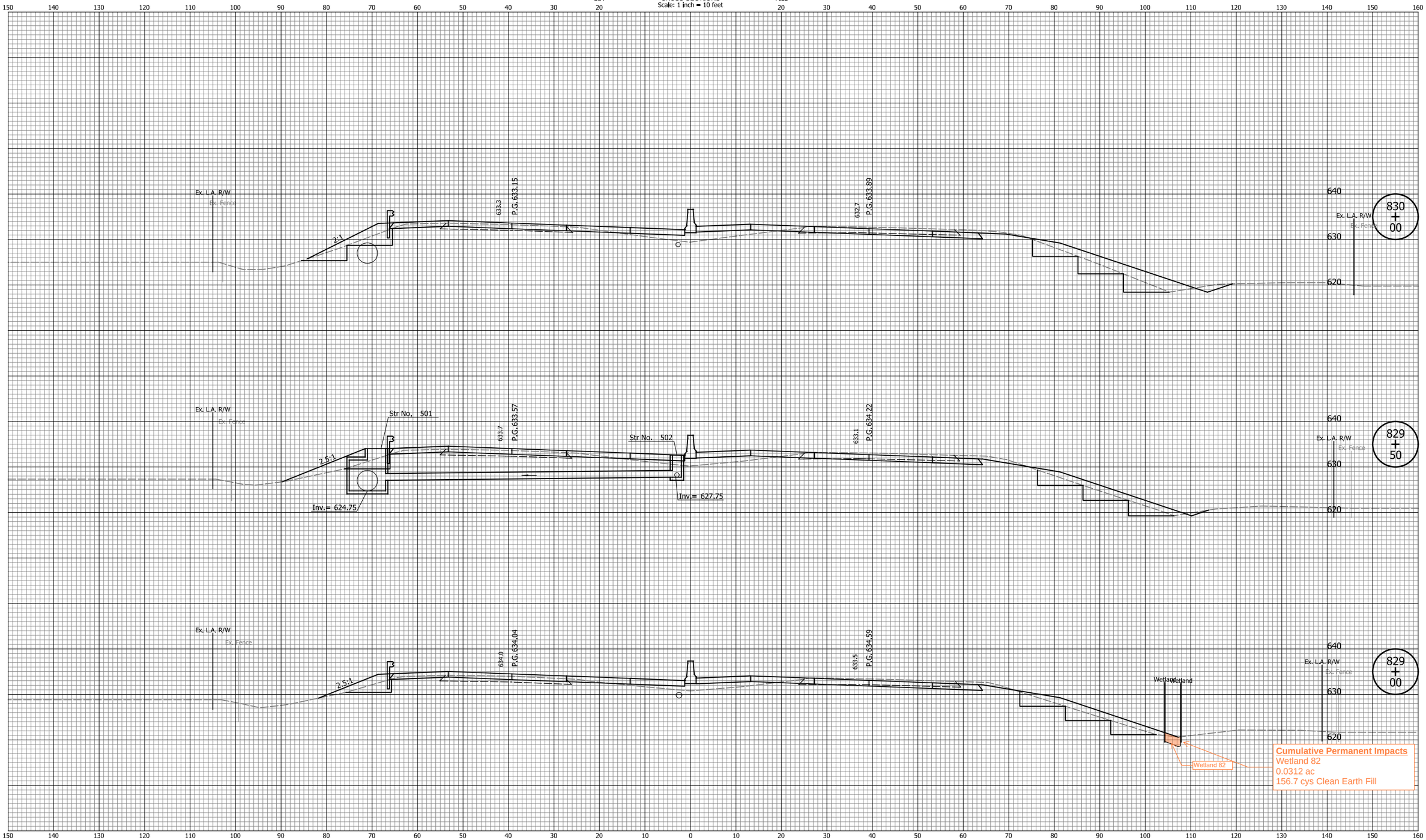
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	129 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-ref.dgn
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:47 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	130 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:49 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

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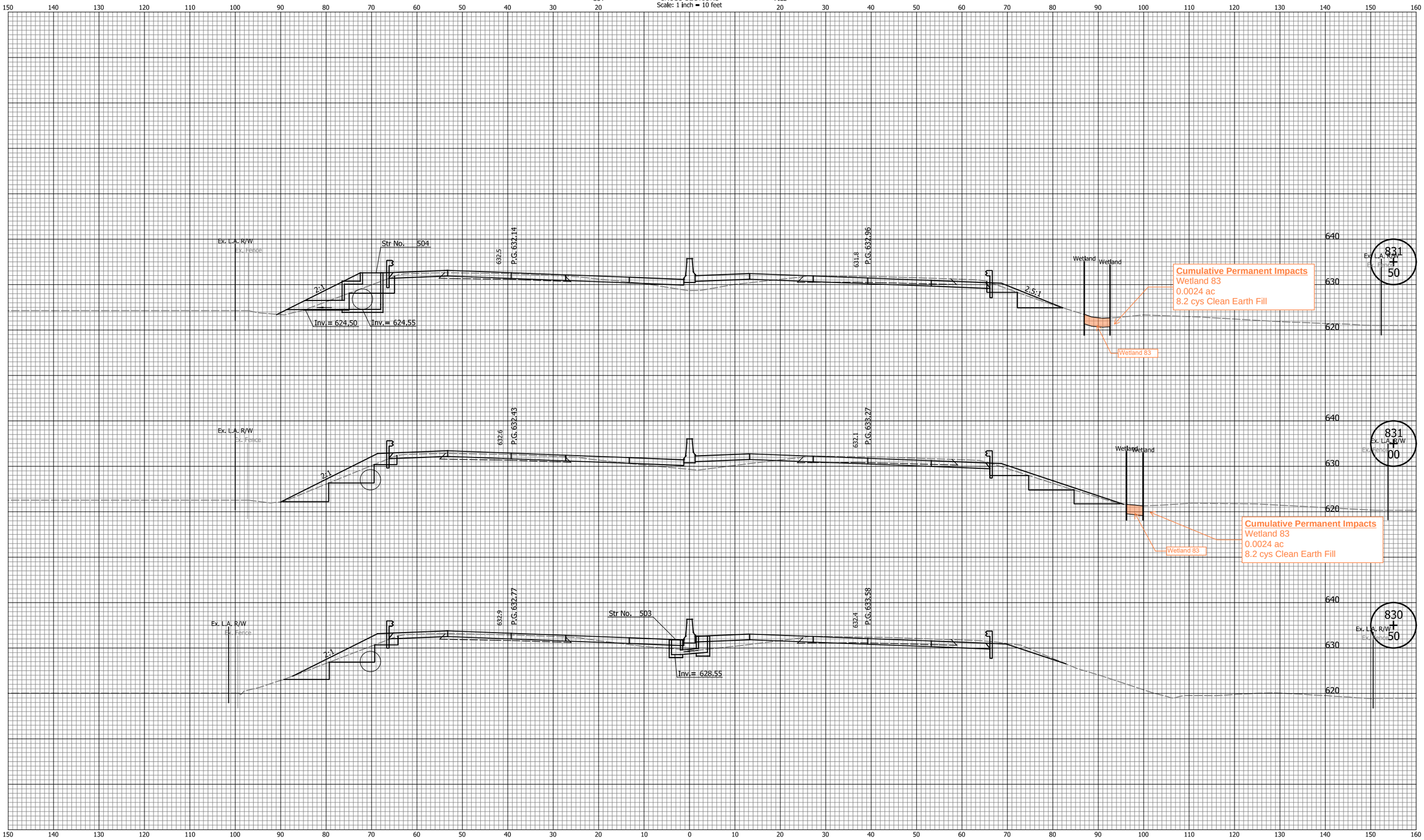

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	131 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:51 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 — FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

660
650
640
630

833 + 00

County Line Road (Line "S-9-Q")

16'-8" Vert. Clear.

631.7 P.G.631.51

2'-9" Str. Depth

Str No. 507

16'-8" Vert. Clear.

631.3 P.G.632.05

Inv.= 626.48

Ex. L.A. R/W
Ex. Fence

632.0 P.G.631.67

631.3 P.G.632.34

Wetland

Wetland

2:1

Wetland 83

Cumulative Permanent Impacts
Wetland 83
0.0024 ac
8.2 cys Clean Earth Fill

Ex. L.A. R/W
Ex. Fence

640
630

832 + 50

Ex. L.A. R/W
Ex. Fence

632.2 P.G.631.88

Str No. 505

631.6 P.G.632.65

Wetland

Wetland

2:1

2.5:1

Inv.= 627.10

Wetland 83

Cumulative Permanent Impacts
Wetland 83
0.0024 ac
8.2 cys Clean Earth Fill

Ex. L.A. R/W
Ex. Fence

640
630

832 + 00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

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DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	132 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.ctb
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:53 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

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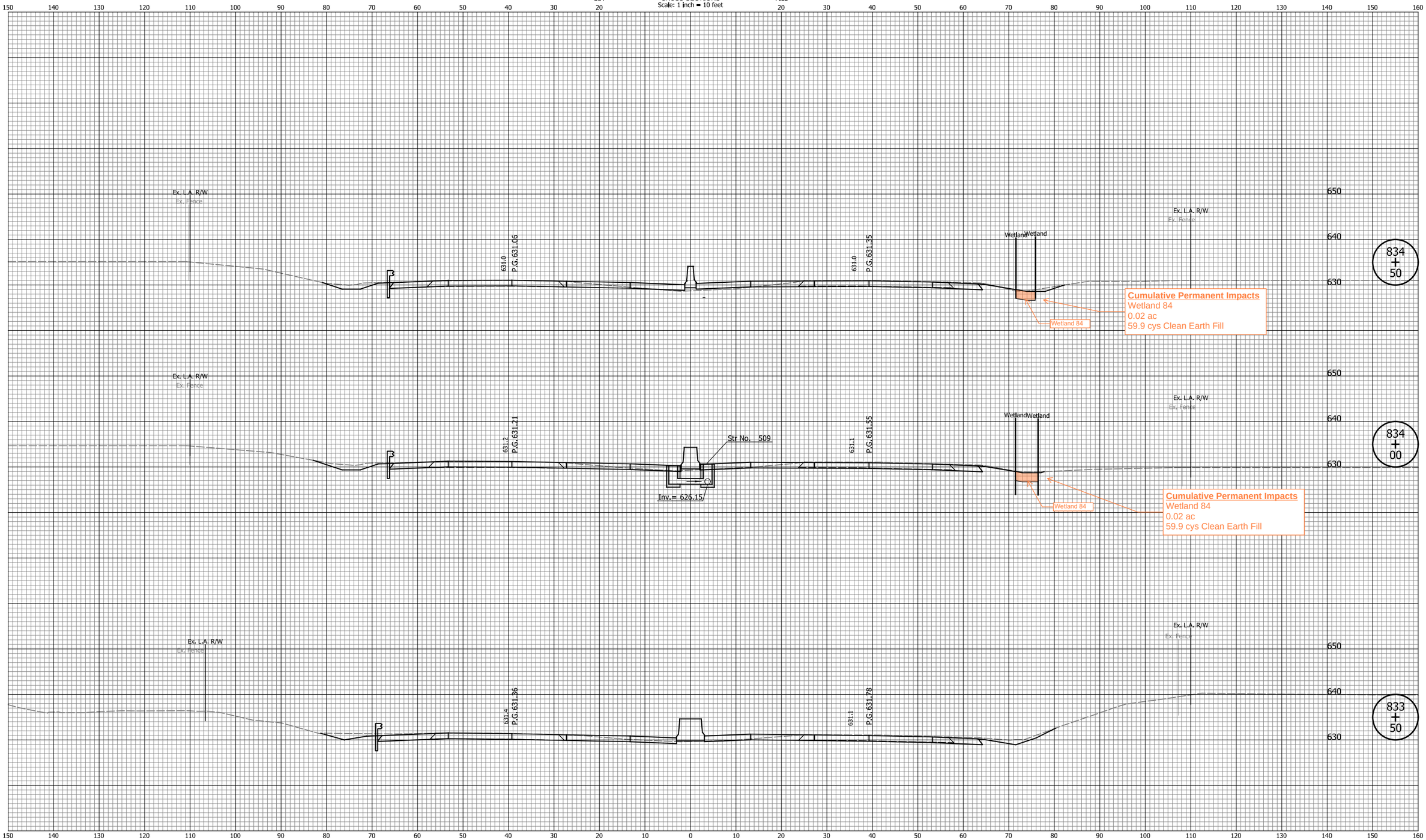
FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

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CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	133 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-ehlf.ctb
Indiana_Shade.tbl

zmurphy 12/6/2021 7:00:55 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

650
640
630

Ex. L.A. R/W
Ex. Fence

630.8
P.G. 630.62

630.8
P.G. 630.86

836 + 00

Ex. L.A. R/W
Ex. Fence

650
640
630

Ex. L.A. R/W
Ex. Fence

630.8
P.G. 630.77

630.9
P.G. 631.02

Wetland
Wetland

835 + 50

Ex. L.A. R/W
Ex. Fence

Cumulative Permanent Impacts
Wetland 84
0.02 ac
59.9 cys Clean Earth Fill

Wetland 84

650
640
630

Ex. L.A. R/W
Ex. Fence

630.9
P.G. 630.91

Str No. 511

Inv.= 625.50

630.9
P.G. 631.18

Wetland
Wetland

835 + 00

Ex. L.A. R/W
Ex. Fence

Cumulative Permanent Impacts
Wetland 84
0.02 ac
59.9 cys Clean Earth Fill

Wetland 84

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

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CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	134 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

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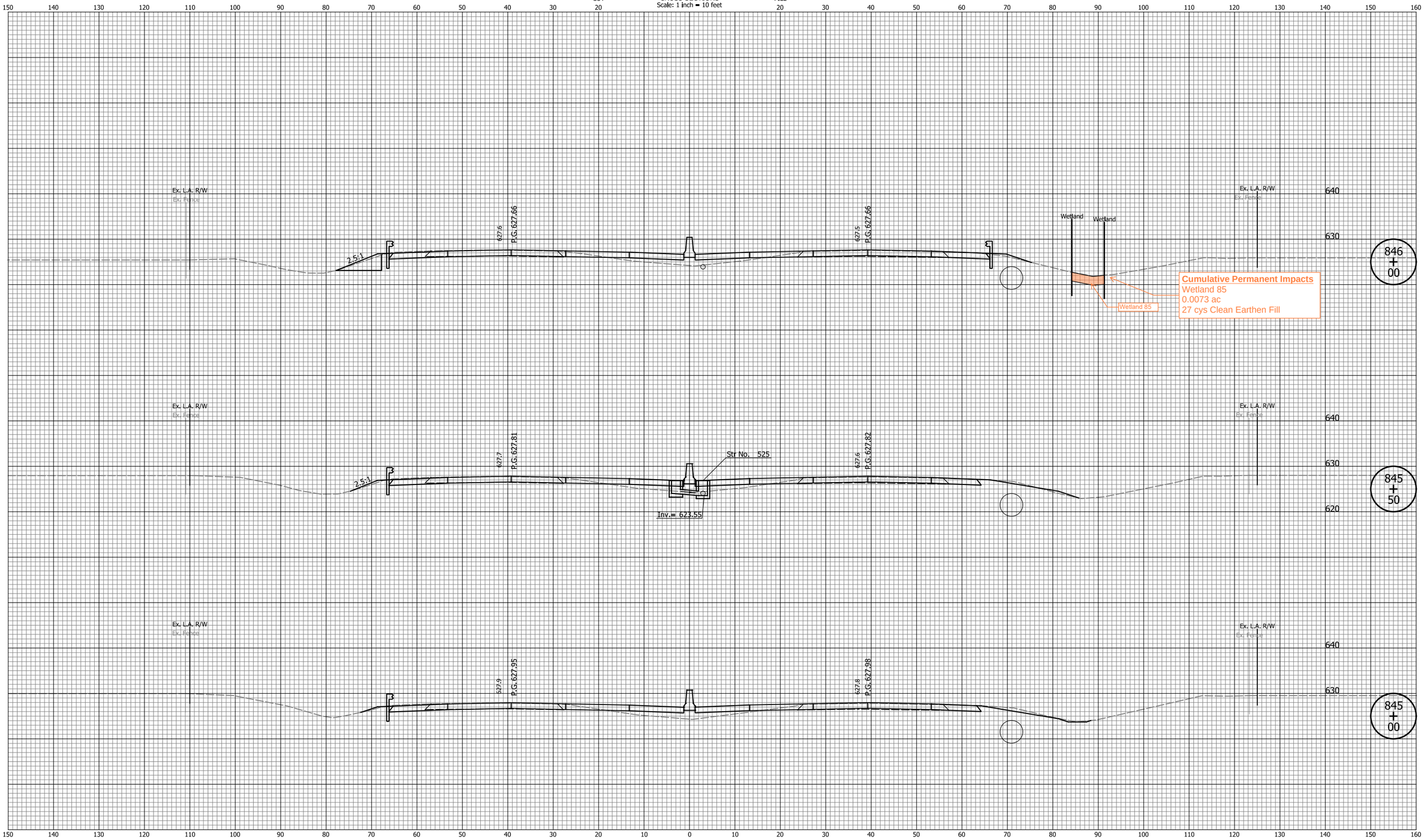

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DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	135 of 241
CONTRACT	PROJECT
R-41529	1700135

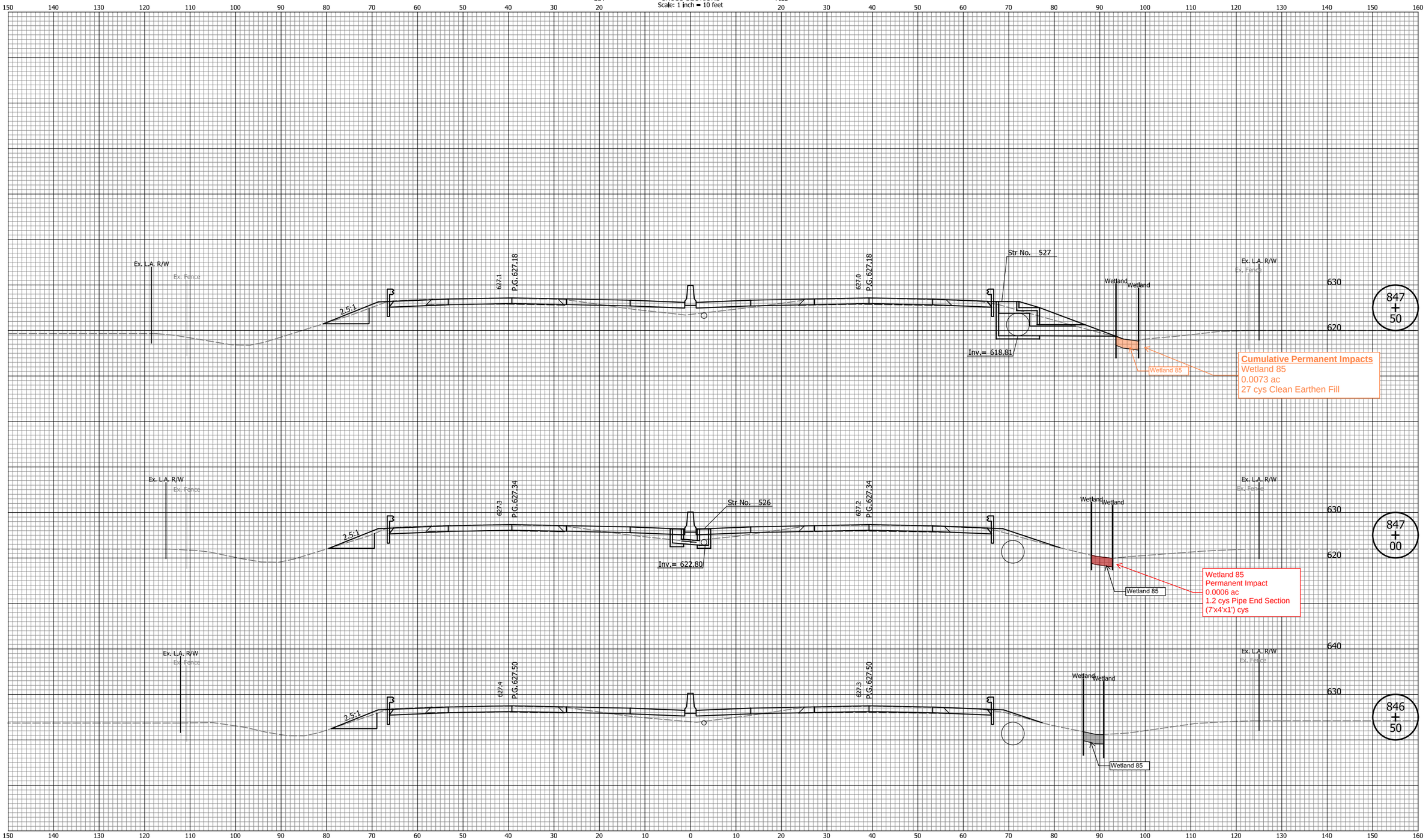
Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:12 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 — FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	136 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf_a4ctg
Indiana_Shade.tbl

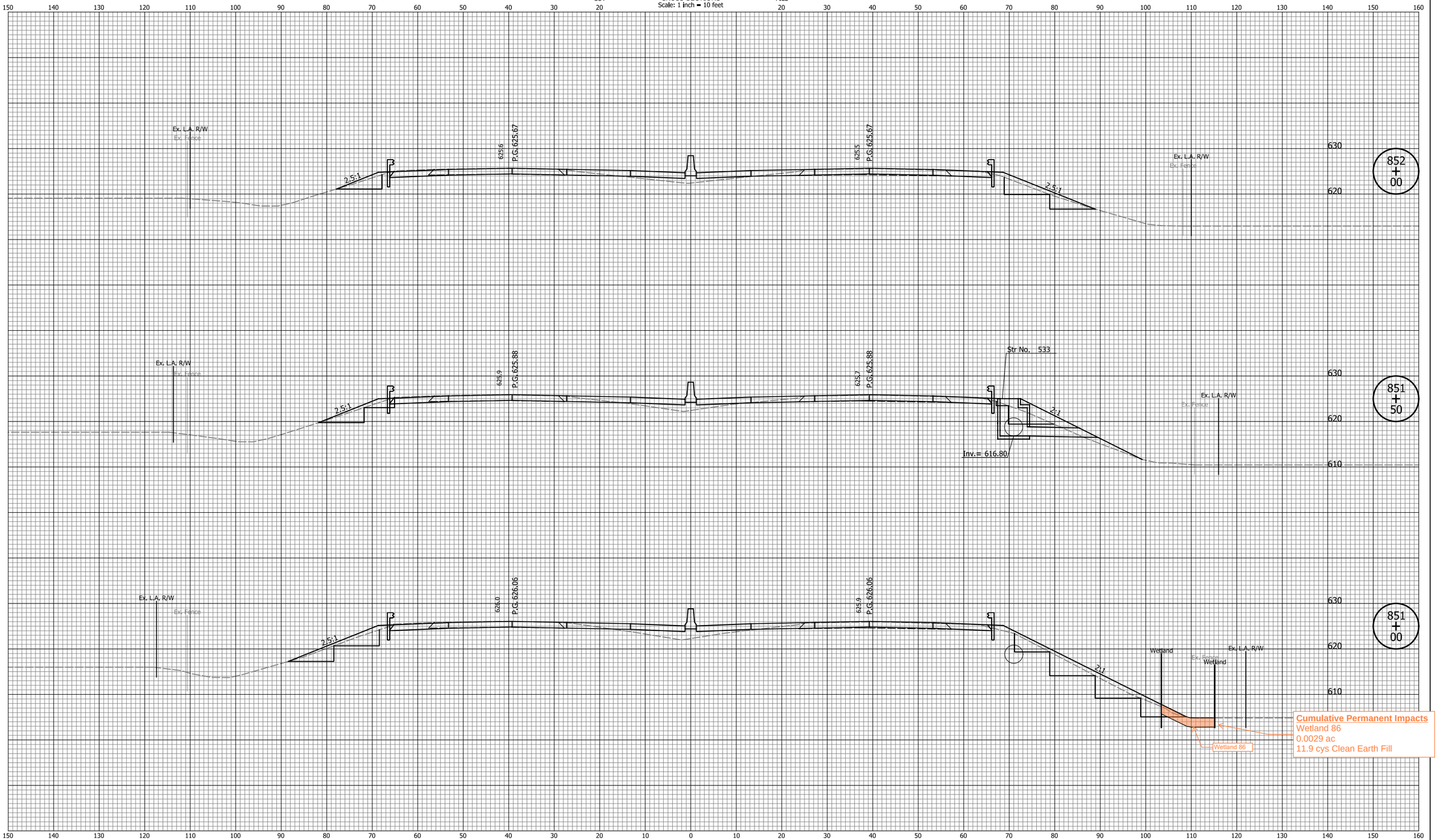
zmurphy 12/6/2021 7:01:14 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	137 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:20 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

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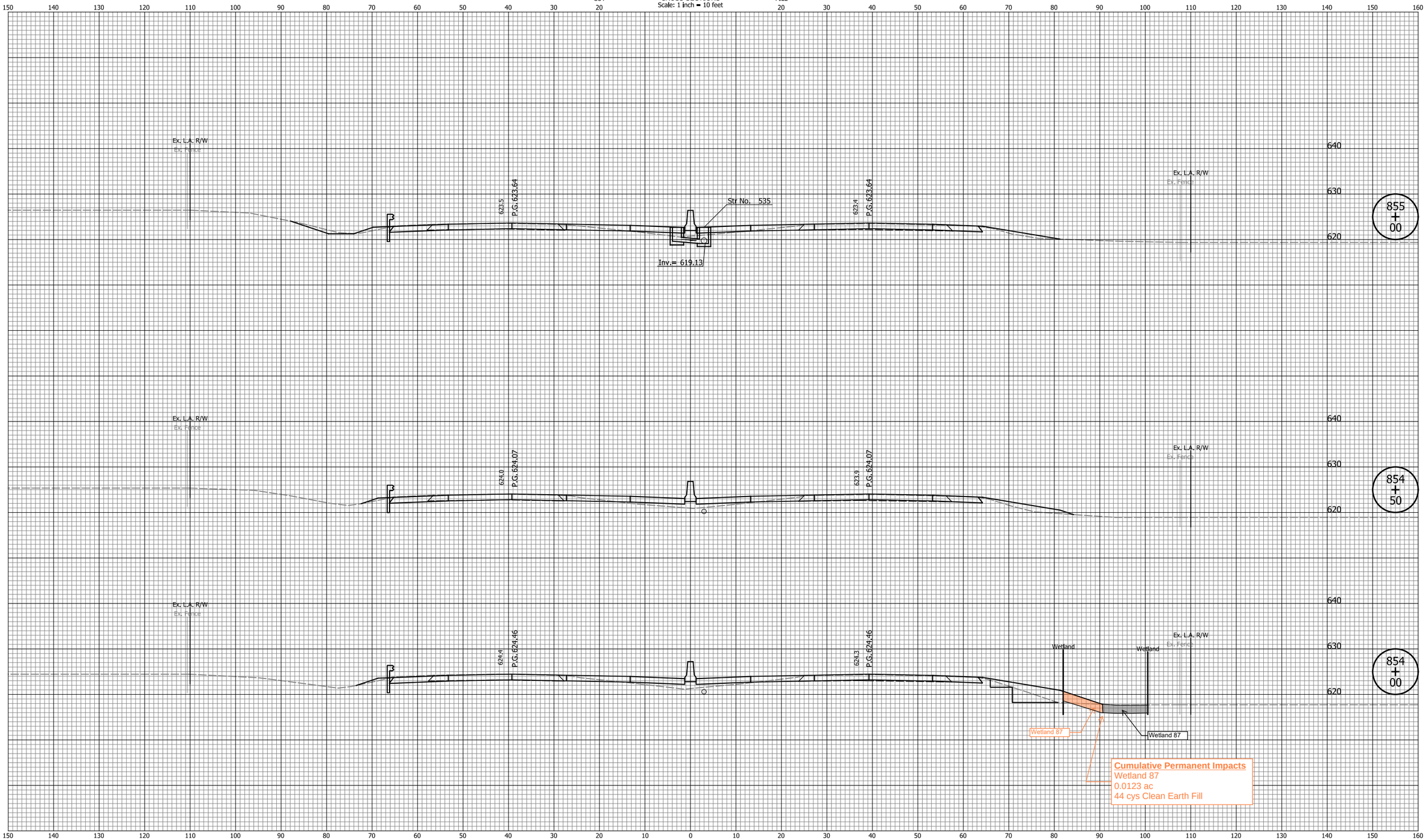

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

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DESIGN ENGINEER DATE

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CHECKED: CDH | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

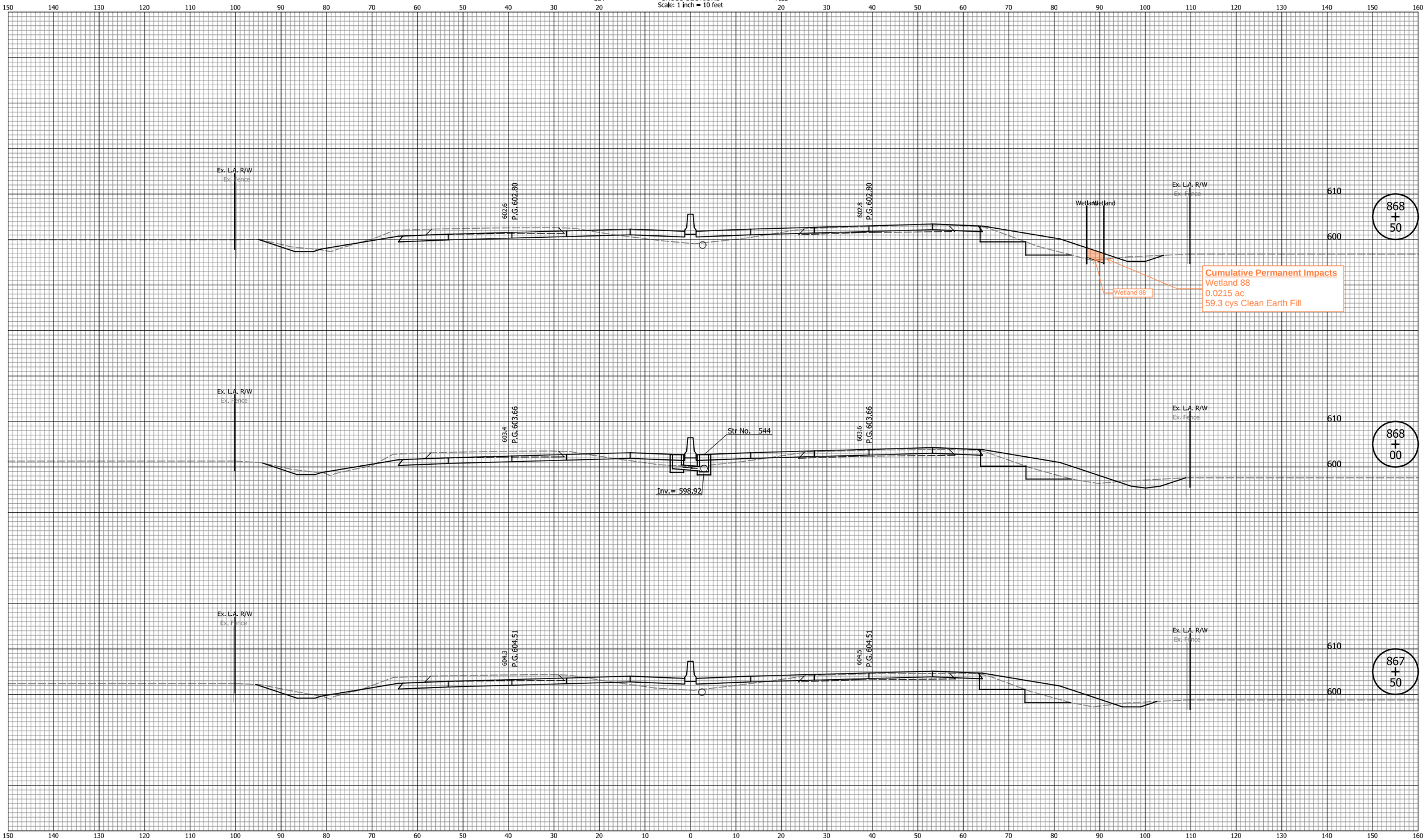
SURVEY BOOK	SHEETS
N/A	138 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.dgn
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:24 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet



DATE	REVISION

Attachment 14-1

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DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD

CHECKED: CDH | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	139 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:42 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

610
600
590

Ex. L.A. R/W
Ex. Fence

600.0
P.G. 600.24

600.3
P.G. 600.24

Wetland
Wetland

Ex. L.A. R/W
Ex. Fence

Wetland 88

Cumulative Permanent Impacts
Wetland 88
0.0215 ac
59.3 cys Clean Earth Fill

870 + 00

Ex. L.A. R/W
Ex. Fence

600.9
P.G. 601.09

Str No. 545

Inv.= 596.30

601.1
P.G. 601.09

Str No. 546

Inv.= 591.45

Wetland
Wetland

Ex. L.A. R/W
Ex. Fence

Wetland 88

Cumulative Permanent Impacts
Wetland 88
0.0215 ac
59.3 cys Clean Earth Fill

869 + 50

Ex. L.A. R/W
Ex. Fence

601.7
P.G. 601.95

601.9
P.G. 601.95

Wetland
Wetland

Ex. L.A. R/W
Ex. Fence

Wetland 88

Cumulative Permanent Impacts
Wetland 88
0.0215 ac
59.3 cys Clean Earth Fill

869 + 00

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

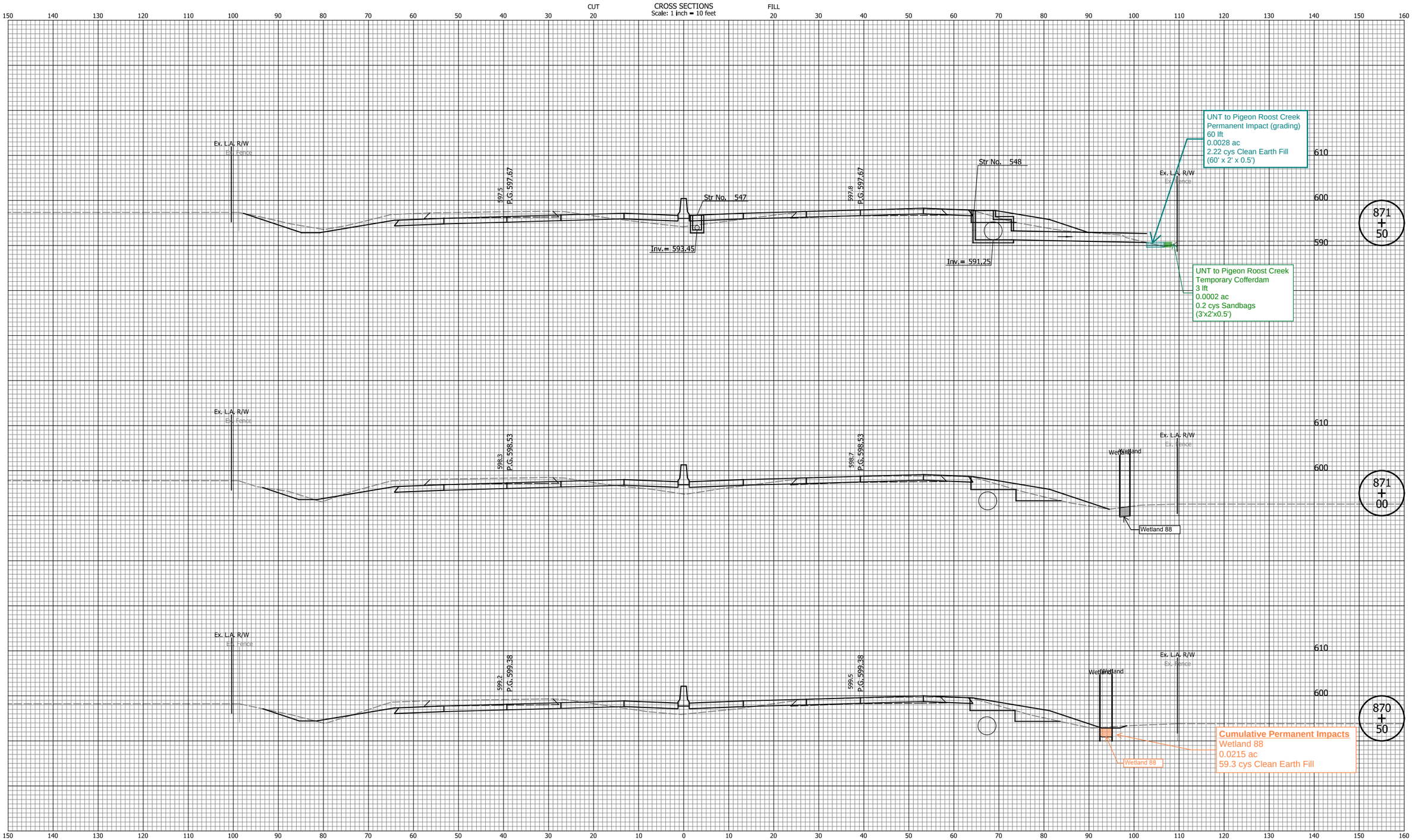
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	140 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:42 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

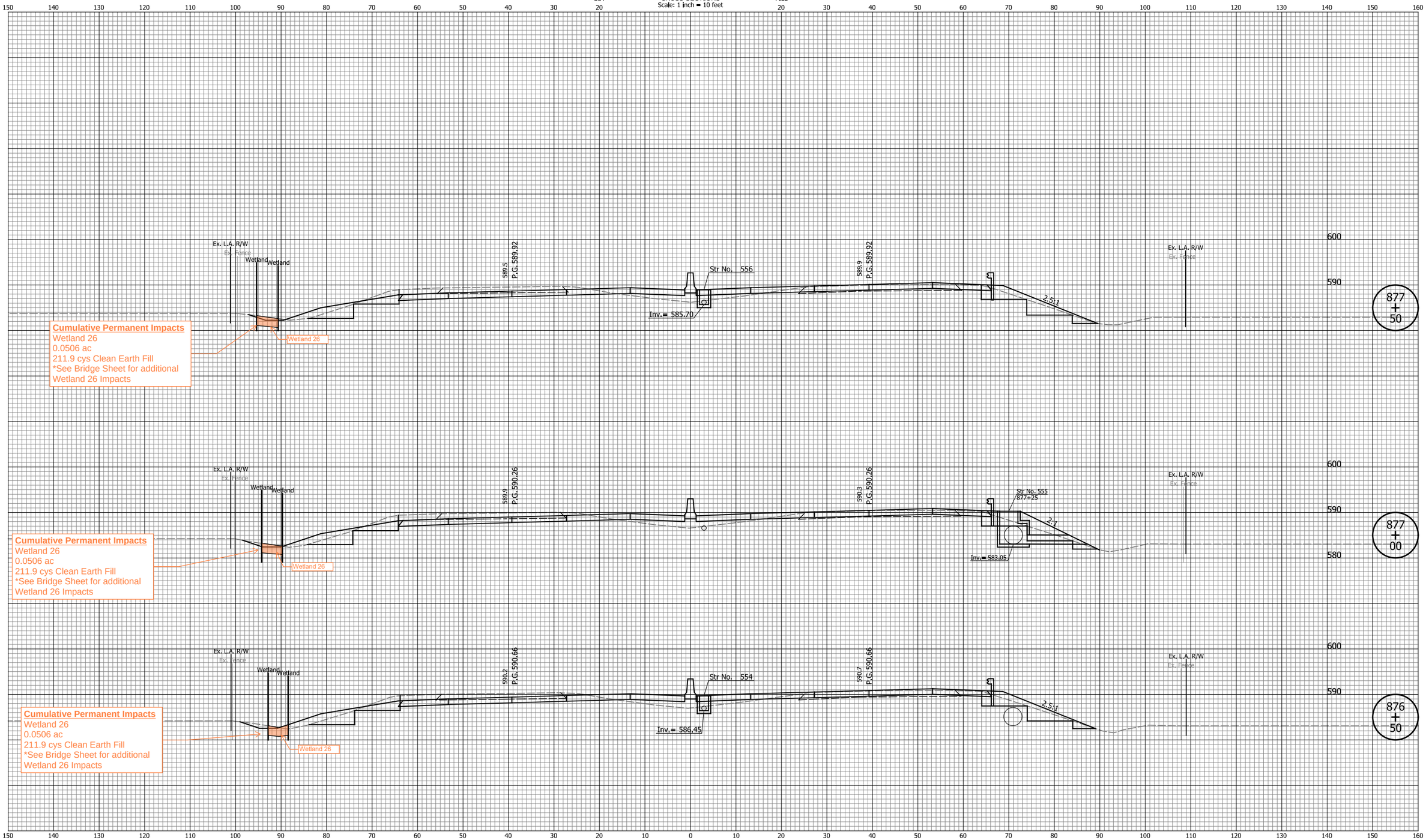
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	141 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:43 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	142 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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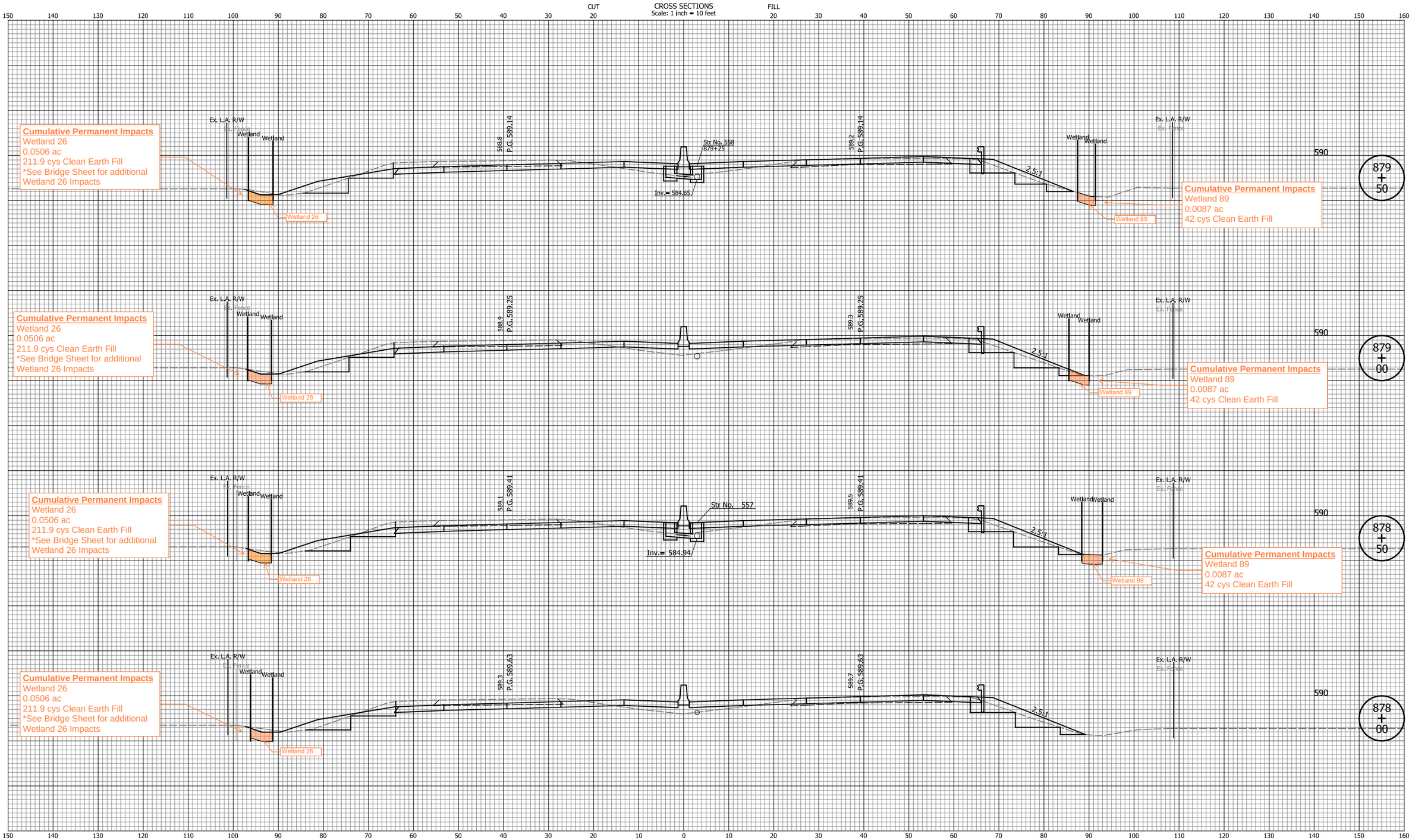


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	143 of 229
CONTRACT	PROJECT
R-41529	1700135

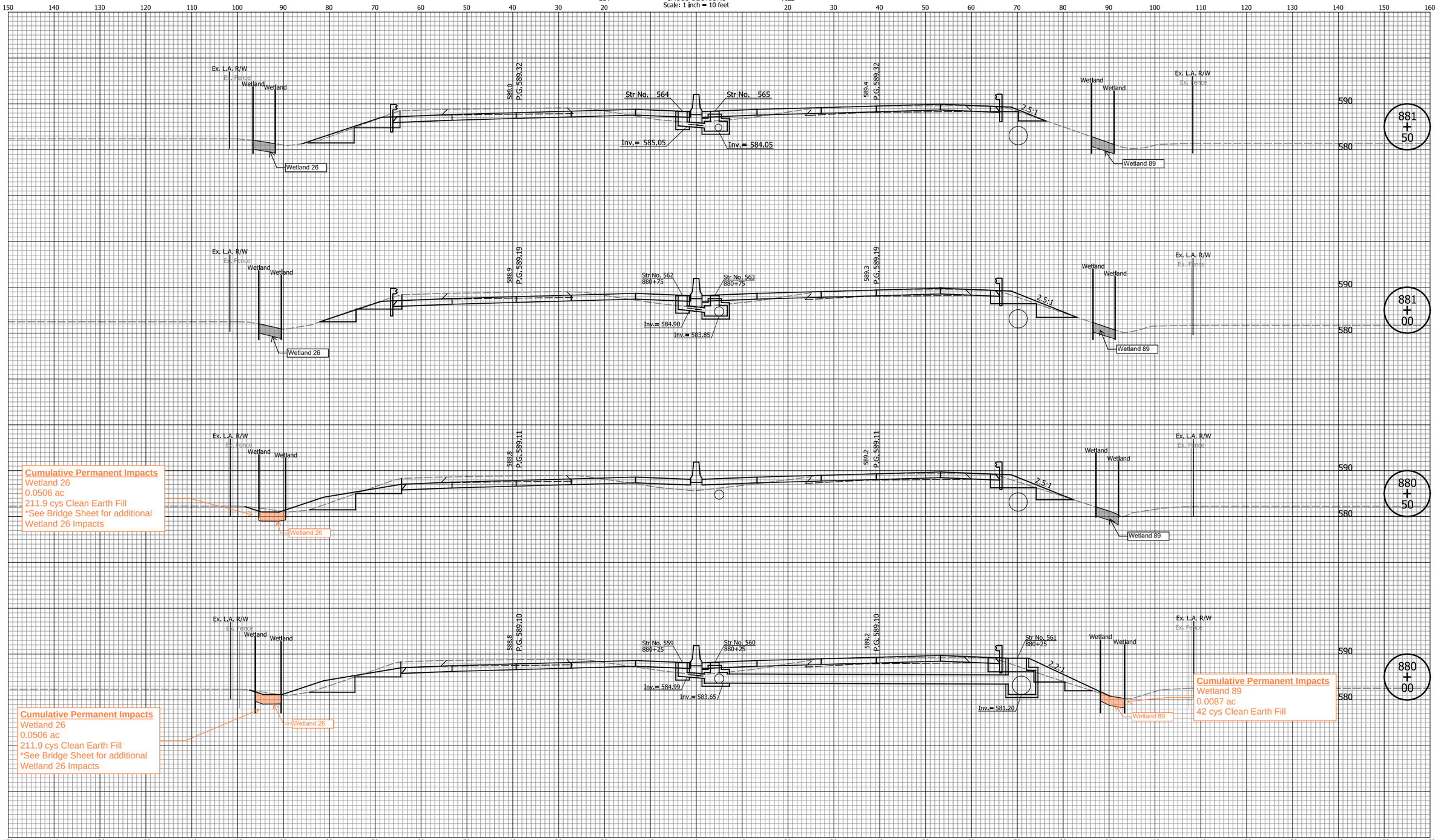
Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:47 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 — FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



Cumulative Permanent Impacts
Wetland 26
0.0506 ac
211.9 cys Clean Earth Fill
*See Bridge Sheet for additional Wetland 26 Impacts

Cumulative Permanent Impacts
Wetland 26
0.0506 ac
211.9 cys Clean Earth Fill
*See Bridge Sheet for additional Wetland 26 Impacts

Cumulative Permanent Impacts
Wetland 89
0.0087 ac
42 cys Clean Earth Fill

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD
CHECKED: CDH | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	144 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prf.dfcfg
Indiana_Shade.tbl

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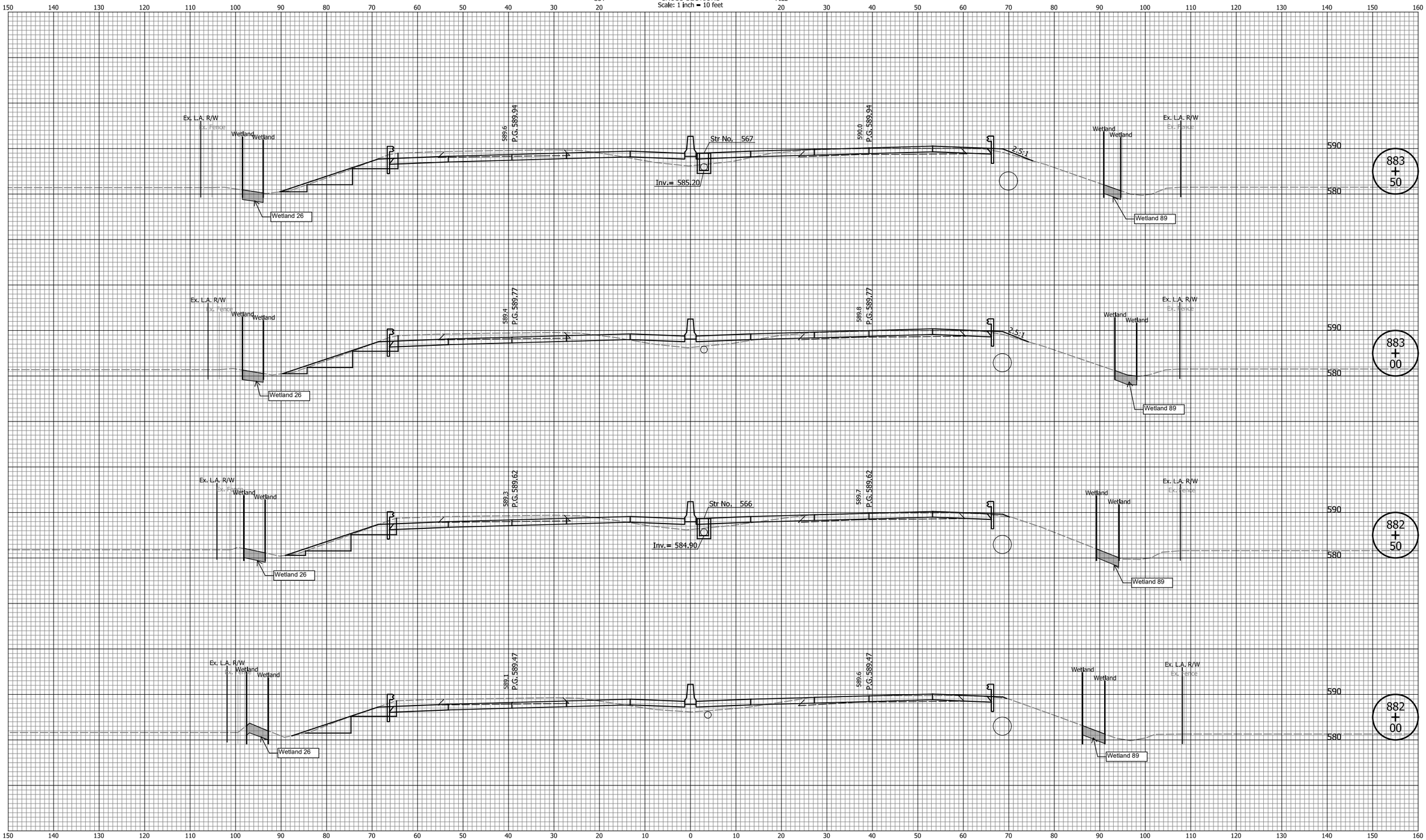


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	145 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:48 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 — FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

600 / 590 / 580

885 + 00

Ex. L.A. R/W
Ex. Fence
Wetland
Wetland
2.5:1
590.0
P.G. 590.56
590.1
P.G. 590.56
Ex. L.A. R/W
Ex. Fence
Wetland
Wetland
Wetland 26
Wetland 89

884 + 50

Ex. L.A. R/W
Ex. Fence
Wetland
Wetland
2.5:1
589.8
P.G. 590.34
Str No. 569
Inv.= 585.55
590.1
P.G. 590.34
2.5:1
Ex. L.A. R/W
Ex. Fence
Wetland
Wetland
Wetland 26
Wetland 89

Wetland 89
Permanent Impact
0.0004 ac
0.7 cys Pipe End Section
(4'x4'x1') cys

884 + 00

Ex. L.A. R/W
Ex. Fence
Wetland
Wetland
2.5:1
589.7
P.G. 590.13
590.1
P.G. 590.13
Str No. 568
2.5:1
Ex. L.A. R/W
Ex. Fence
Wetland
Wetland
Inv.= 580.82
Wetland 26
Wetland 89

Cumulative Permanent Impacts
Wetland 89
0.0087 ac
42 cys Clean Earth Fill

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	146 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:49 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn

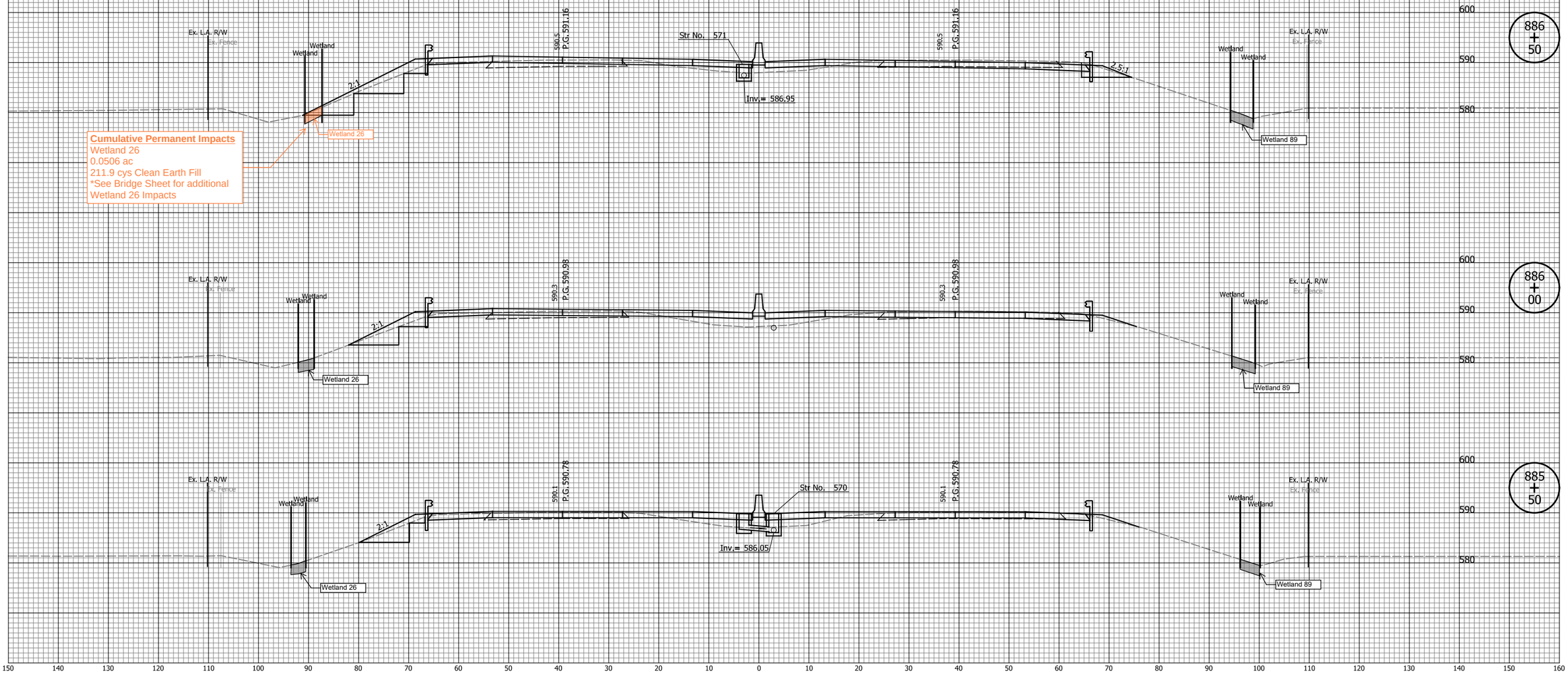
CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

Cumulative Permanent Impacts
Wetland 26
0.0506 ac
211.9 cys Clean Earth Fill
*See Bridge Sheet for additional
Wetland 26 Impacts



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

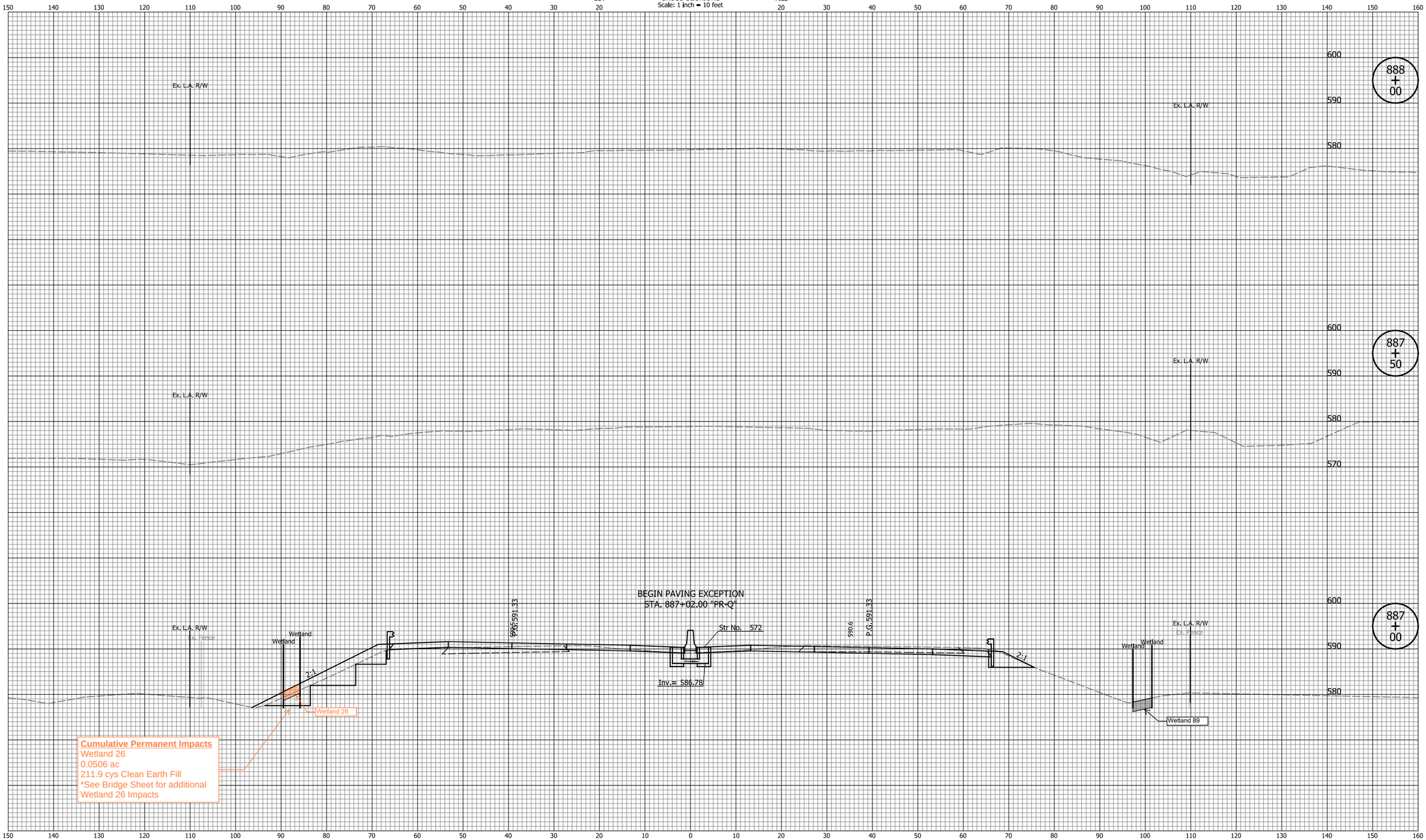
CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	147 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.ctb
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:50 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

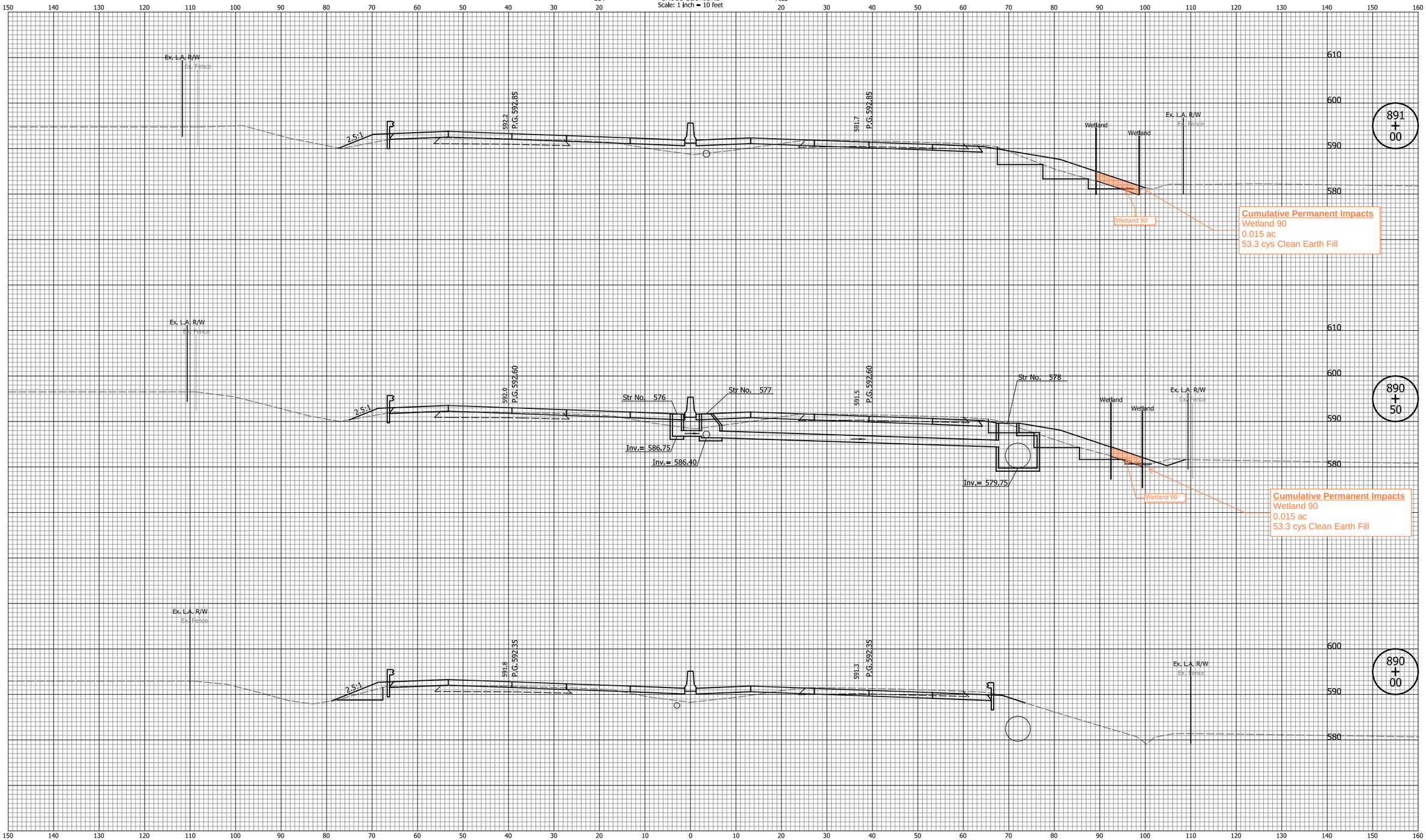
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	148 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:01:51 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	149 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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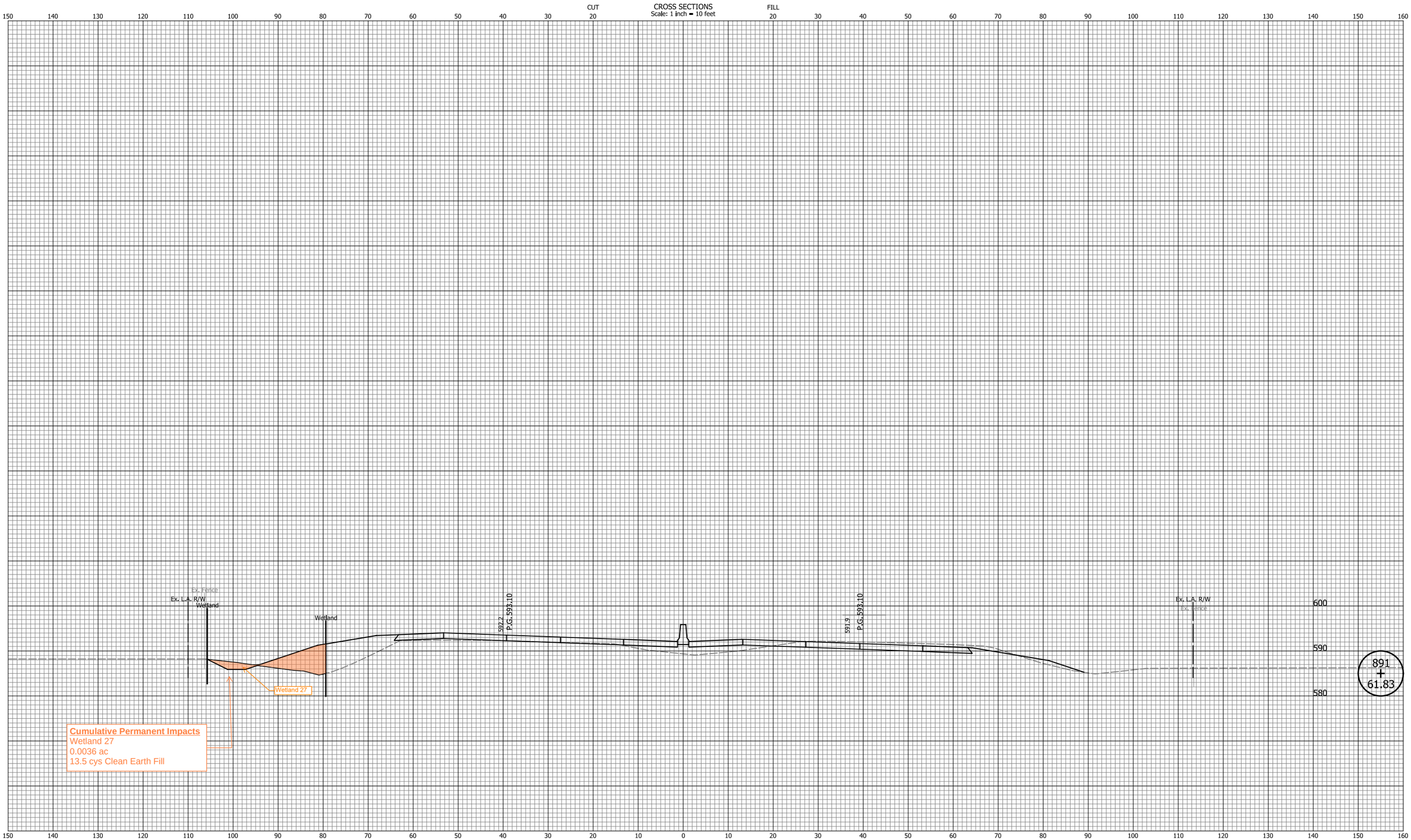


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

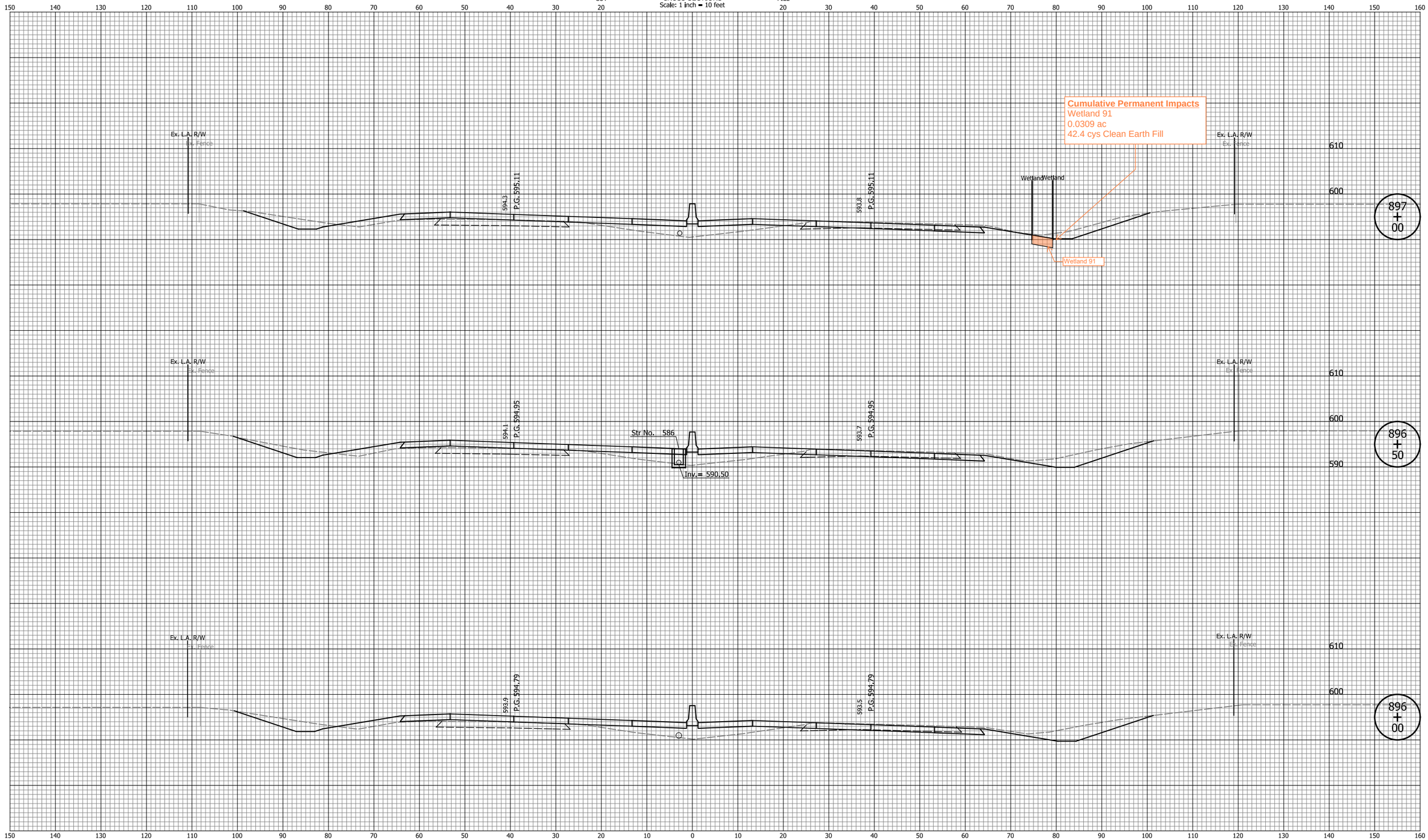
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	150 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 2/1/2022 7:25:59 AM P:\2019\00172\D. Drawings\Working Drawings\ZLM\201900172.0001.RD.CS.STREAM.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	151 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

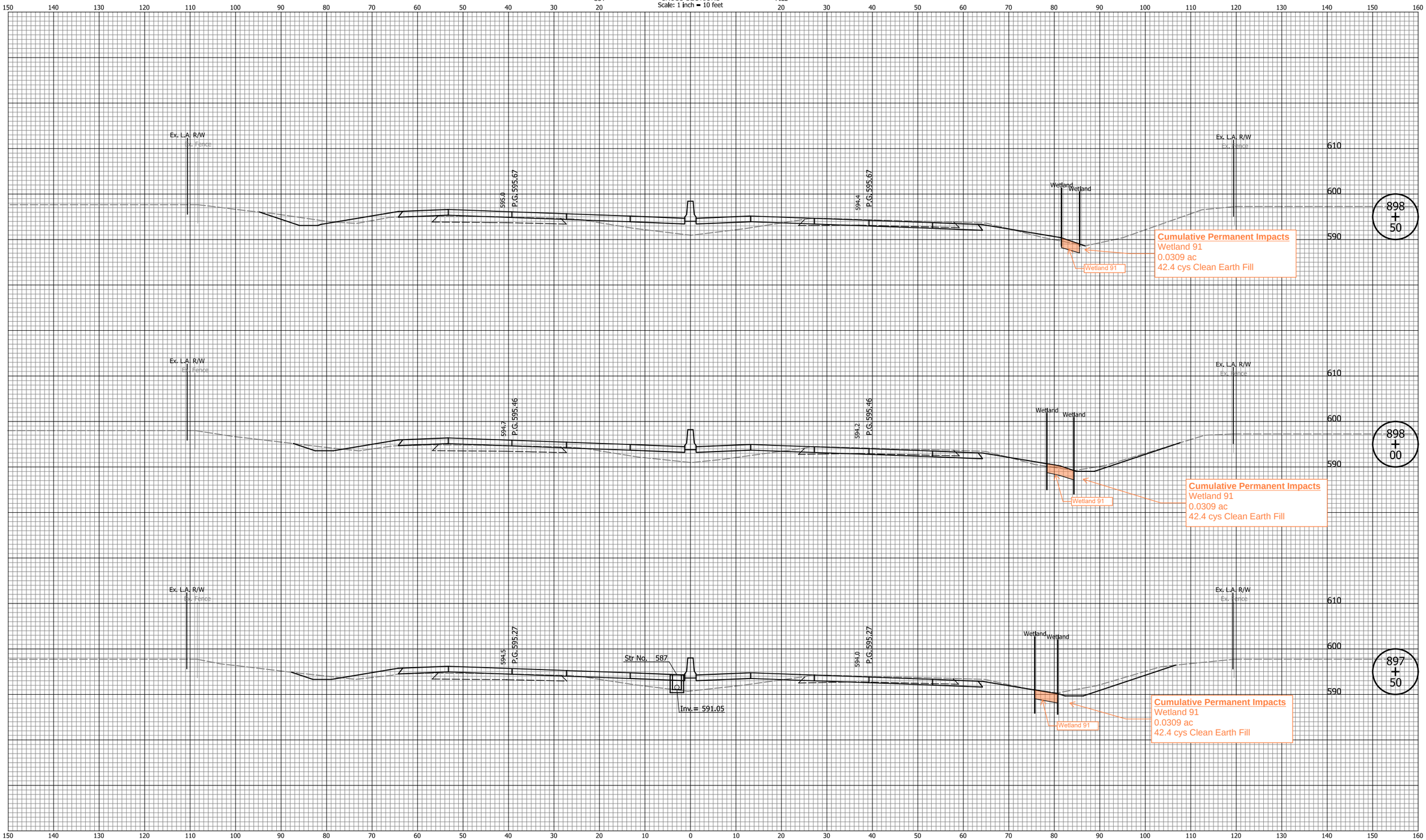
zmurphy 12/6/2021 7:01:55 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	152 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

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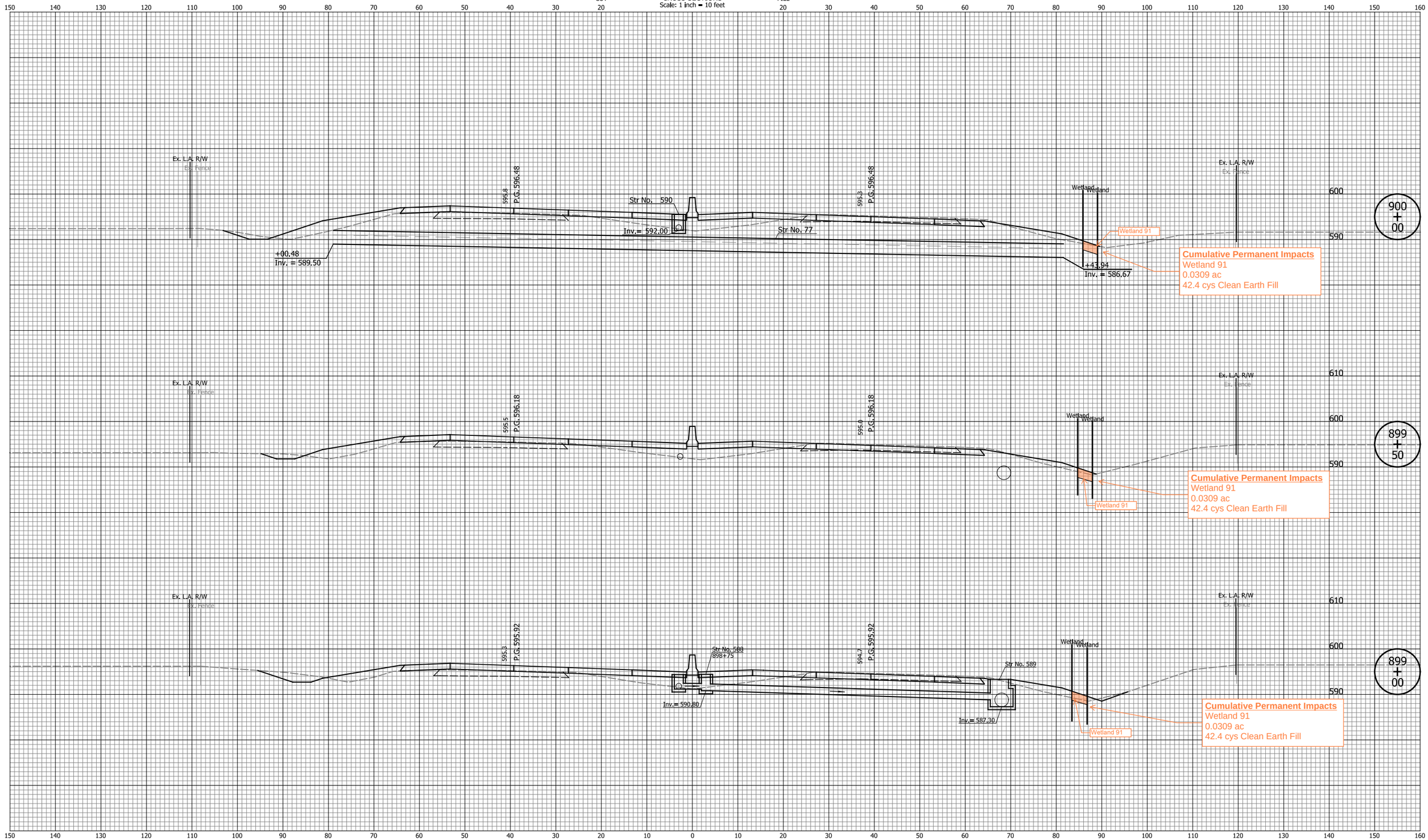
CROSS SECTIONS

Scale: 1 inch = 10 feet



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD

CHECKED: CDH | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	153 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwrg
Indiana_Shade.tbl

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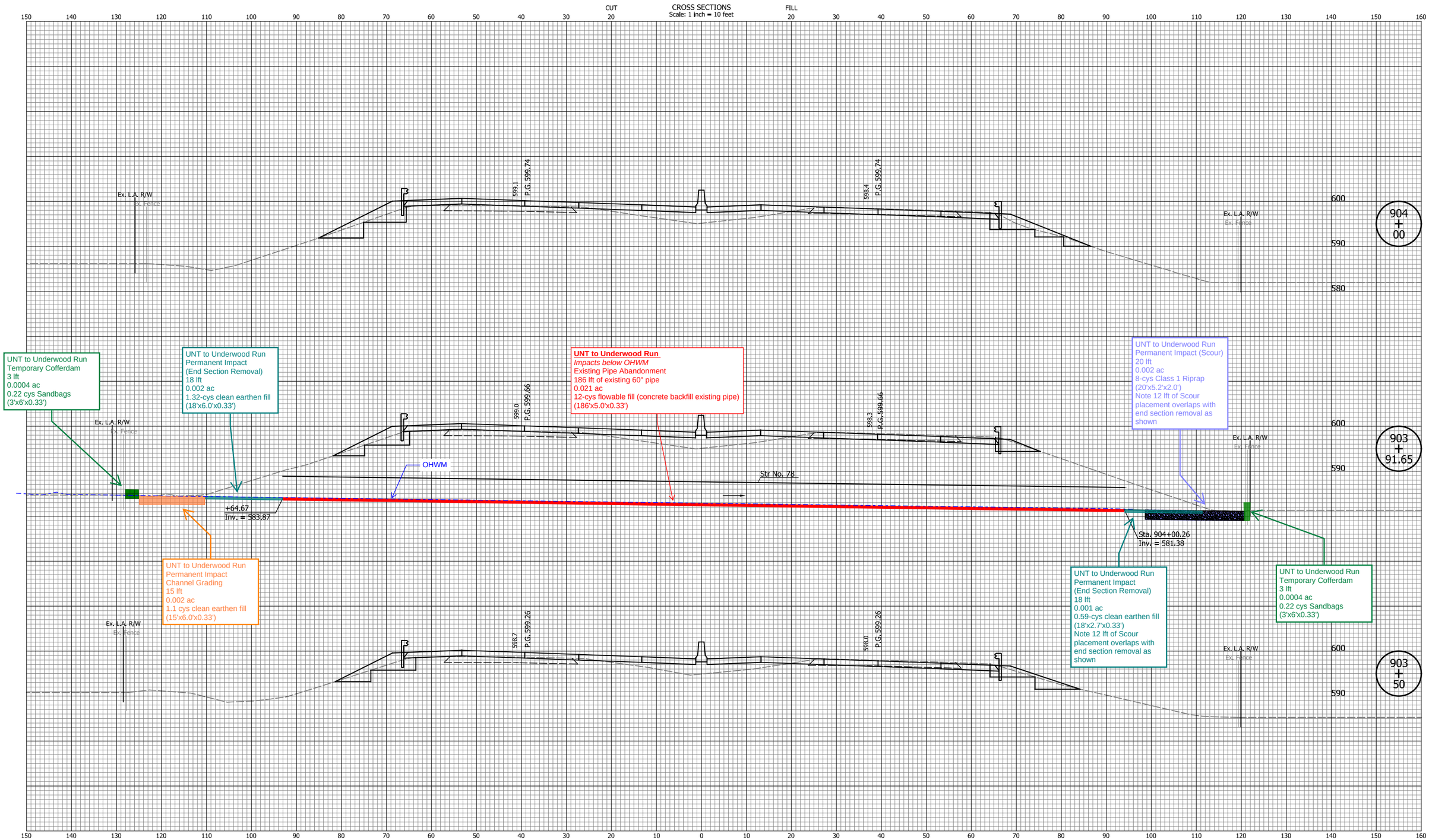

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "PR-Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	154 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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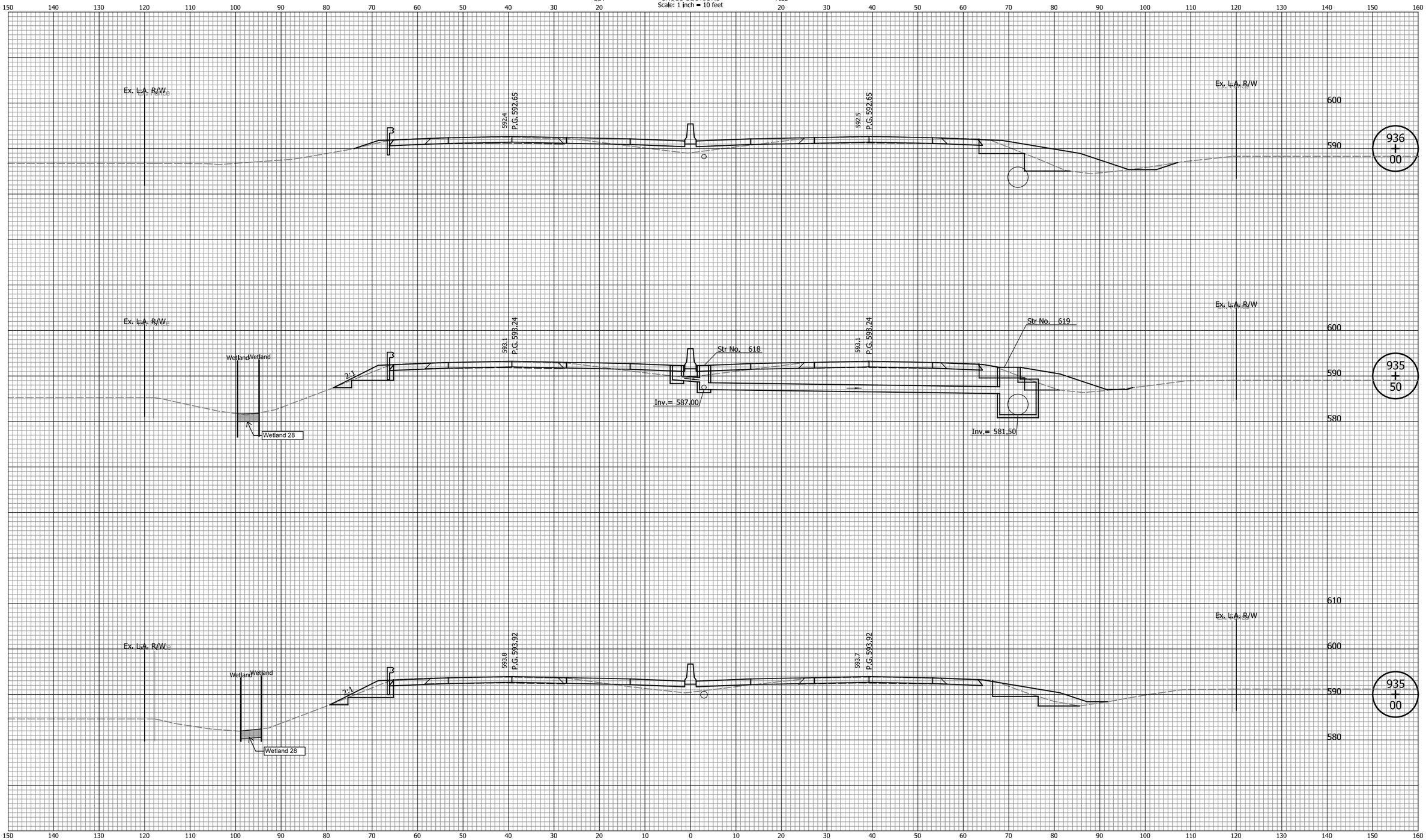

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	155 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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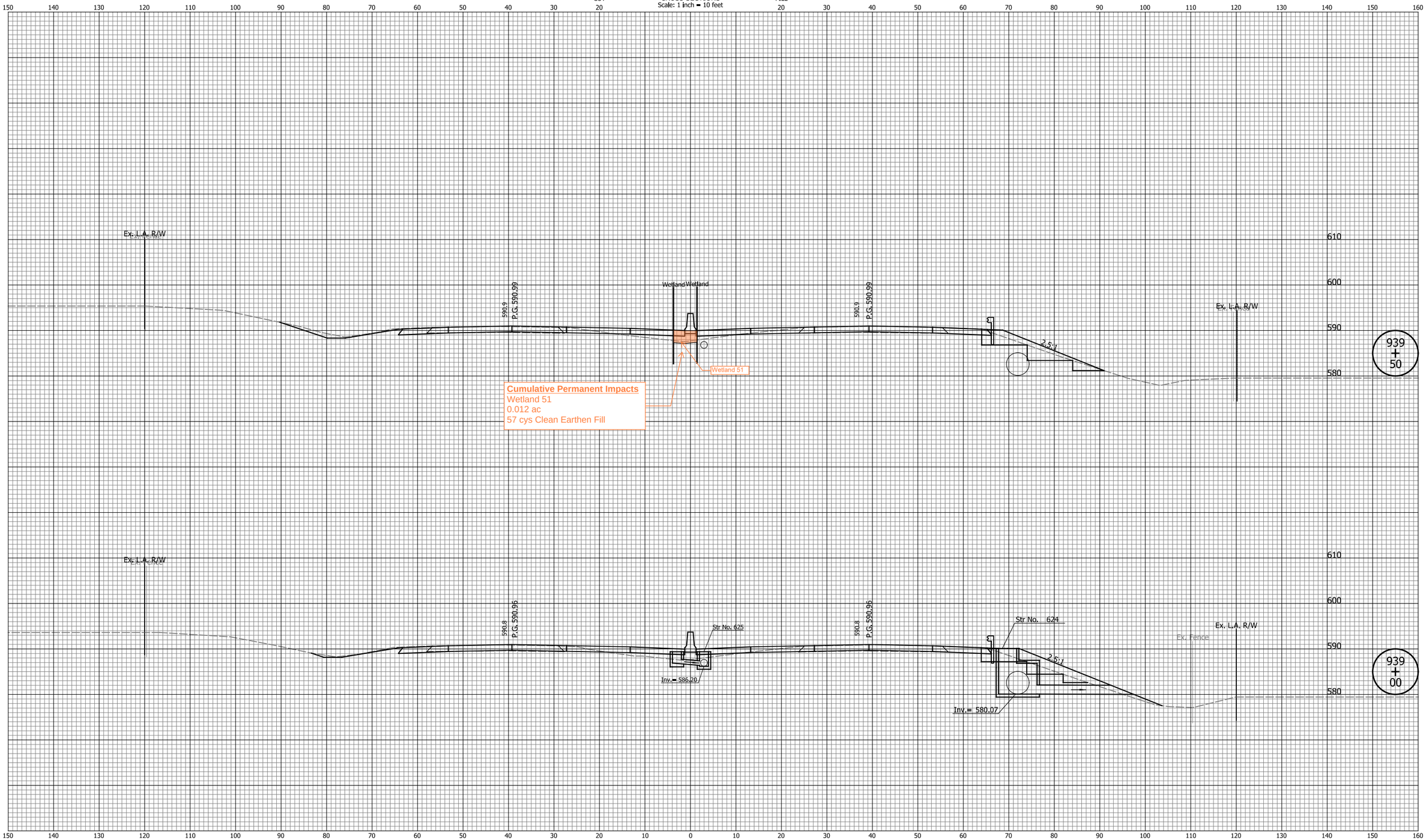

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
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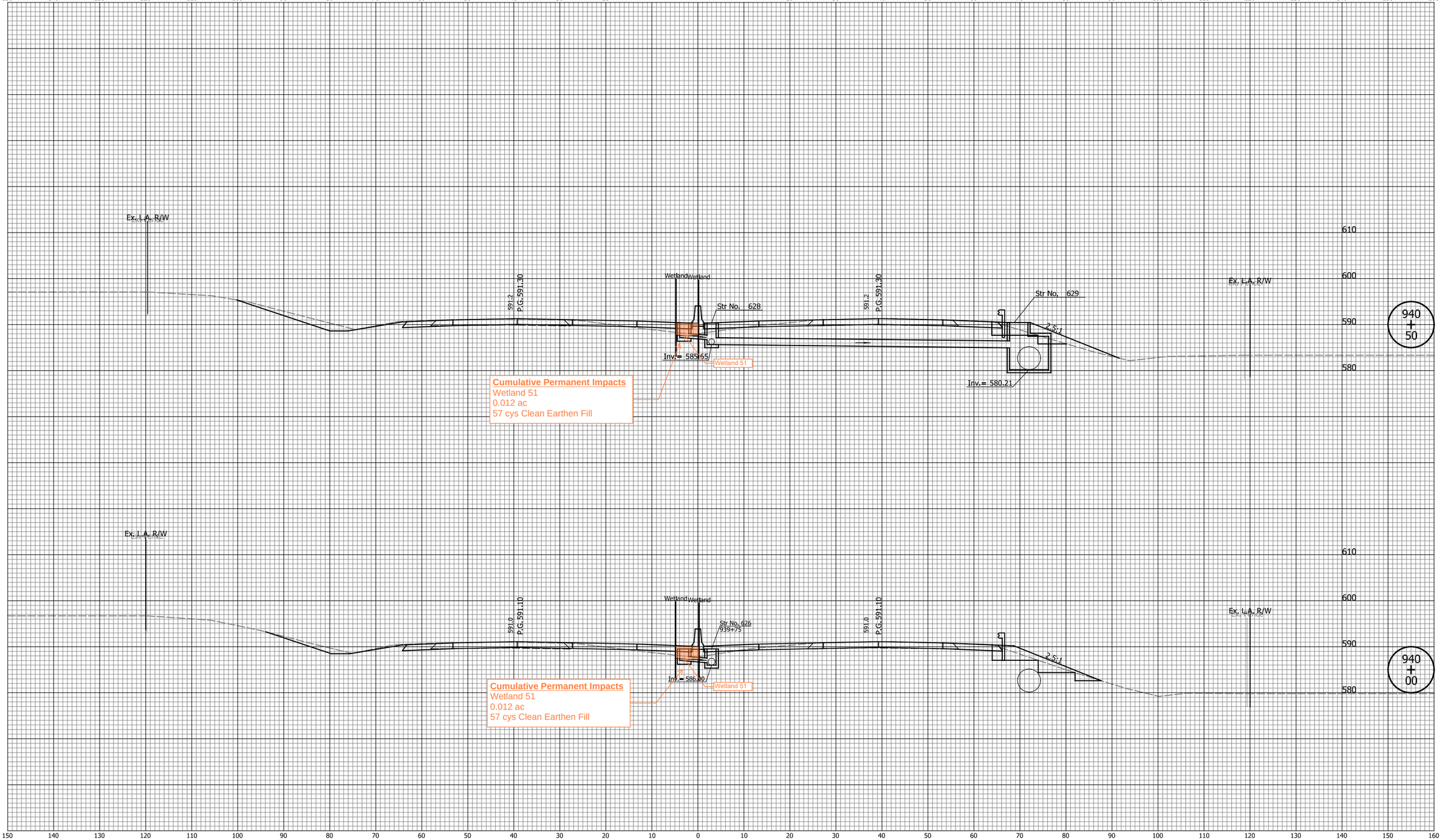
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	156 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:02:33 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02a.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
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DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

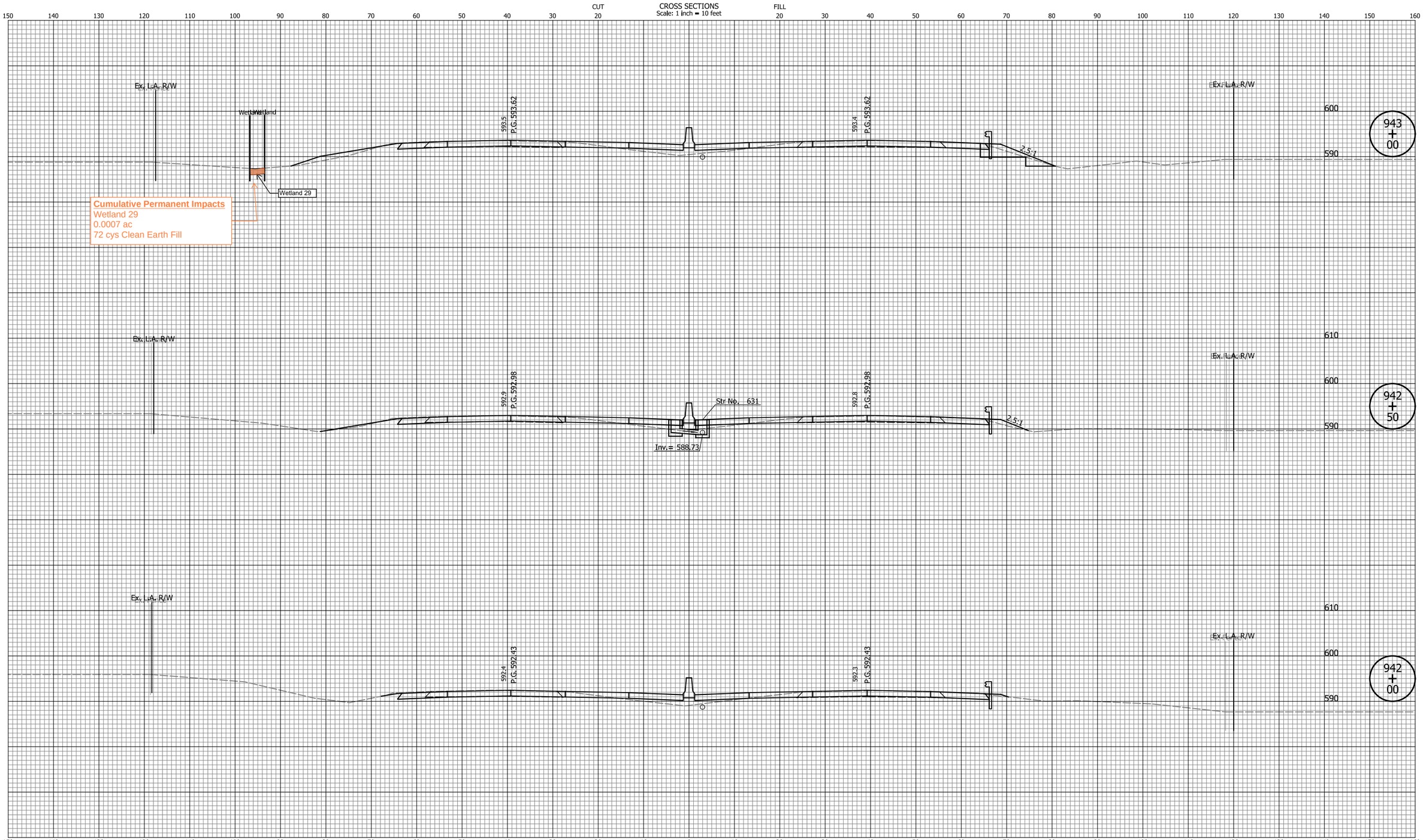
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	157 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:02:33 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02a.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	158 of 241
CONTRACT	PROJECT
R-41529	1700135

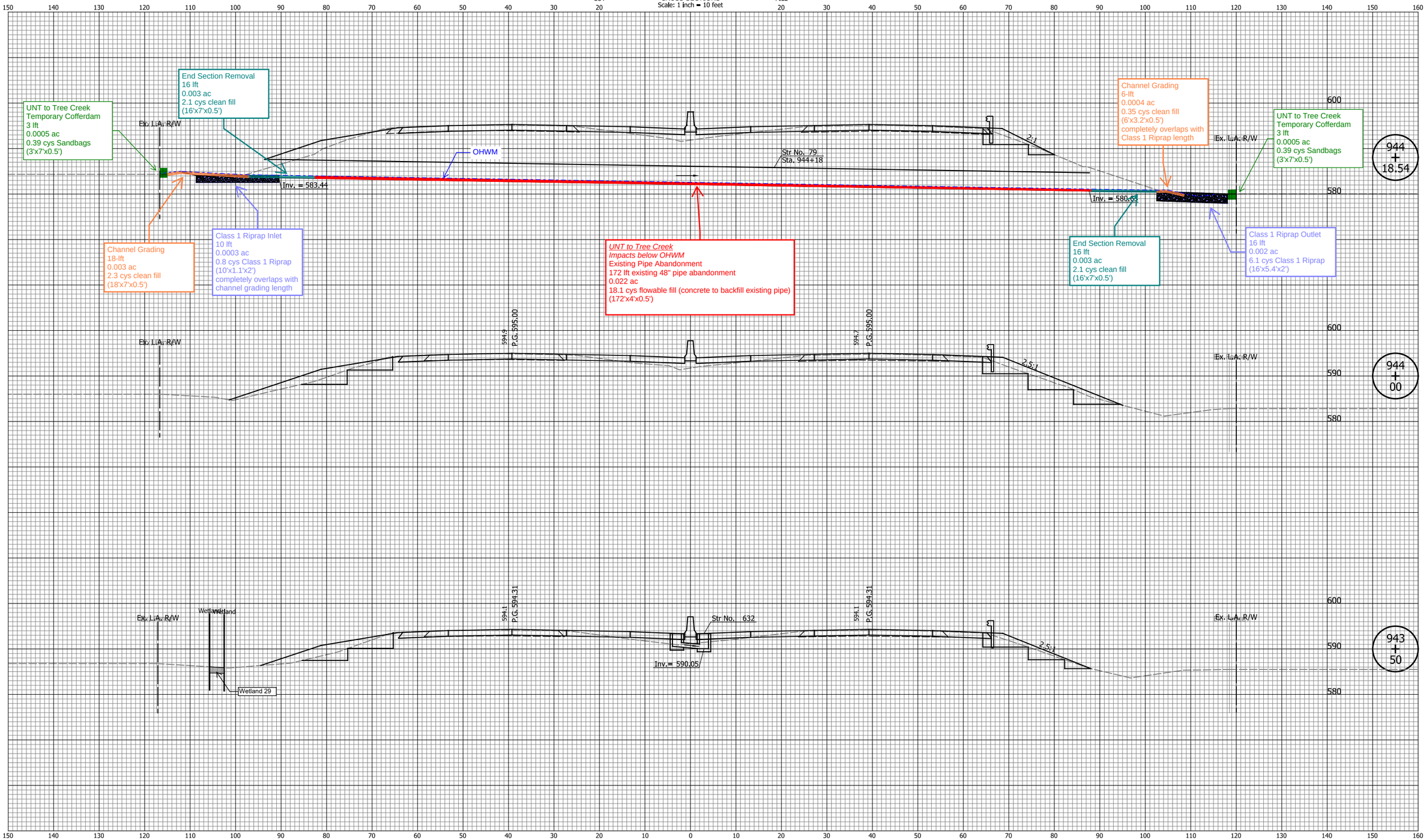
Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:02:34 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.02a.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT / FILL



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD

CHECKED: CDH | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

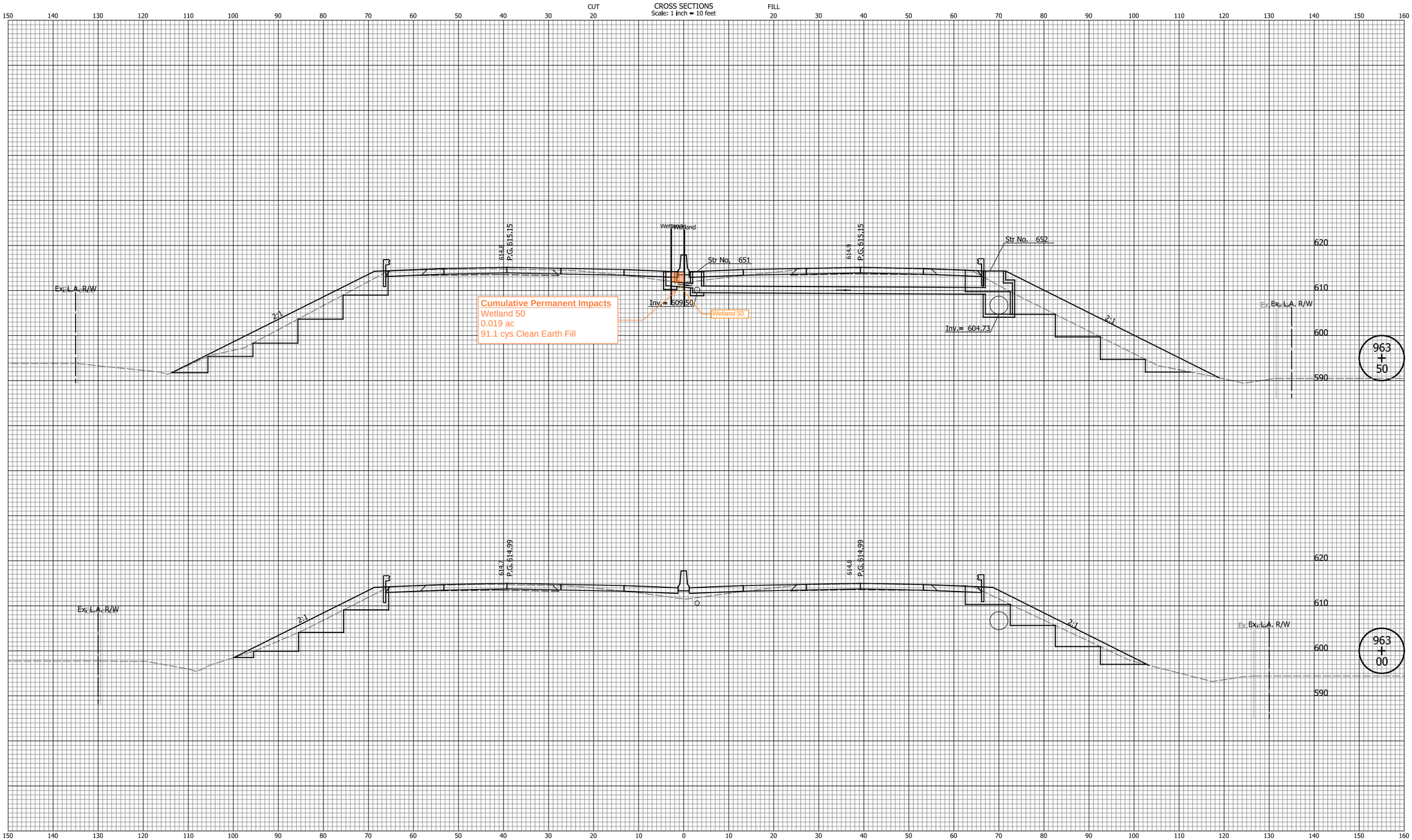
CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	159 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.ctb
Indiana_Shade.tbl

zmurphy 12/6/2021 7:02:36 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	160 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:02:59 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

Cumulative Permanent Impacts
Wetland 50
0.019 ac
91.1 cys Clean Earth Fill

Sycamore Run
Impacts below OHWM
Existing Pipe Abandonment
254 lft existing 72" pipe abandonment (224-lft to be filled, 20-lft to be open channel, 10-lft channel grading)
0.036 ac (0.032 ac flowable fill/0.003 ac lined with Riprap/0.001 ac channel grading)
23.1 cys flowable fill (concrete to backfill existing pipe)/11.1 cys Class 1 Riprap/4 cys clean earth fill
(Flowable Fill - 226'x6'x0.5'/ Class 1 Riprap 20'x6'x0.5'/ Clean Earth Fill 10'x6'x0.5')

Wetland Wetland

615.0 P.G.615.4

615.2 P.G.615.48

Wetland 50

620
610
600
590
580

Ex. L.A. R/W

Sycamore Run
Temporary Impact
3 lft
0.001 (ac) Cofferdam
1.6 cys Sand Bags
(7' x 3' x 2')

Open Channel post relocation

2:1

OHWM

Str No. 81
Sta. 964+45

Sycamore Run
Pipe Removal and New Riprap
20 lft existing 72" pipe removed
0.003 ac
11.1 cys Class 1 Riprap
(25'x6'x0.5')

Ex. L.A. R/W

964 + 50

Inv. = 585.46

Inv. = 581.64

Sycamore Run
Culvert Removal and Channel Grading
10 lft
0.001 ac
4 cys Clean Earth Fill
(10'x6'x0.5')

Sycamore Run
Permanent Impact
Existing Riprap Supplemented
17 lft
0.002 ac
5.4 cys Class 1 Riprap
(17'x4.3'x2')

Sycamore Run
Temporary Cofferdam
3 lft
0.0002 ac
0.33 cys Sandbags
(3'x3.5'x0.5')

Cumulative Permanent Impacts
Wetland 50
0.019 ac
91.1 cys Clean Earth Fill

Wetland Wetland

614.8 P.G.615.32

615.1 P.G.615.32

Wetland 50

620
610
600
590

Ex. L.A. R/W

Ex. L.A. R/W

2:1

964 + 00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	161 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:03:01 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

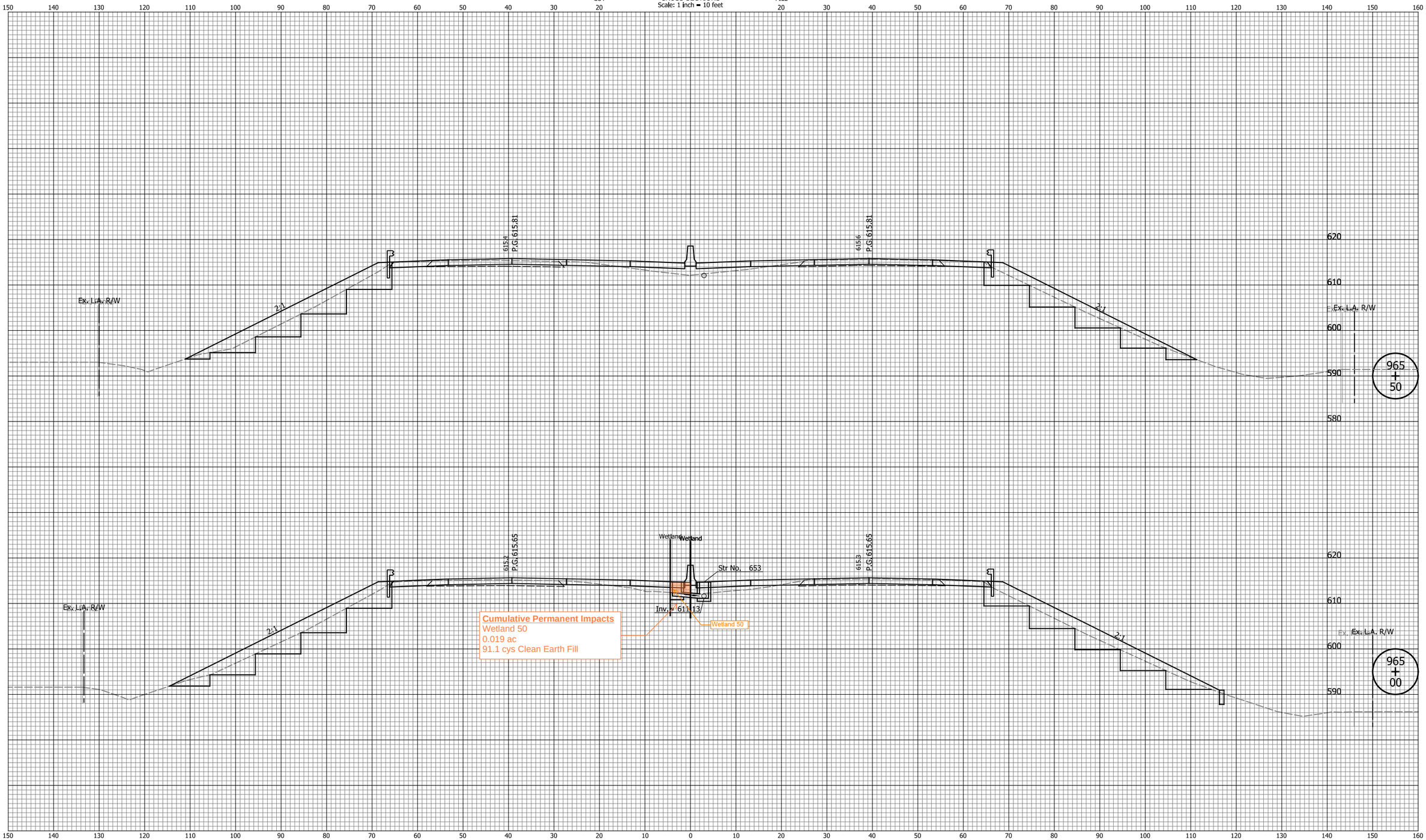
CUT

CROSS SECTIONS

Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20



20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS		
N/A	162	of	241
CONTRACT	PROJECT		
R-41529	1700135		

Indy-shtf.ctb
Indiana_Shade.tbl

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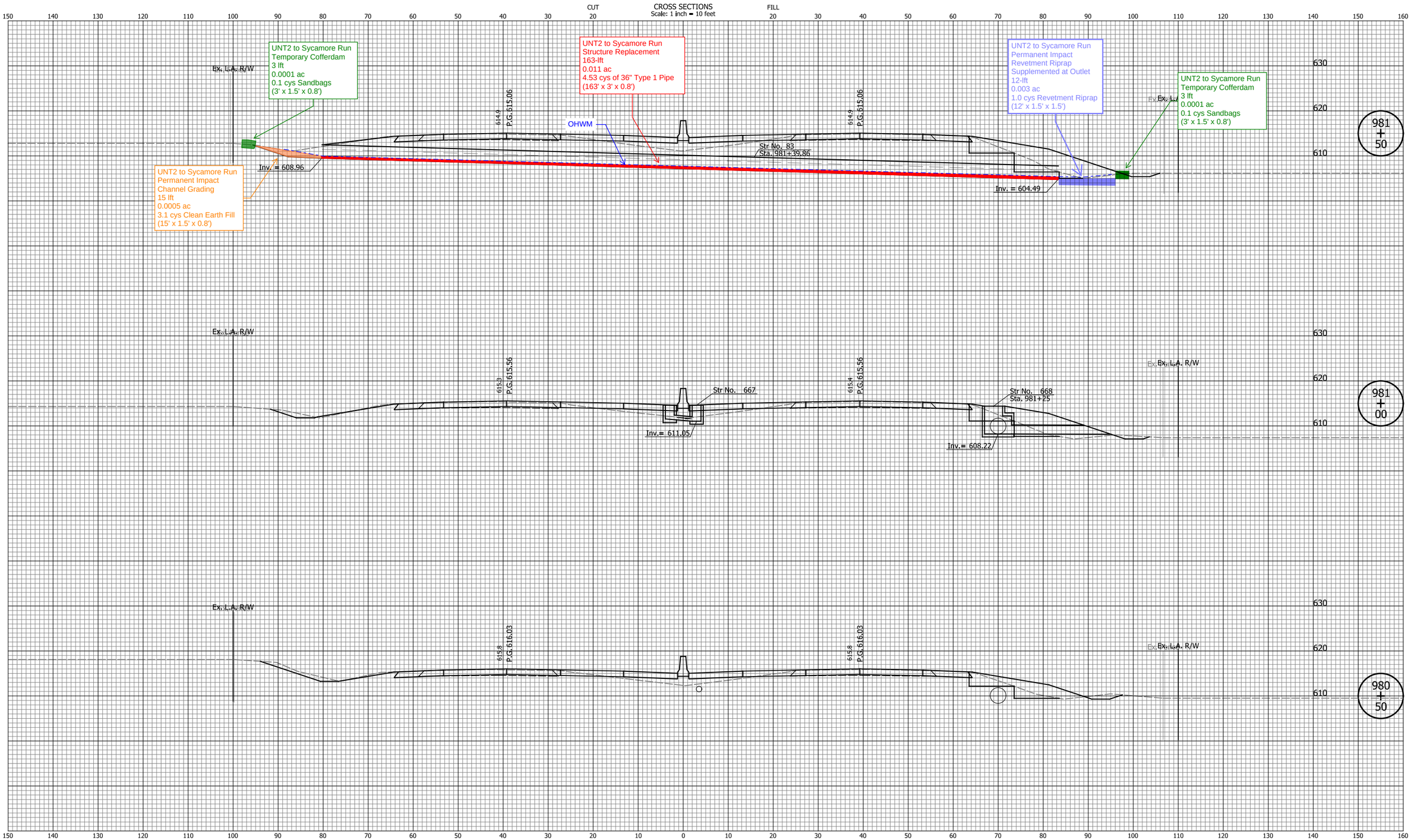

DATE	REVISION

Attachment 14-1

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	163 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

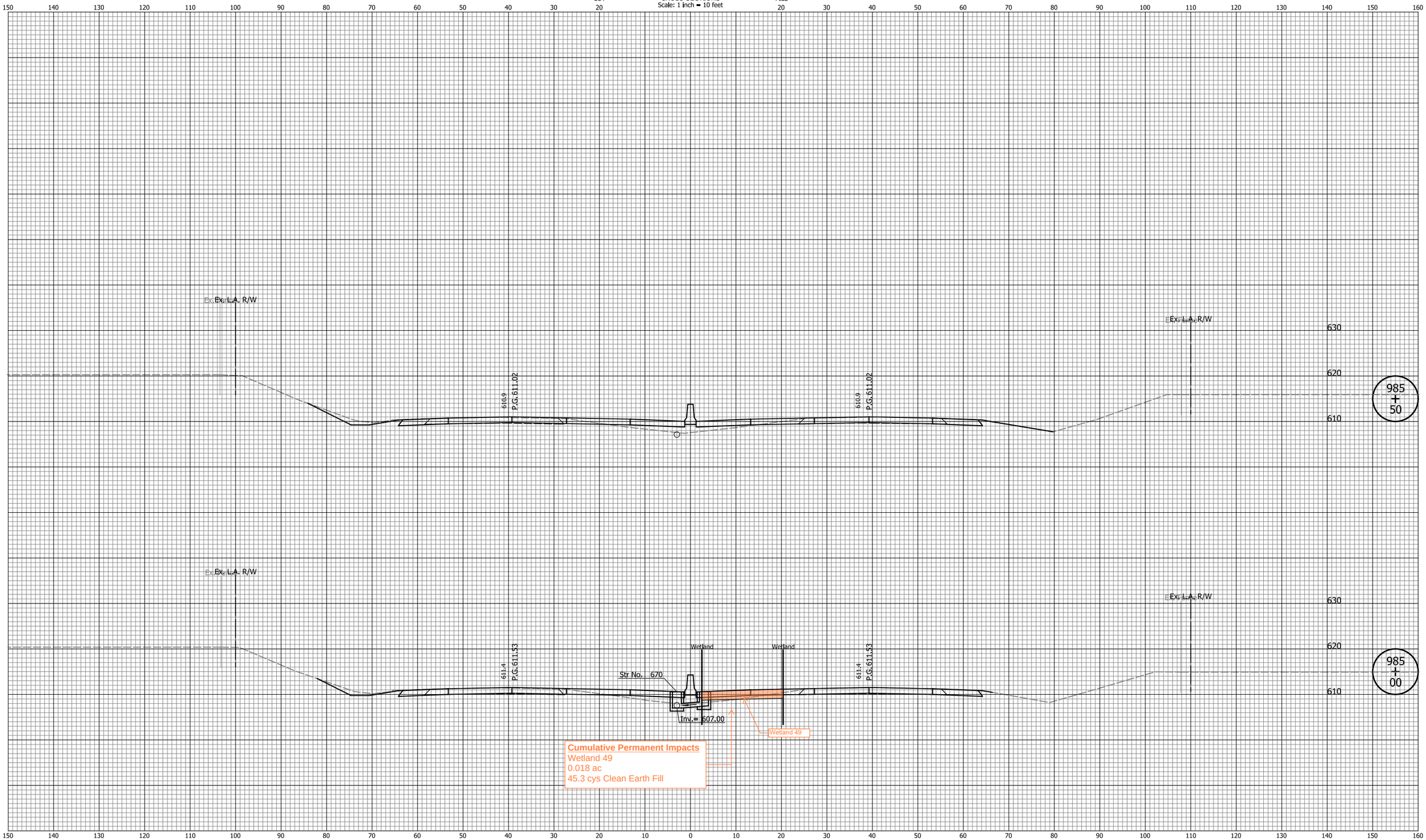
zmurphy 11/29/2021 1:22:43 PM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	164 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.dgn
Indiana_Shade.tbl

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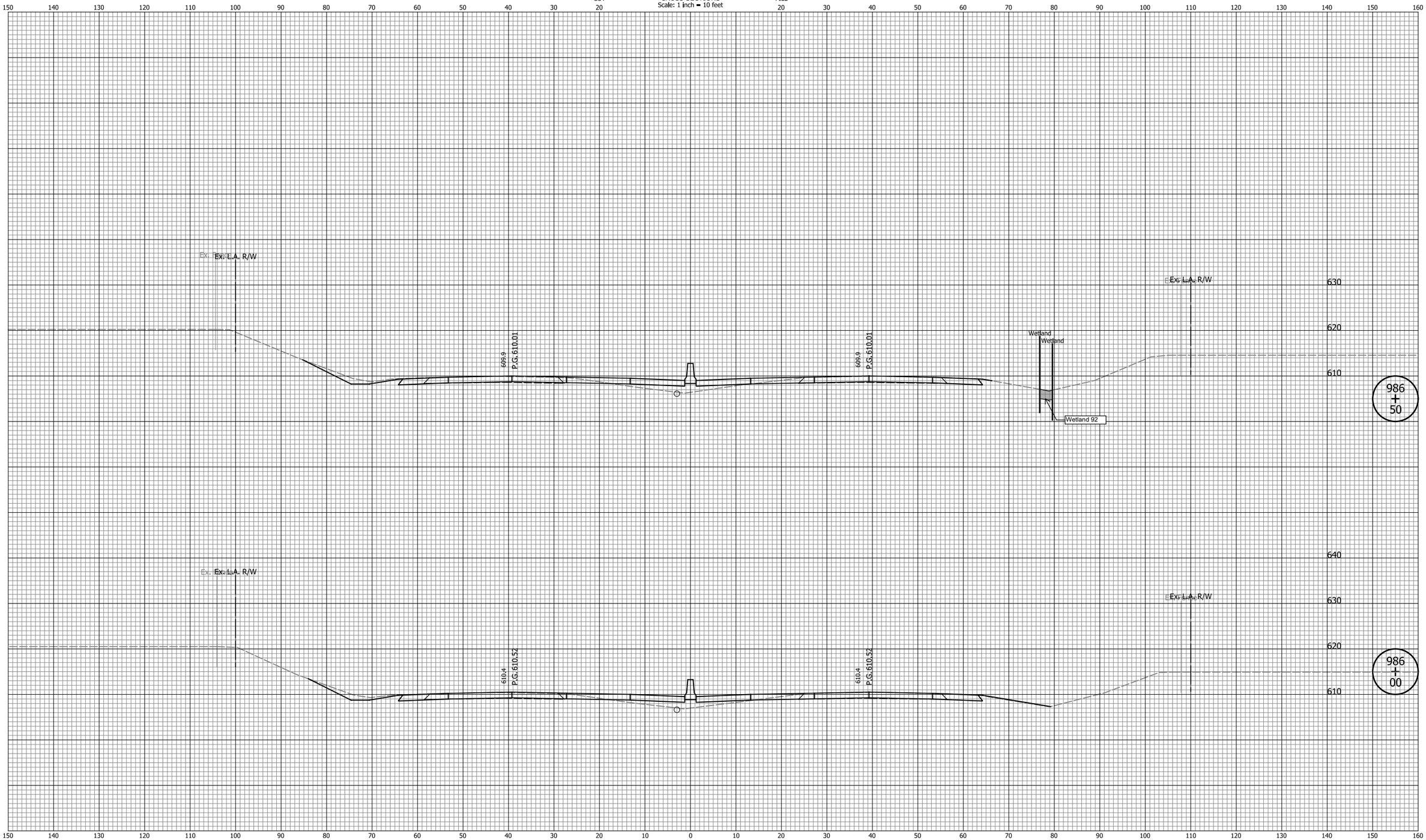

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	165 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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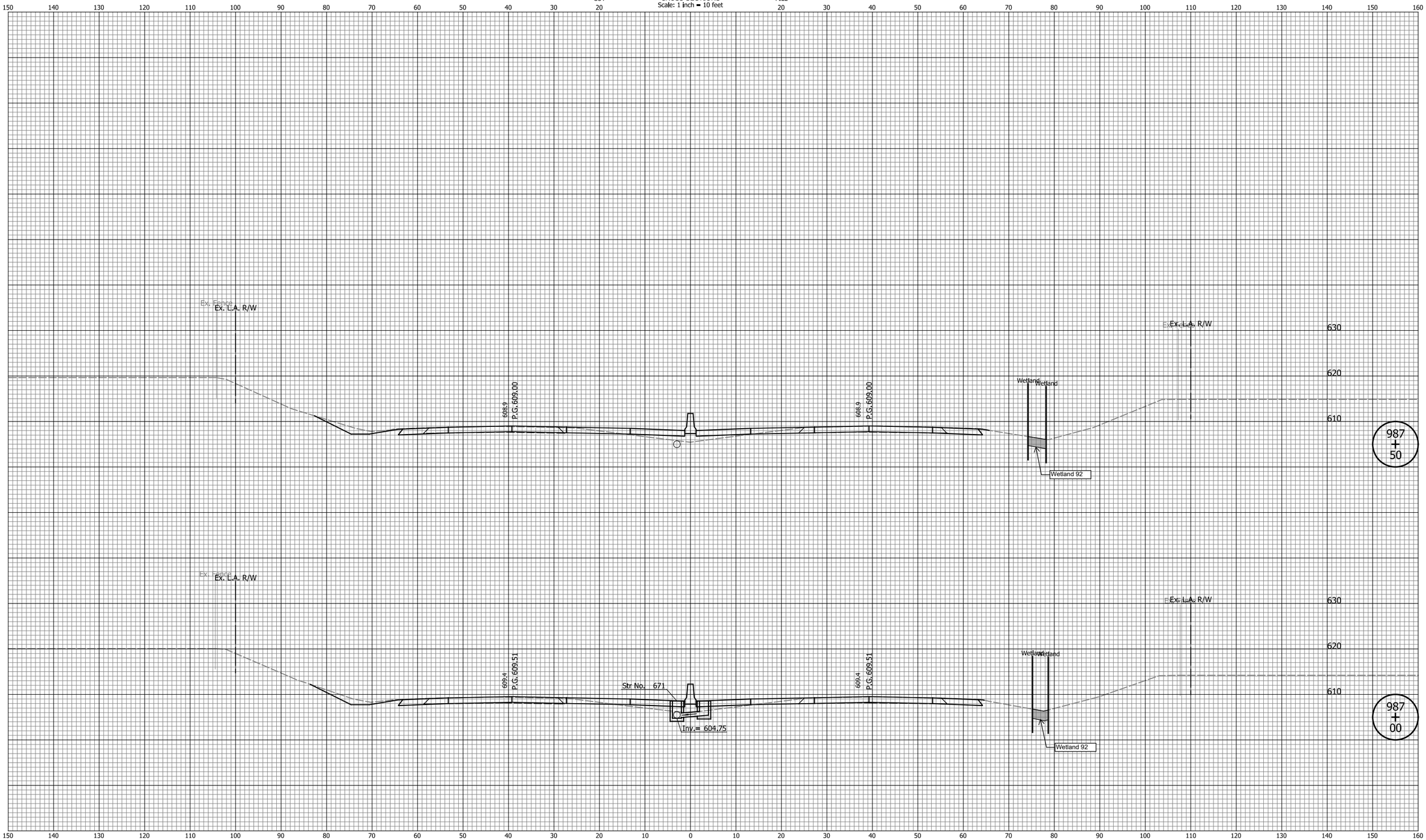

DATE	REVISION

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RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	166 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

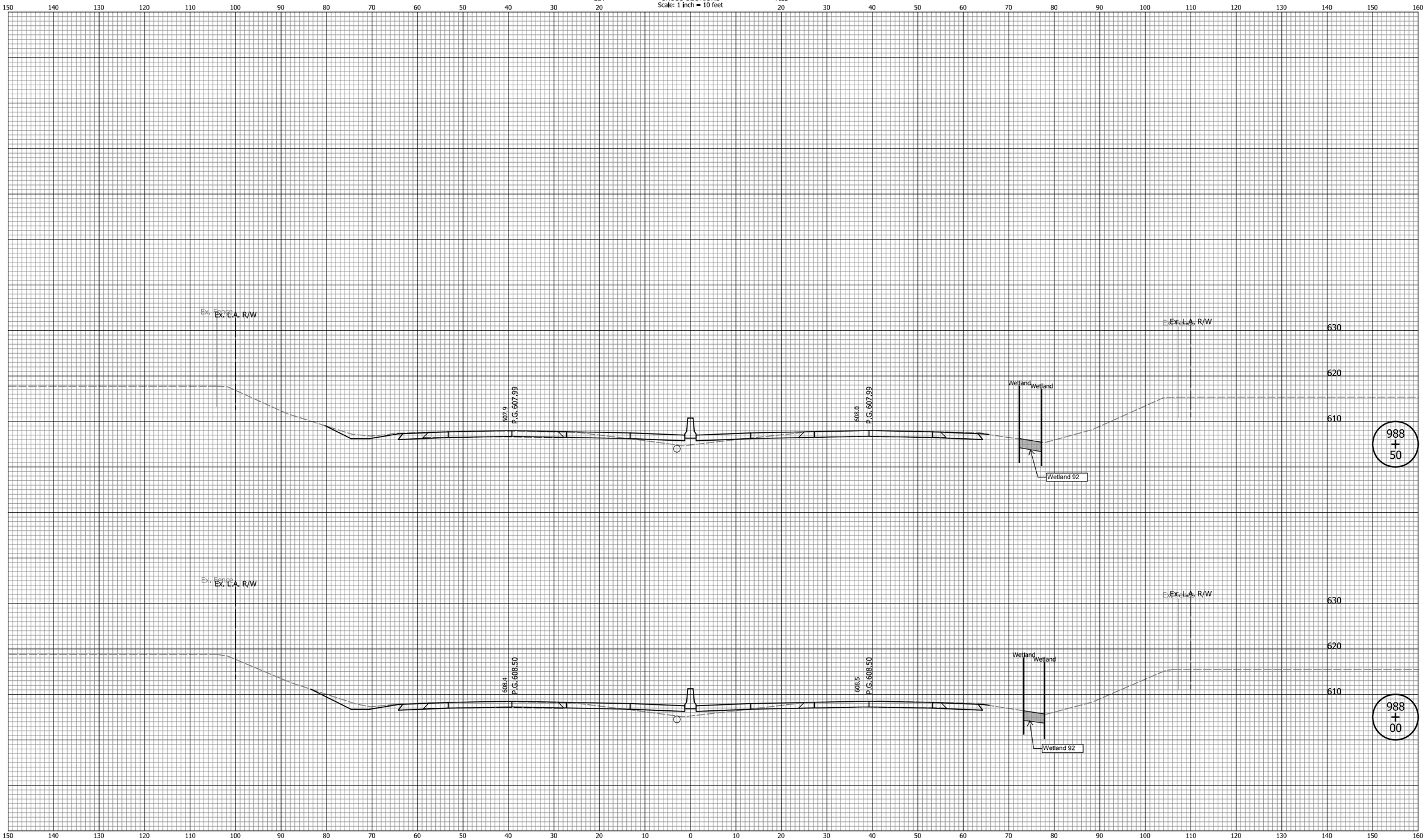
zmurphy 12/6/2021 7:03:28 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



DATE	REVISION

Attachment 14-1

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CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	167 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

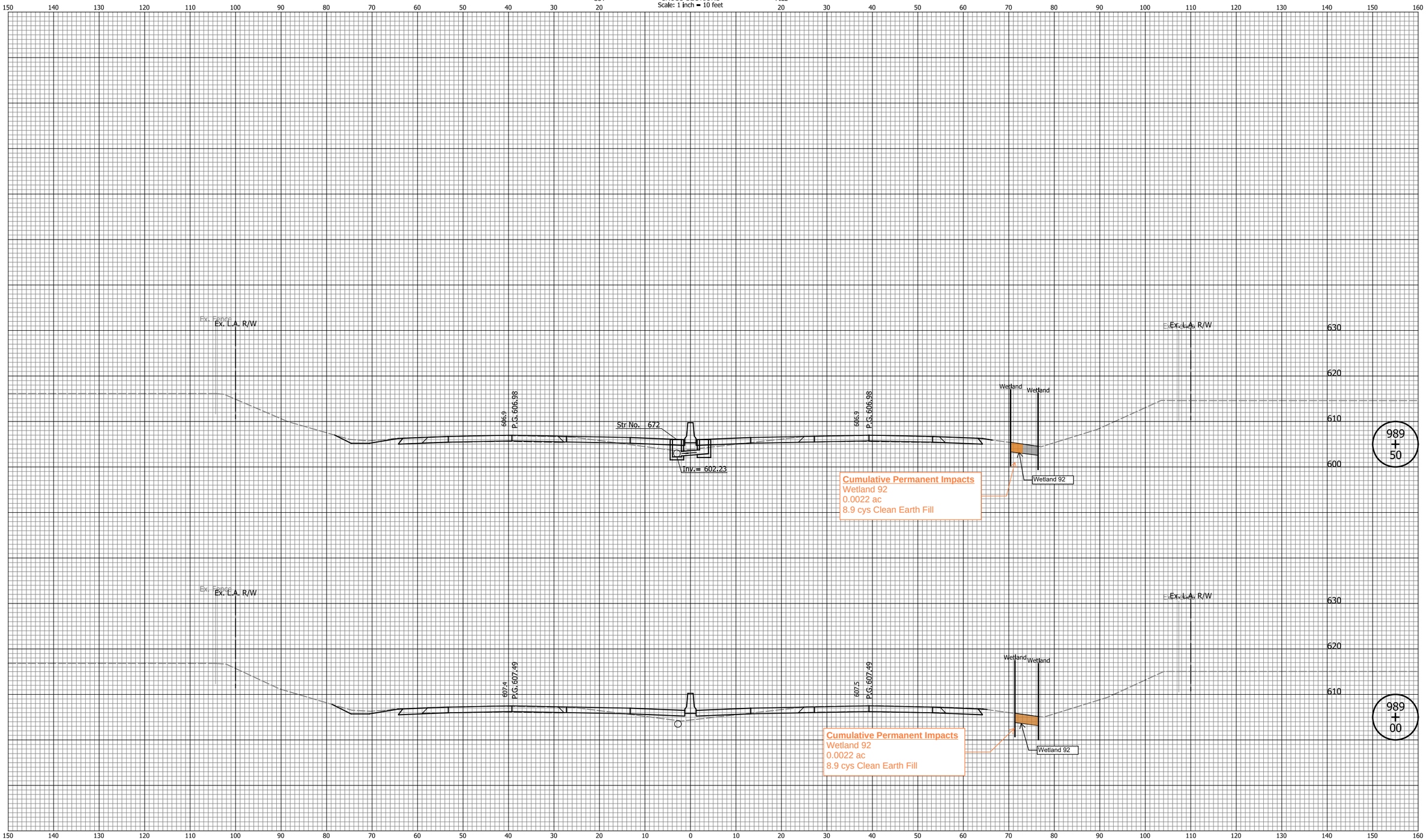
zmurphy 12/6/2021 7:03:29 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	168 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:03:31 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

620
610
600
590

Ex. L.A. R/W
Ex. L.A. R/W
600.3
P.G.600.37
600.3
P.G.600.37
Str No. 684
2:1
Inv.= 596.10
Wetland
Wetland
Wetland 93
998
+
50
Cumulative Permanent Impacts
Wetland 93
0.0114 ac
53.3 cys Clean Earth Fill

Ex. L.A. R/W
Ex. L.A. R/W
Str No. 685
600.4
P.G.600.53
600.5
P.G.600.53
Str. No. 84
2:1
Inv.= 591.00
Inv.= 591.82
Wetland
Wetland
Wetland 93
998
+
00

Ex. L.A. R/W
Ex. L.A. R/W
600.6
P.G.600.68
600.6
P.G.600.68
2.5:1
Str. No. 84
997
+
50

DATE	REVISION

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	169 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-dist.dgn
Indiana_Shade.tbl

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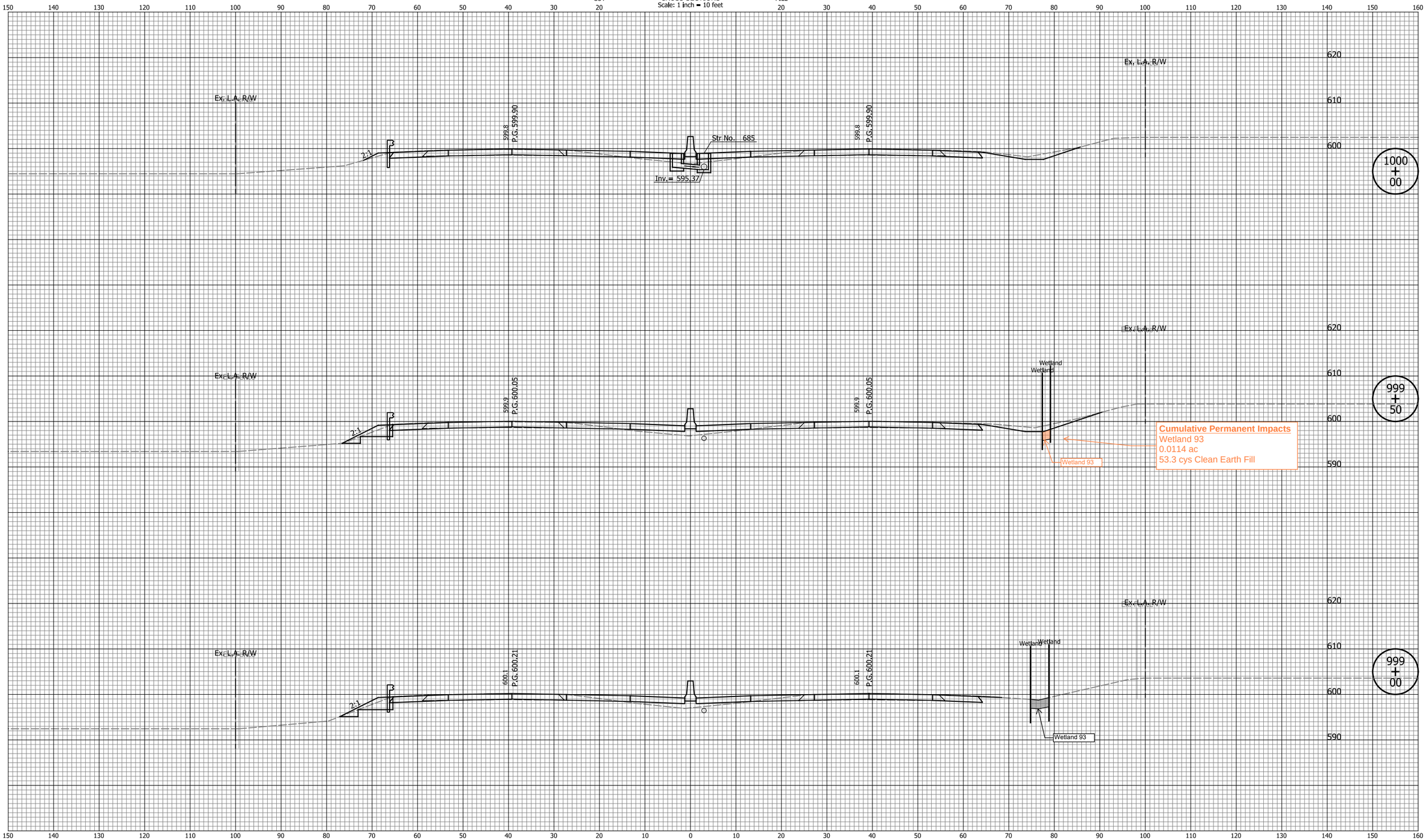

DATE	REVISION

Attachment 14-1

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CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	170 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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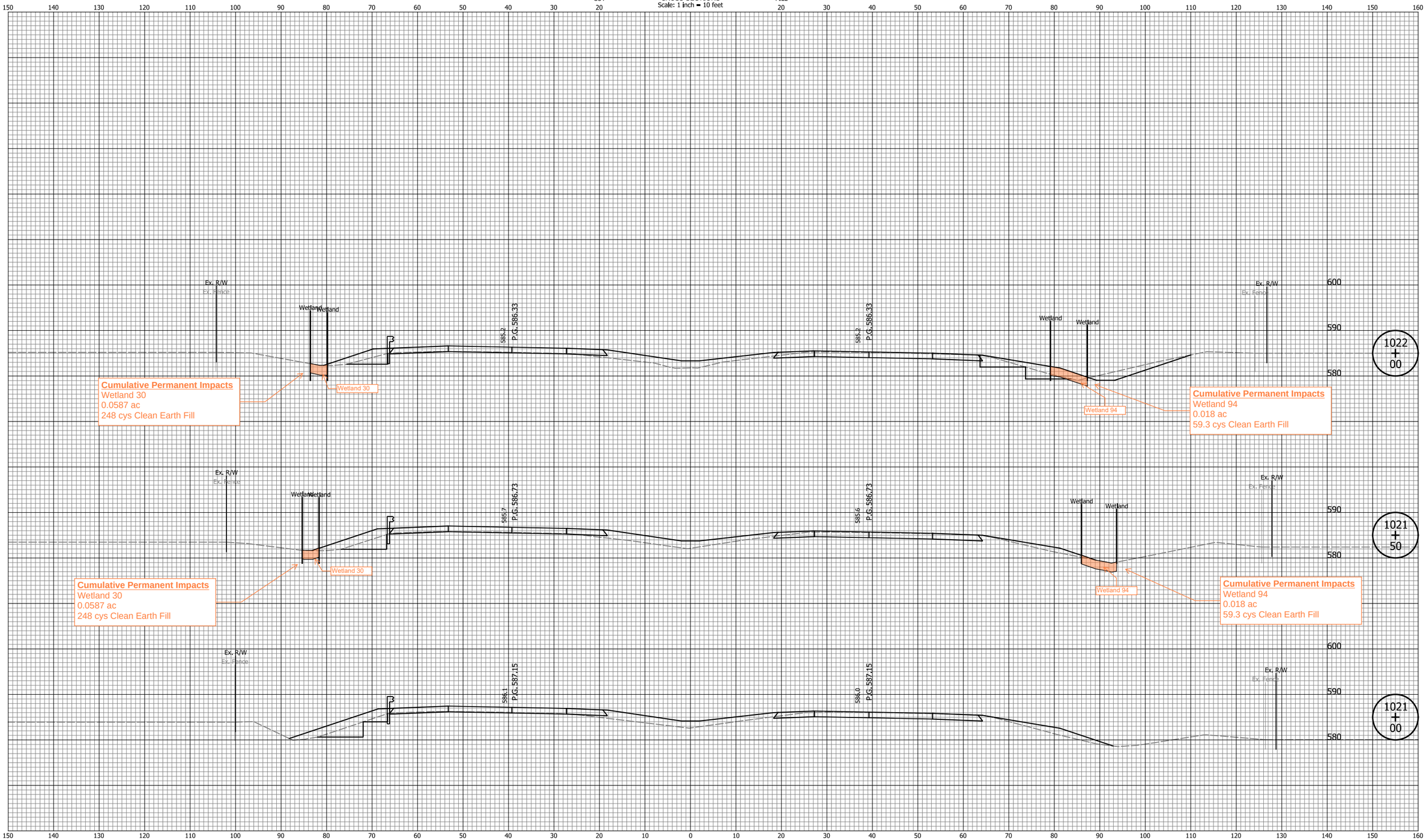

DATE	REVISION

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	171 of 241
CONTRACT	PROJECT
R-41529	1700135

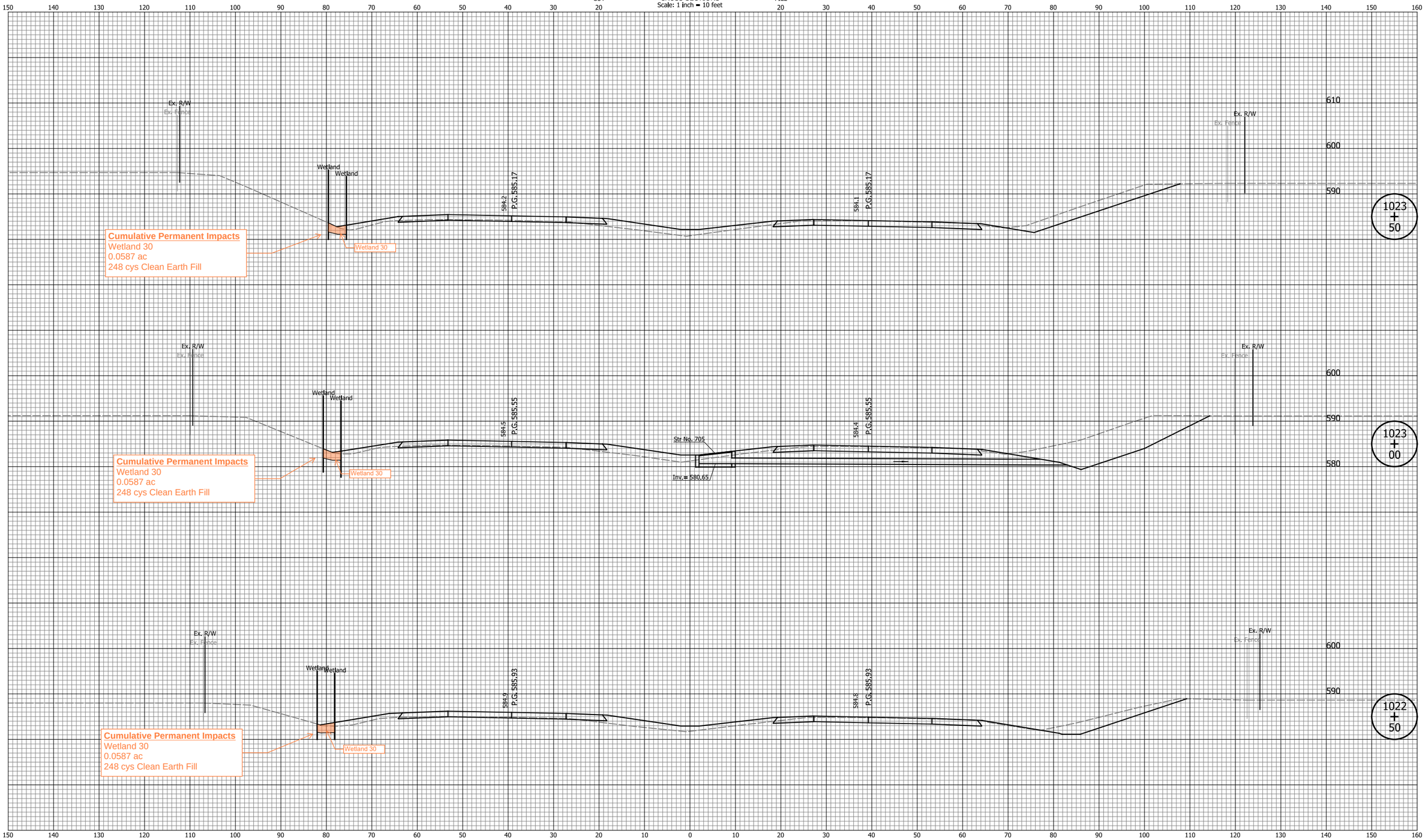
Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:14 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

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DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	172 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

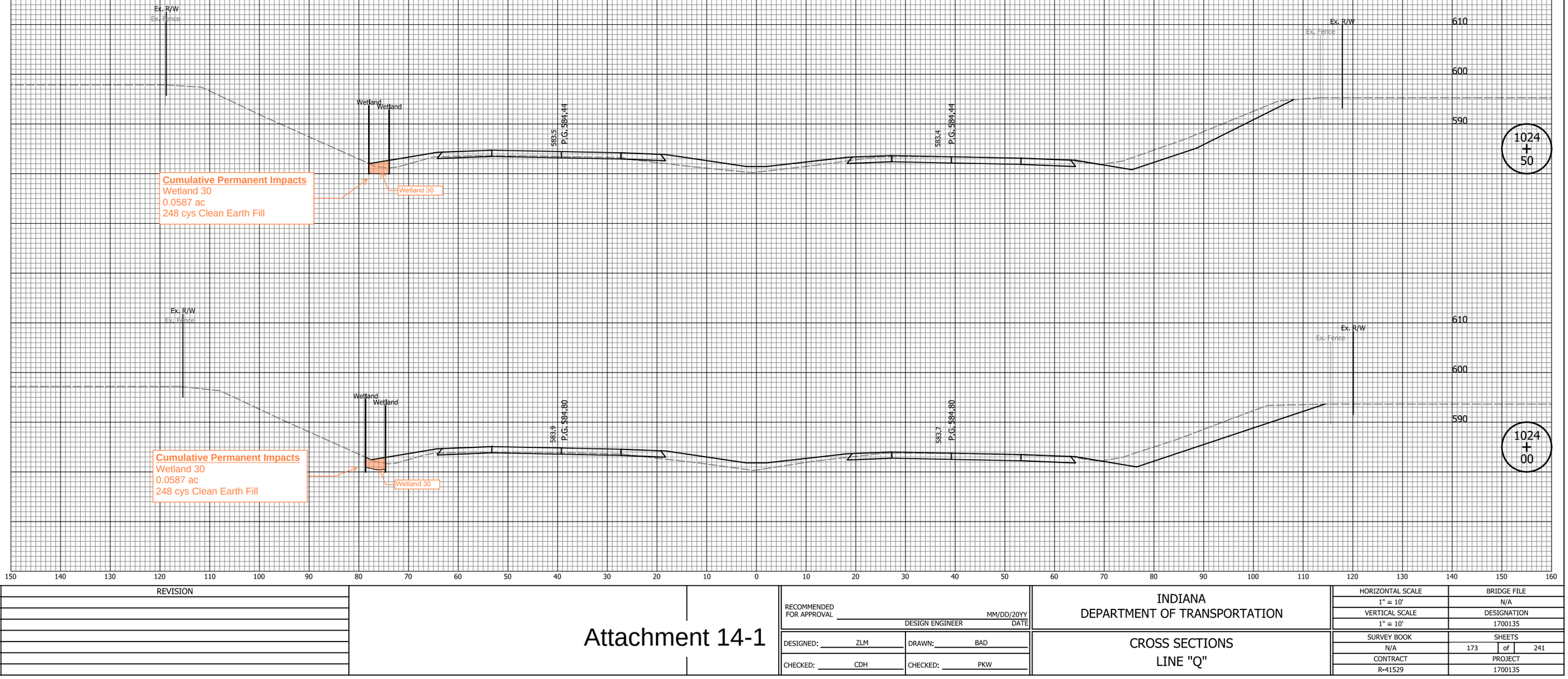
zmurphy 12/6/2021 7:04:15 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



DATE	REVISION

Attachment 14-1

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
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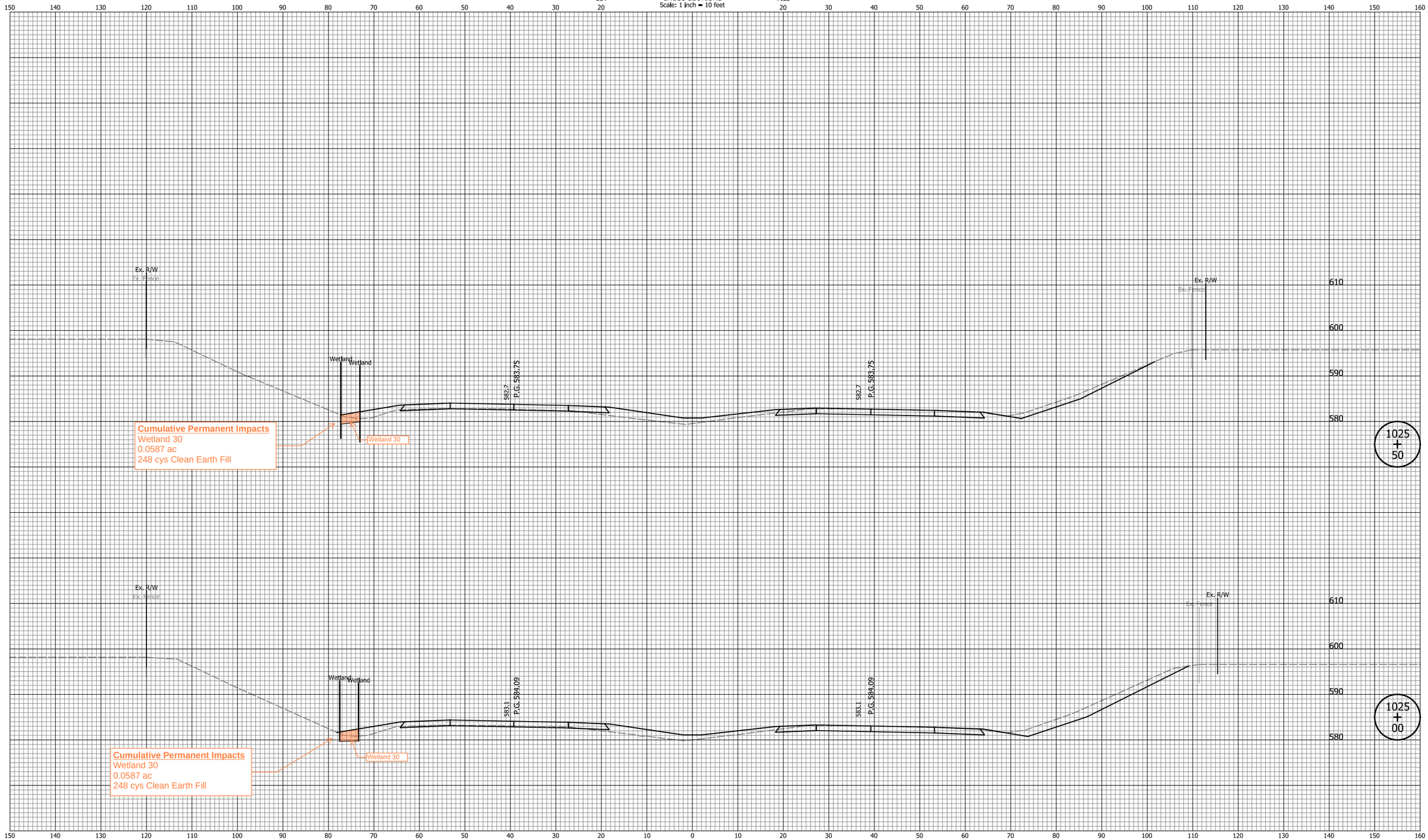
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	173 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:17 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn



DATE	REVISION

Attachment 14-1

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	174 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:18 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CUT

CROSS SECTIONS
Scale: 1 inch = 10 feet

FILL

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

610
600
590
580

Ex. R/W
Ex. Fence

Wetland
Wetland

582.0
P.G. 583.10

582.0
P.G. 583.10

Ex. R/W
Ex. Fence

Wetland 30

Cumulative Permanent Impacts
Wetland 30
0.0587 ac
248 cys Clean Earth Fill

1026
+
50

Ex. R/W
Ex. Fence

Wetland
Wetland

582.4
P.G. 583.43

582.3
P.G. 583.43

Ex. R/W
Ex. Fence

Wetland 30

Cumulative Permanent Impacts
Wetland 30
0.0587 ac
248 cys Clean Earth Fill

1026
+
00

DATE	REVISION

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INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	175 of 241
CONTRACT	PROJECT
R-41529	1700135

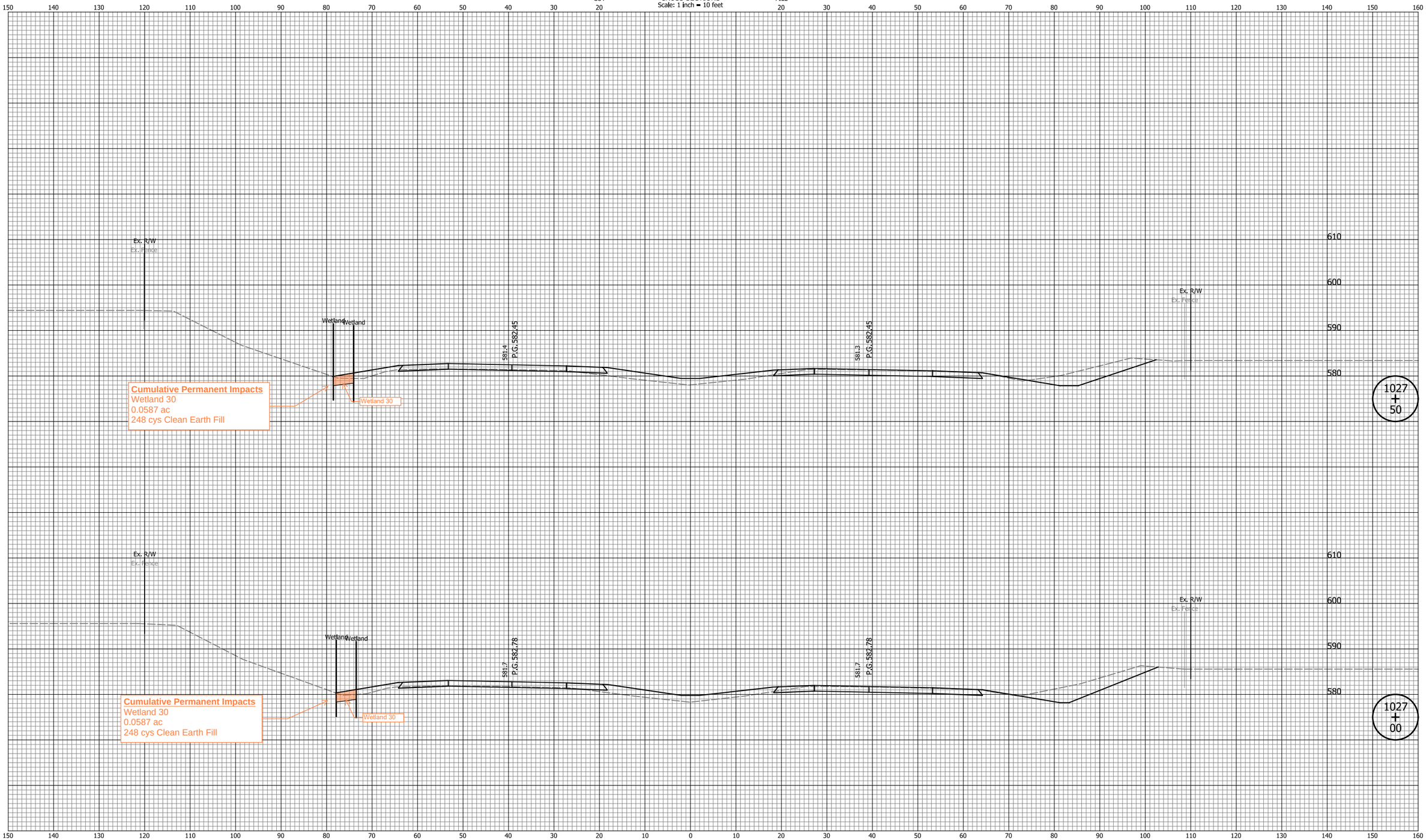
Indy-shtf.dgn
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:19 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS
Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	176 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.dgn
Indiana_Shade.tbl

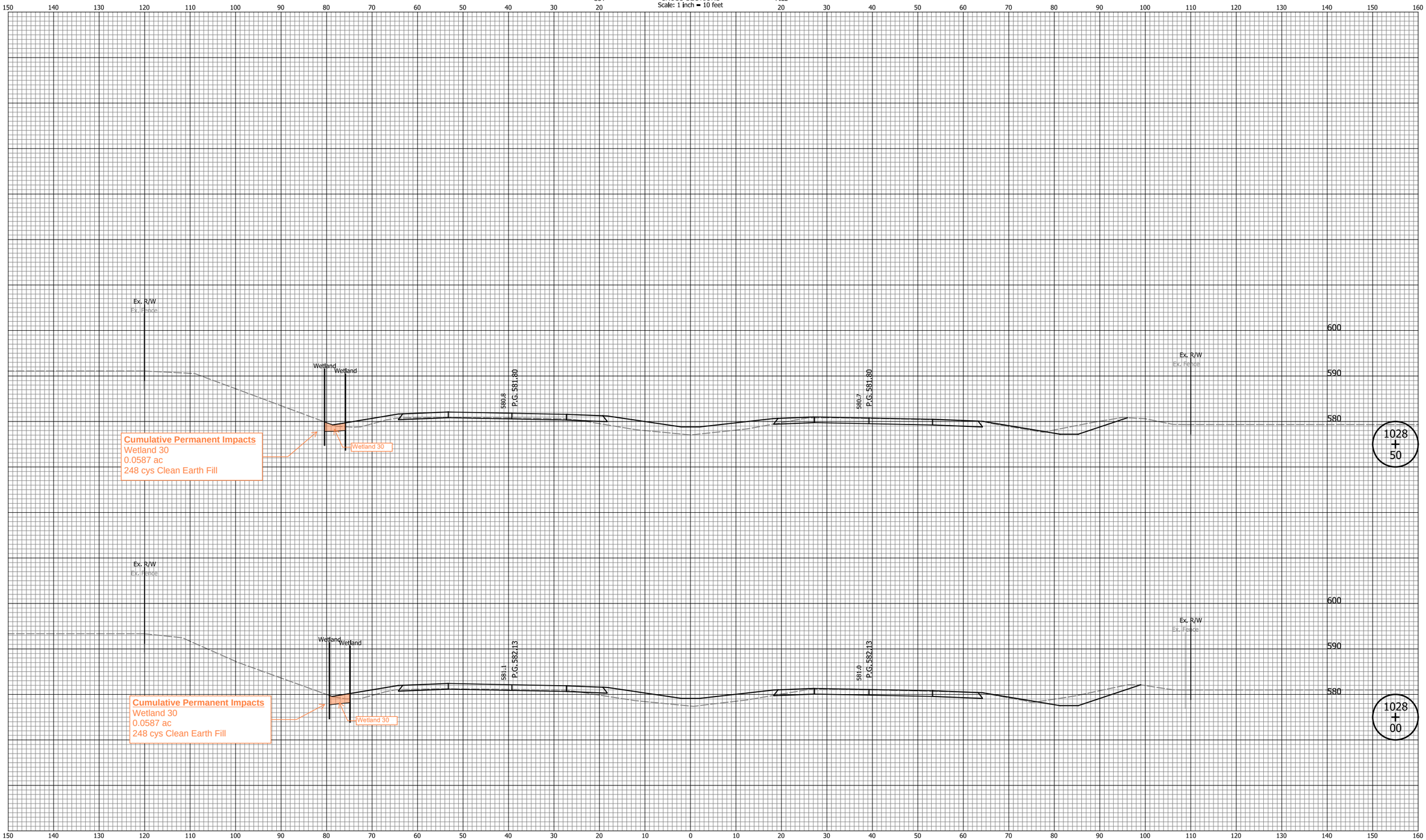
zmurphy 12/6/2021 7:04:21 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

SURVEY BOOK	SHEETS
N/A	177 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.dgn
Indiana_Shade.tbl

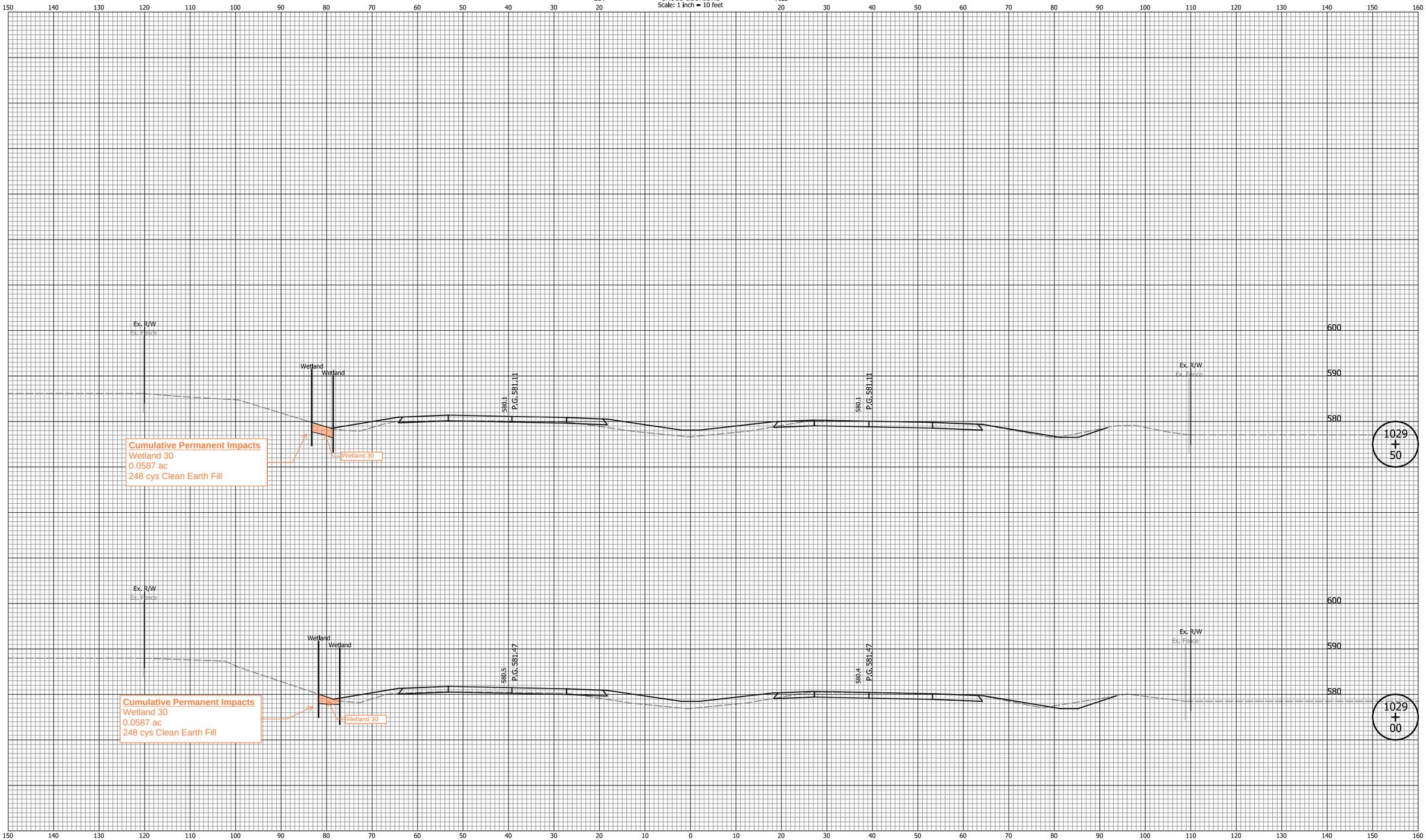
zmurphy 12/6/2021 7:04:22 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135

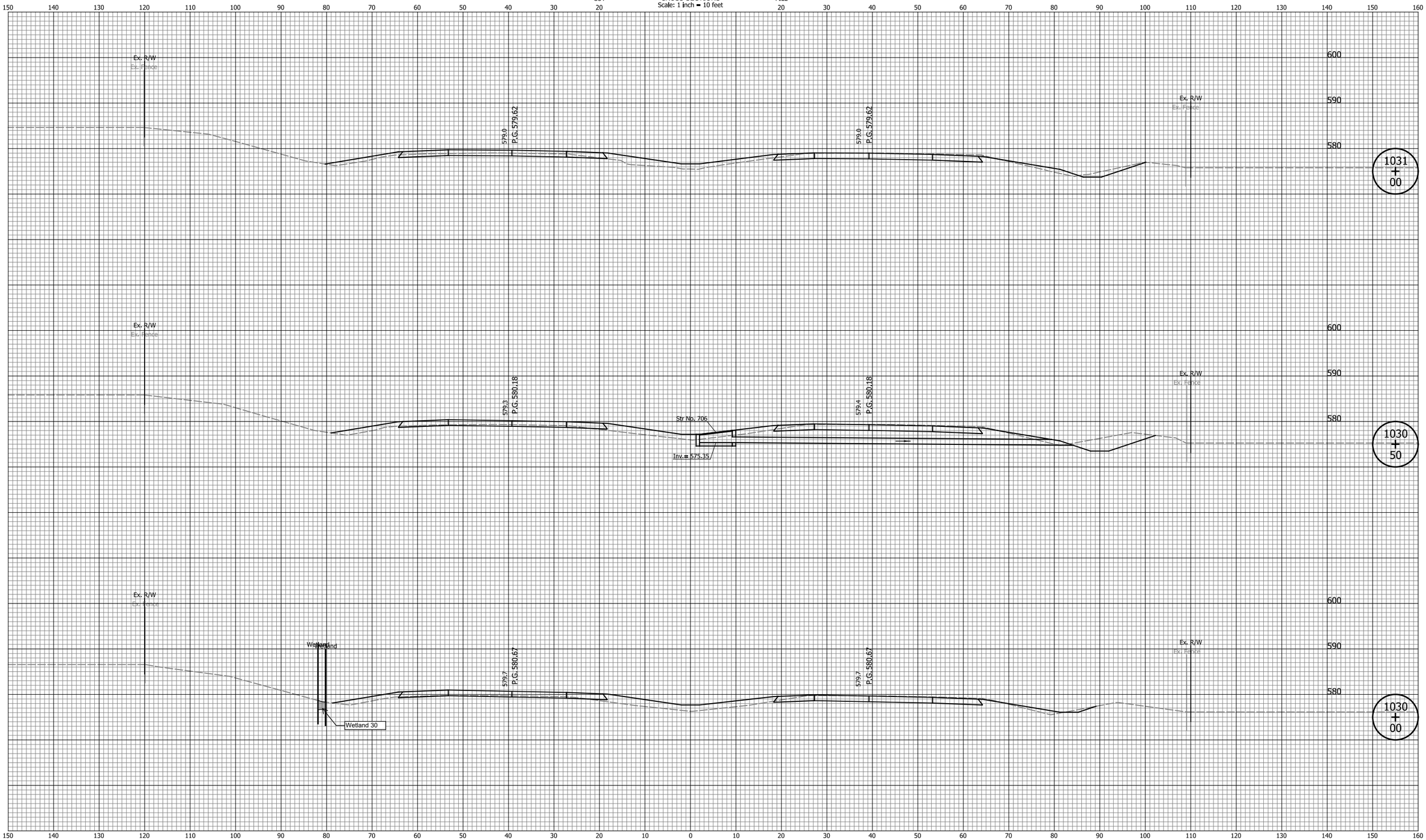
SURVEY BOOK	SHEETS
N/A	178 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-shtf.ctb
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:24 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

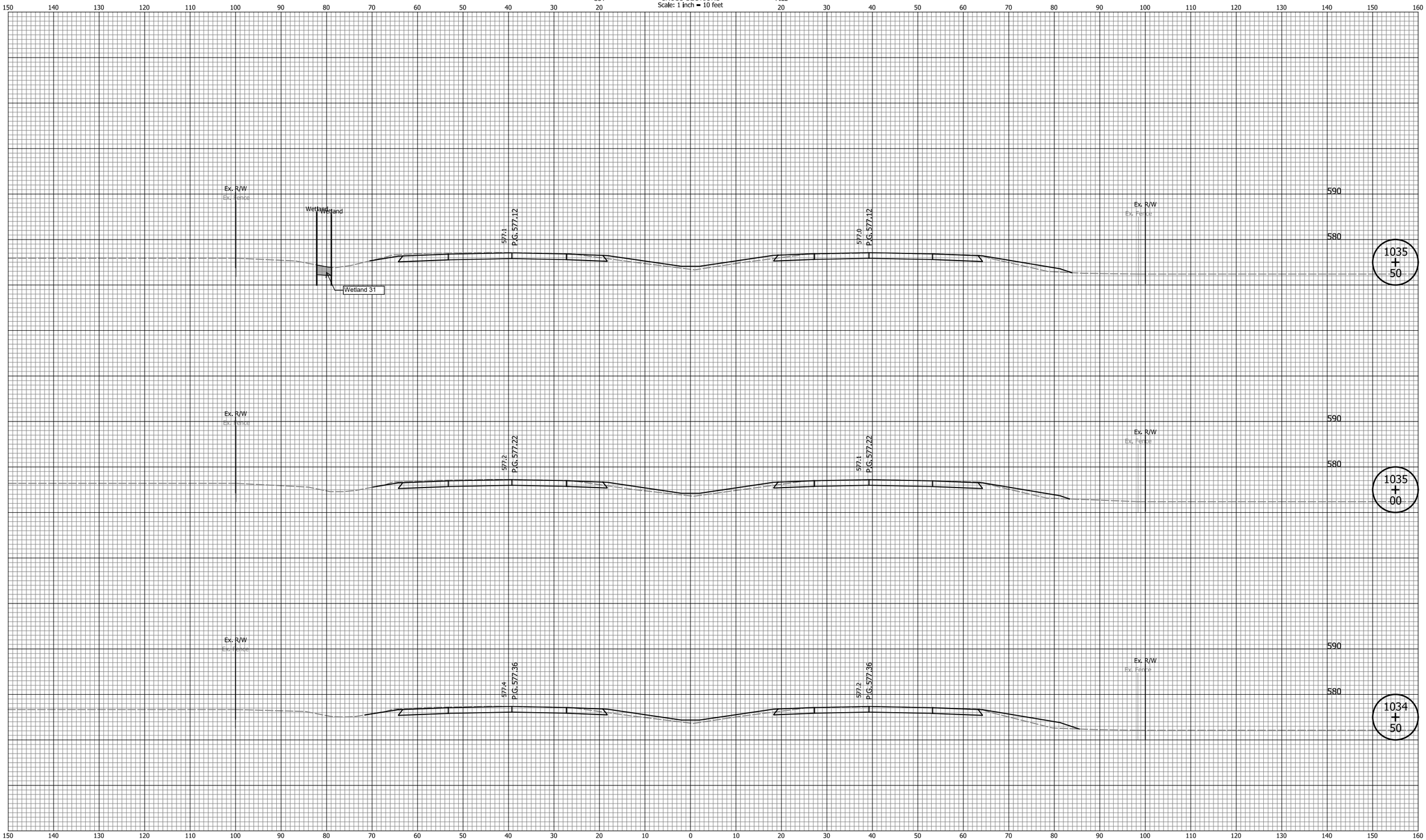
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	179 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:25 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

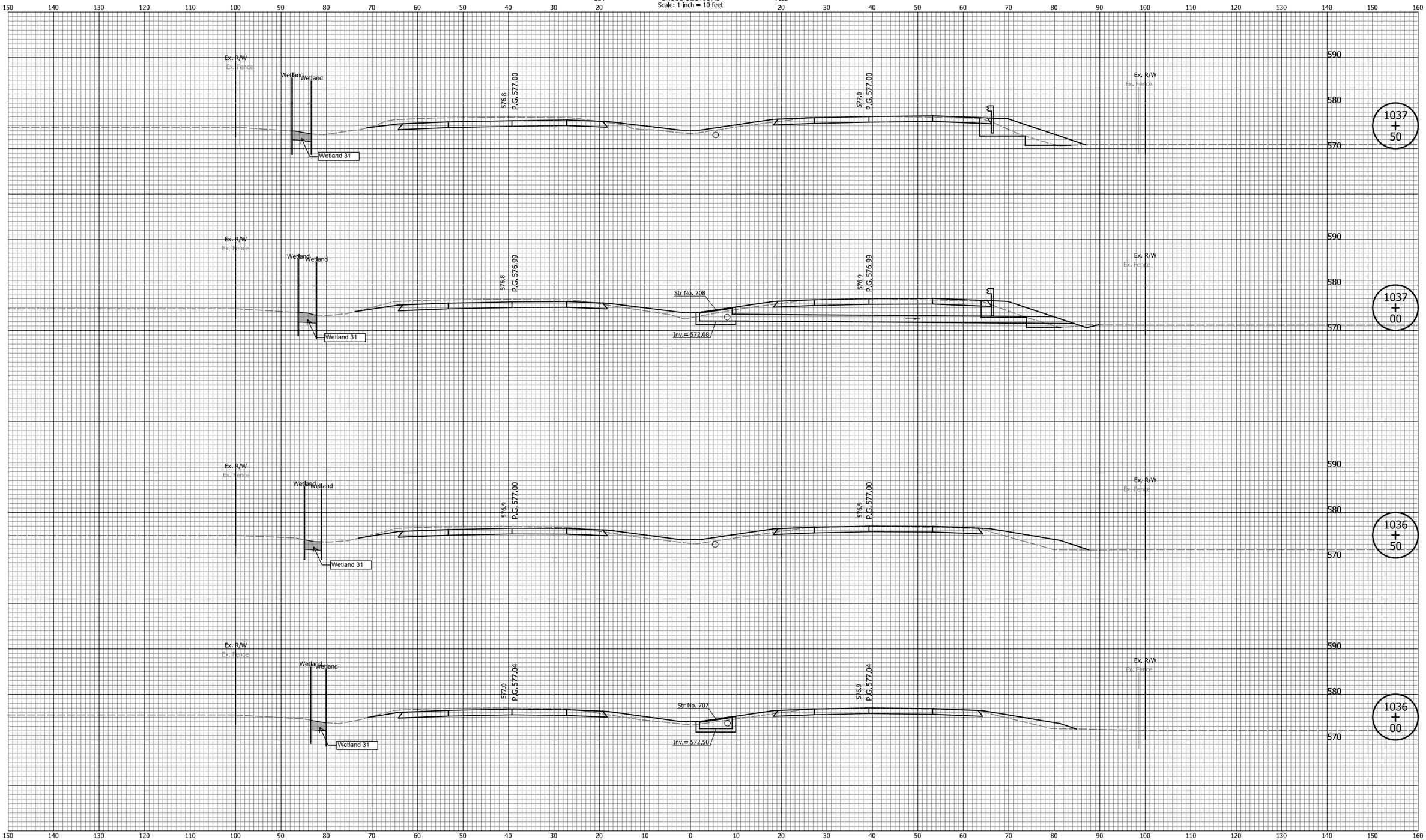
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	180 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:29 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	181 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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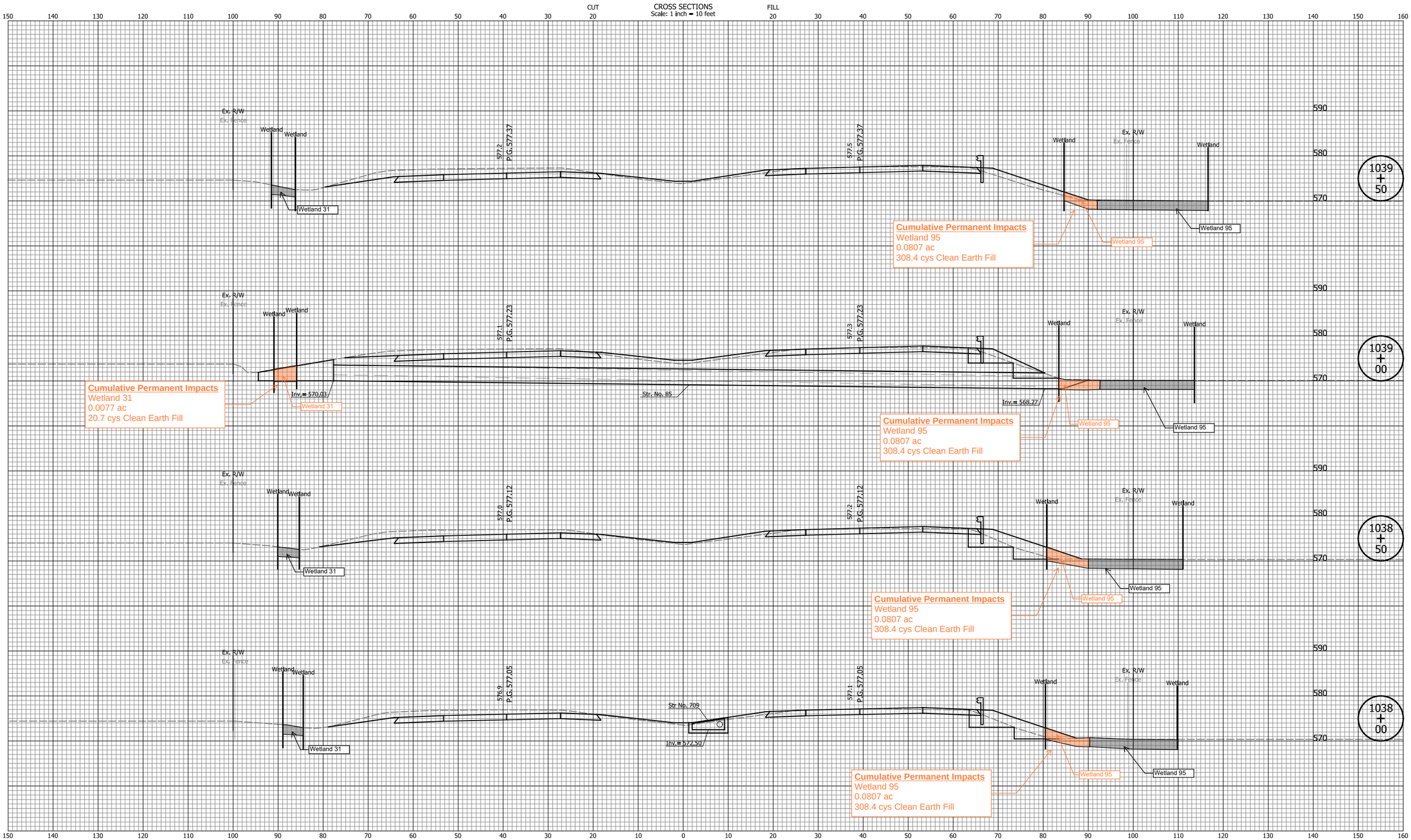


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	182 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

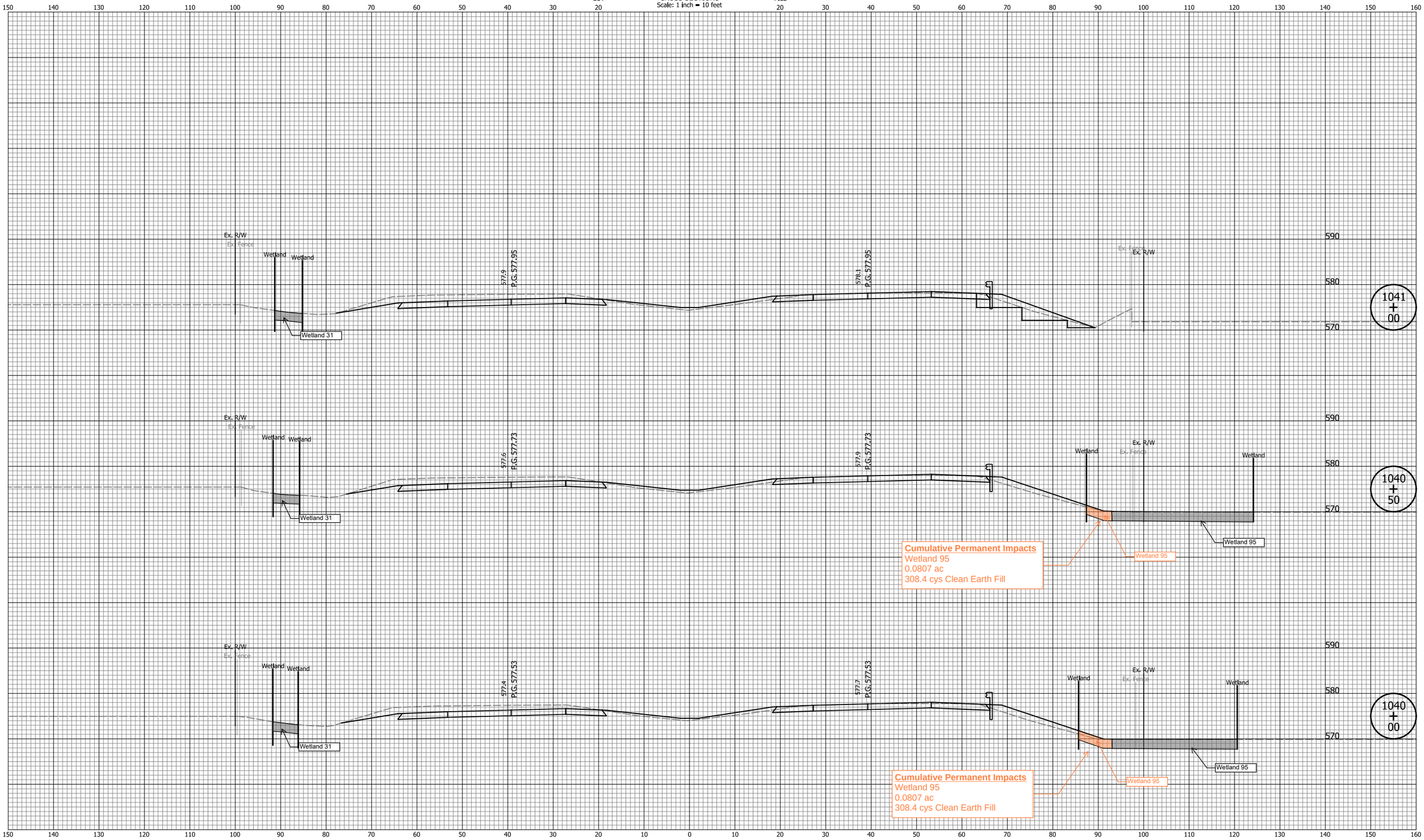
zmurphy 12/6/2021 7:04:32 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20

FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD

CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	183 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Ptf.dfcfg
Indiana_Shade.tbl

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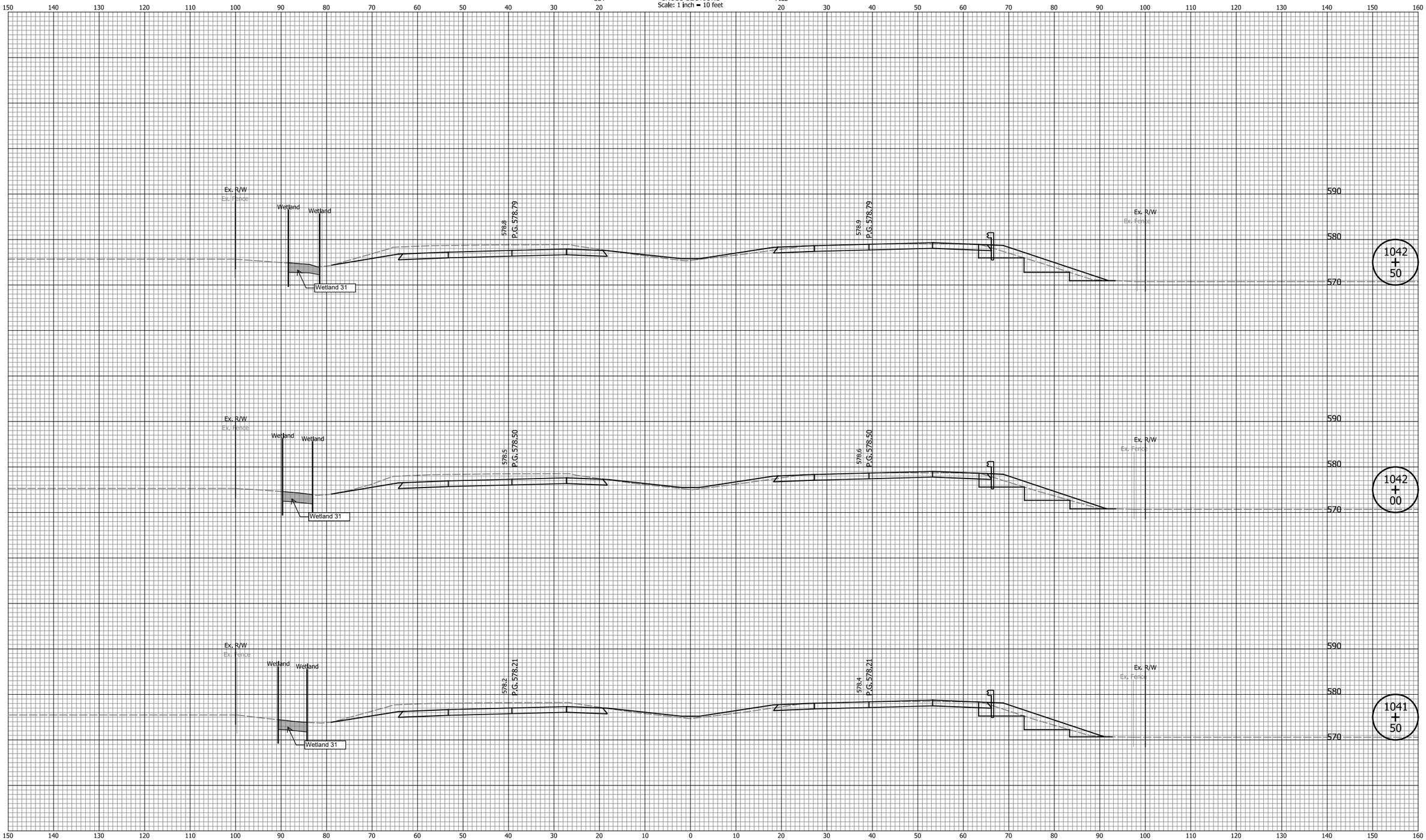


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

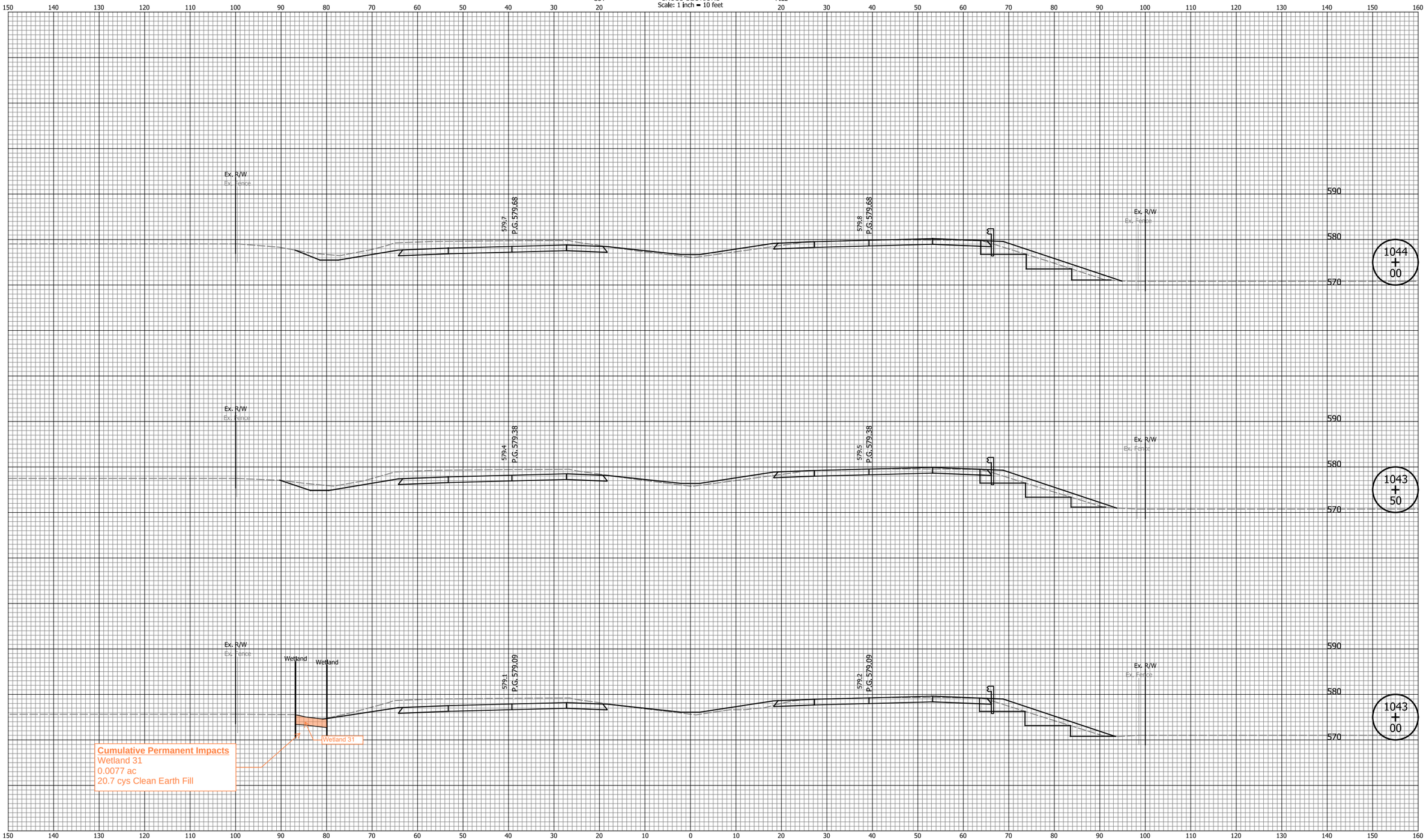
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	184 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/6/2021 7:04:35 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	185 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

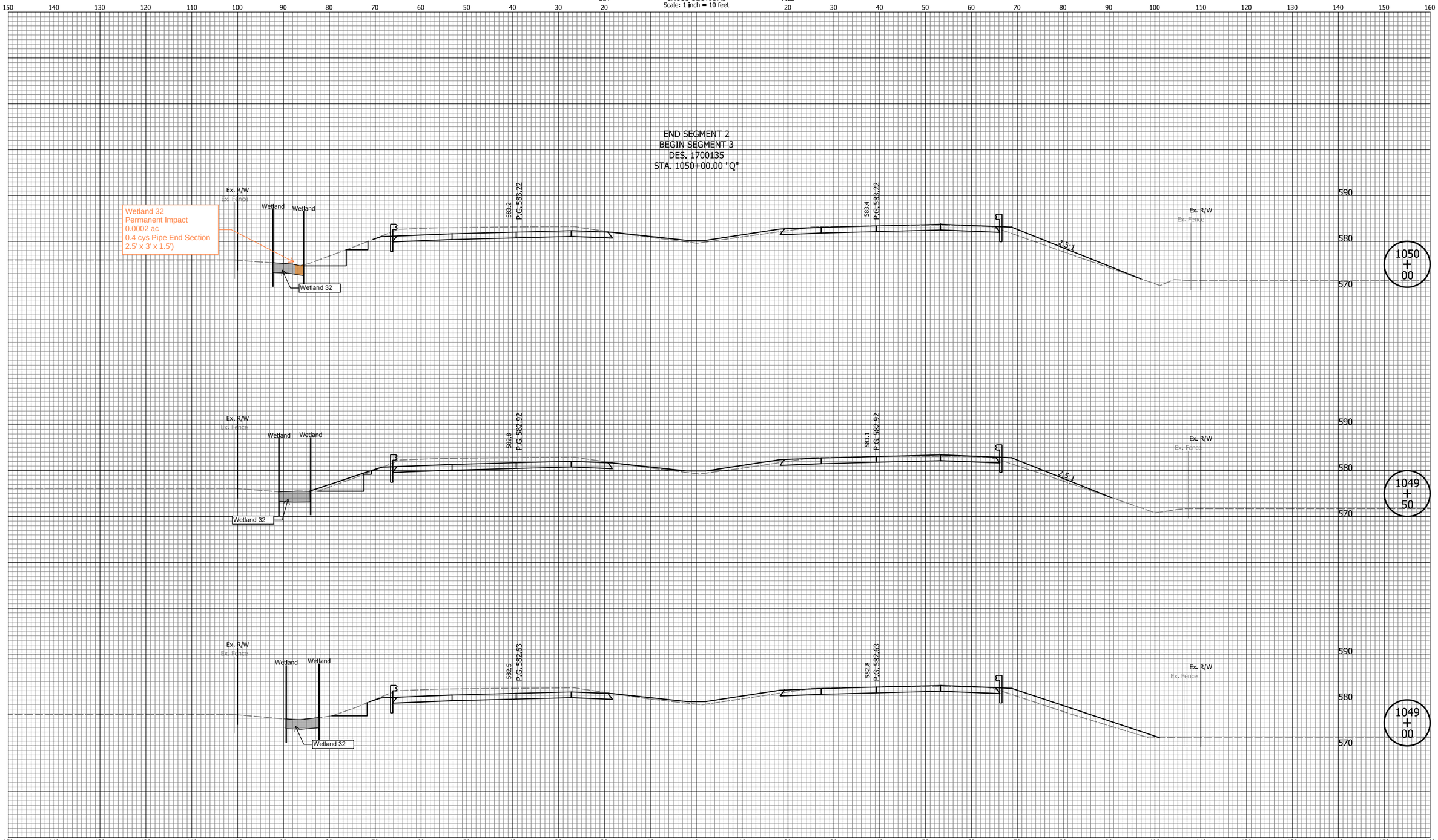
zmurphy 12/6/2021 7:04:37 AM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT 150 140 130 120 110 100 90 80 70 60 50 40 30 20 — FILL 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

END SEGMENT 2
BEGIN SEGMENT 3
DES. 1700135
STA. 1050+00.00 "Q"



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD
CHECKED: CDH | CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	186 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-ePlotCfg
Indiana_Shade.tbl

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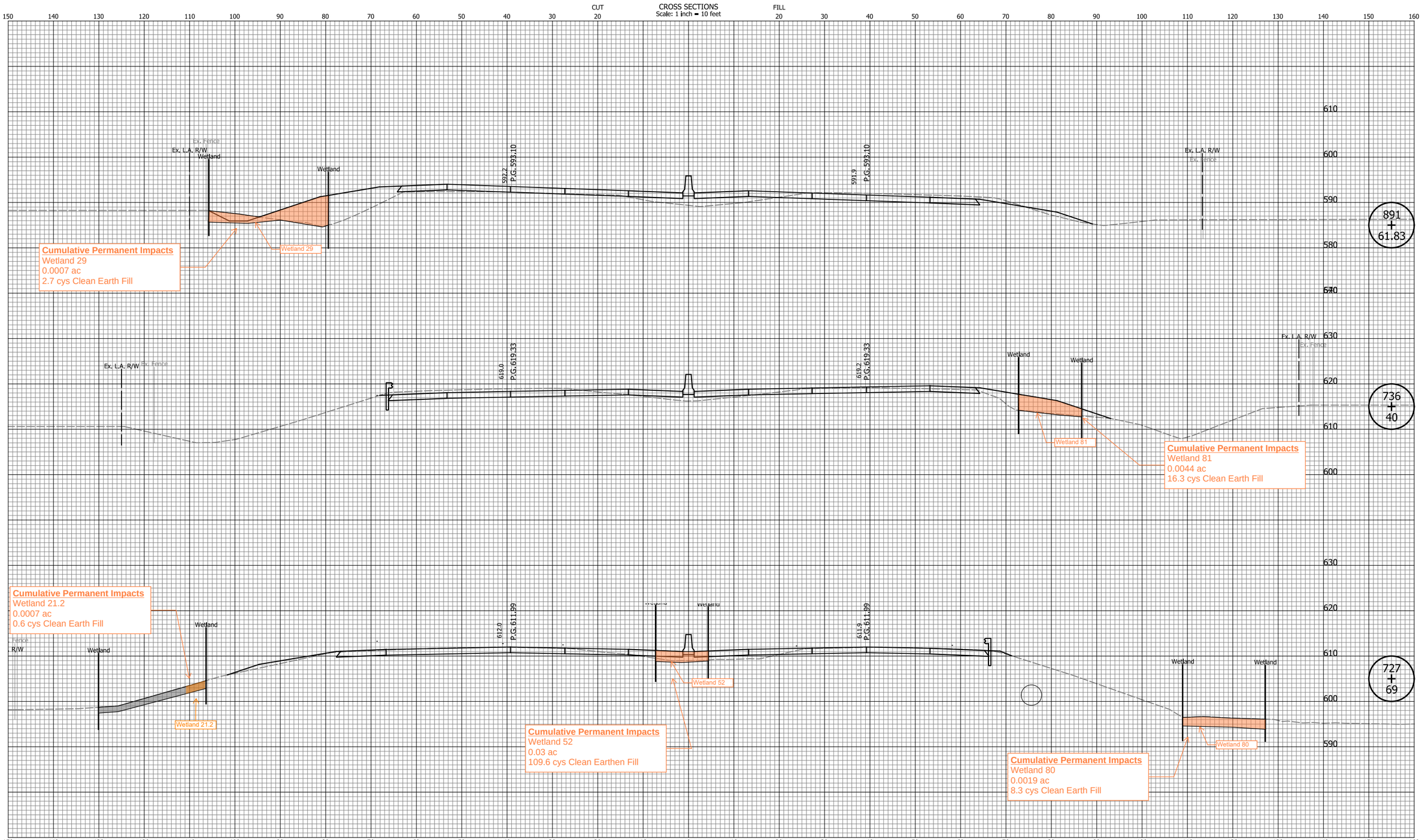

DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	187 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

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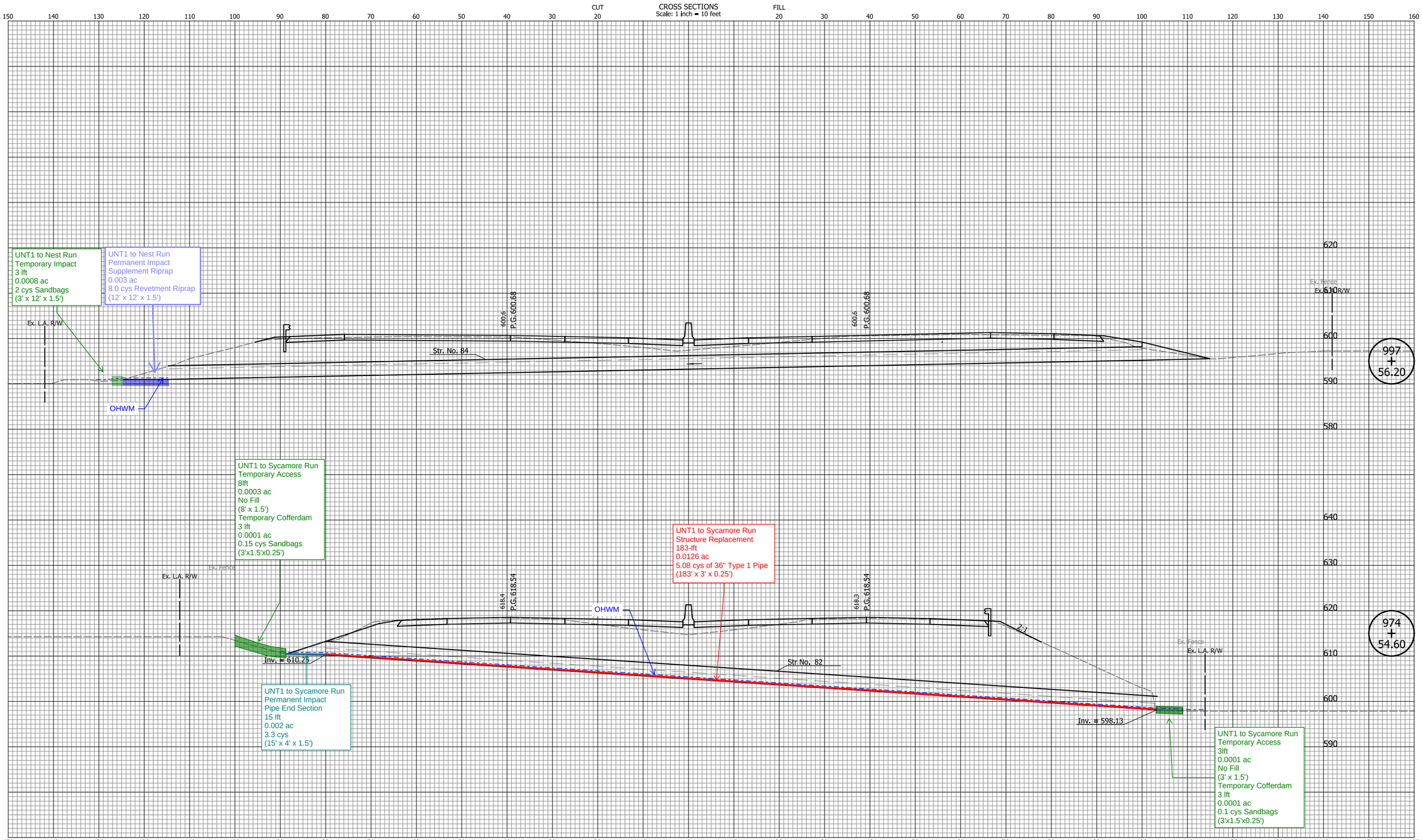


DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	188 of 241
CONTRACT	PROJECT
R-41529	1700135

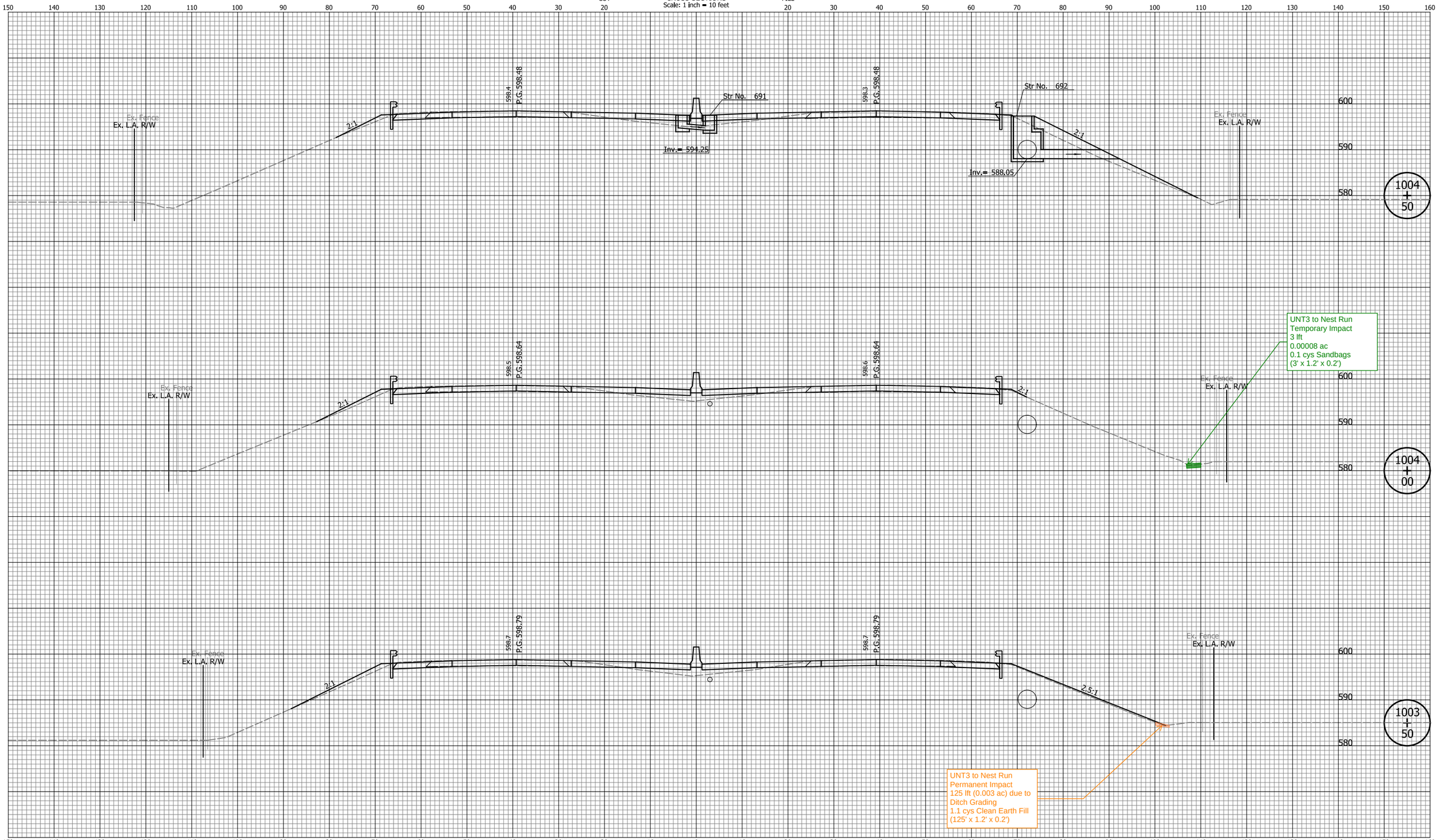
Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/20/2021 11:22:21 AM P:\2019\00172\D. Drawings\Working Drawings\ZLM\201900172.0001.RD.CS.STREAM.01.dgn

CROSS SECTIONS

Scale: 1 inch = 10 feet

CUT / FILL



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM | DRAWN: BAD

CHECKED: CDH | CHECKED: PKW

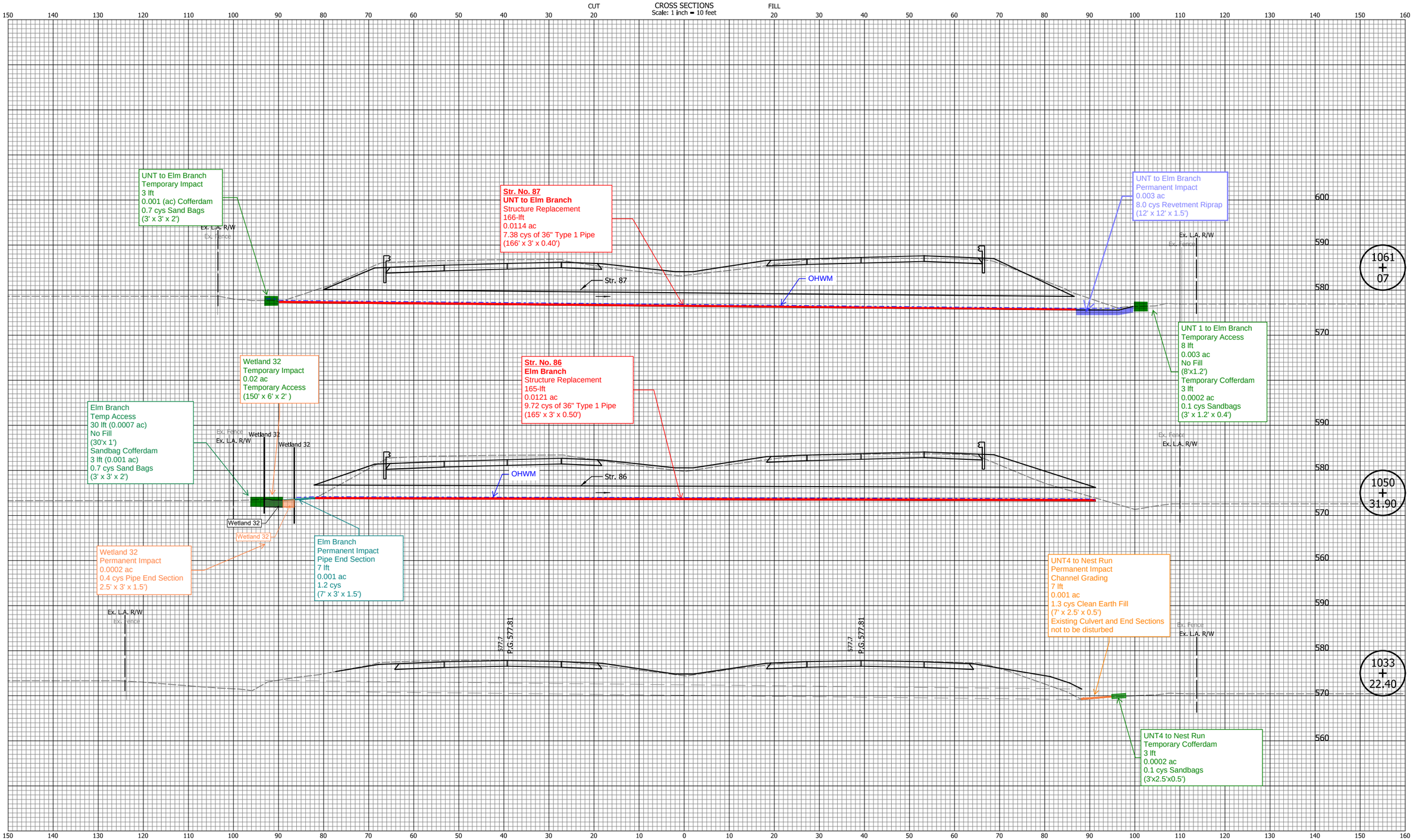
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	189 of 229
CONTRACT	PROJECT
R-41529	1700135

Indy-Prof.dwfg
Indiana_Shade.tbl

mcoates 11/16/2021 3:07:58 PM P:\2019\00172\D. Drawings\201900172.0001.RD.CS.03.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

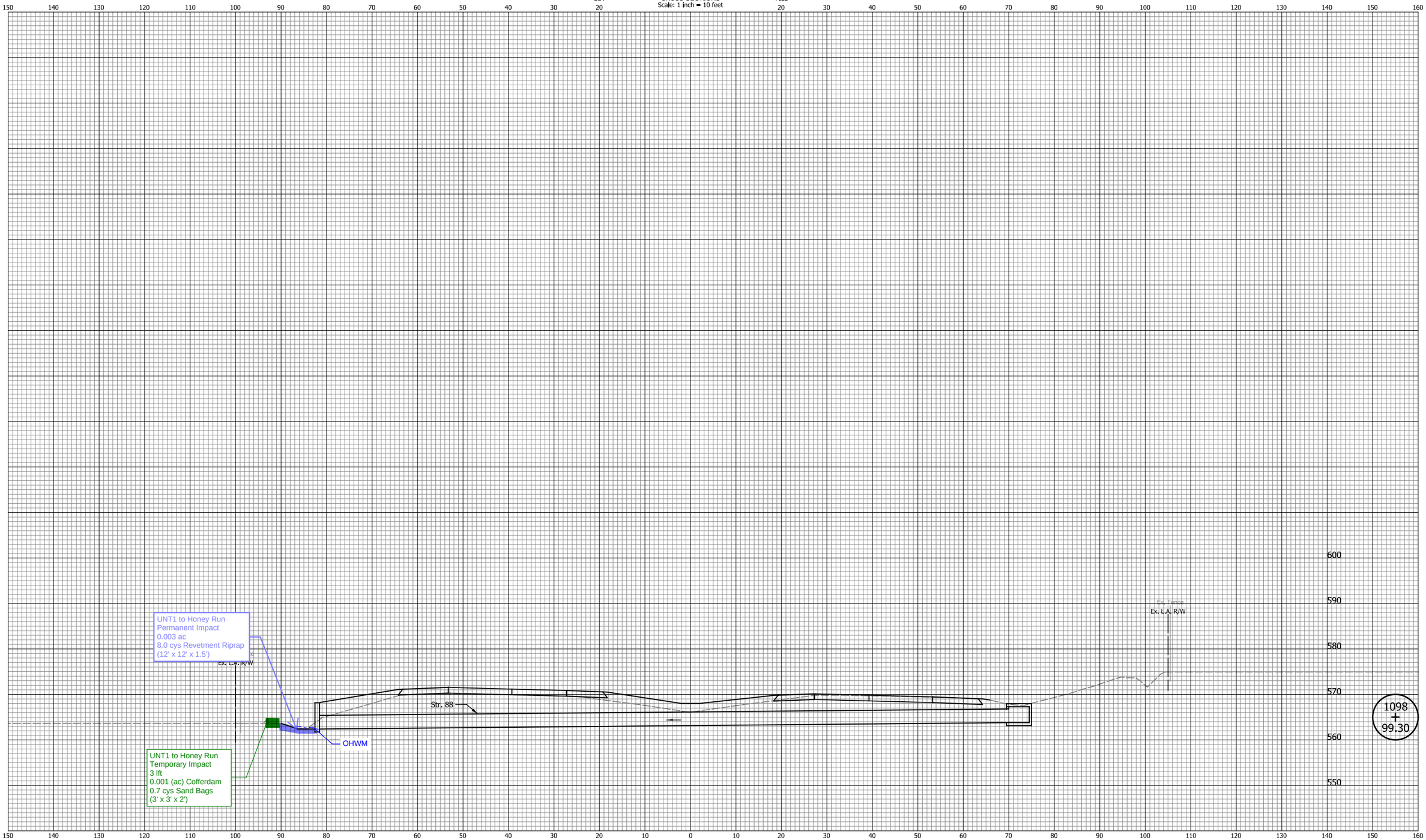
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	190 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/20/2021 11:22:21 AM P:\2019\00172\D. Drawings\Working Drawings\ZLM\201900172.0001.RD.CS.STREAM.01.dgn



DATE	REVISION

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ MM/DD/20YY
DESIGN ENGINEER DATE

DESIGNED: ZLM DRAWN: BAD
CHECKED: CDH CHECKED: PKW

INDIANA
DEPARTMENT OF TRANSPORTATION

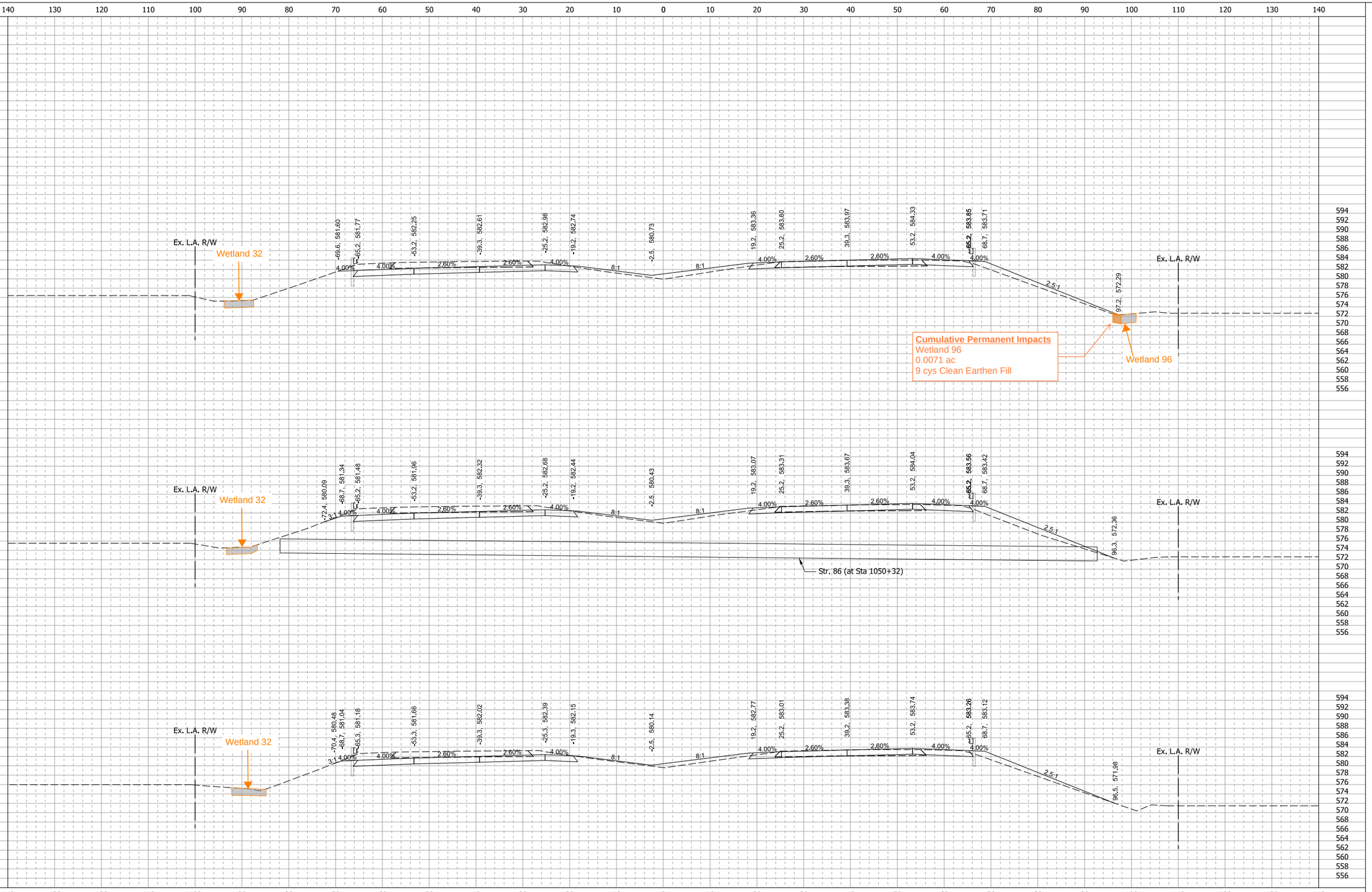
CROSS SECTIONS
LINE "Q"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	1700135
SURVEY BOOK	SHEETS
N/A	191 of 241
CONTRACT	PROJECT
R-41529	1700135

Indy-Pdf.pltcfg
Indiana_Shade.tbl

zmurphy 12/20/2021 11:22:21 AM P:\2019\00172\D. Drawings\Working Drawings\ZLM\201900172.0001.RD.CS.STREAM.01.dgn

R-41529 - PART 15 OF 15



Attachment 14-1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SMS
DRAWN: BDM
CHECKED: MJV
CHECKED: SMS

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
I-65 - LINE "Q"

SCALE	BRIDGE FILE
1" = 10'-0"	
	DESIGNATION
	1700135
SURVEY BOOK	SHEETS
	192 of
CONTRACT	PROJECT
R-41529	1700135

11/29/2021

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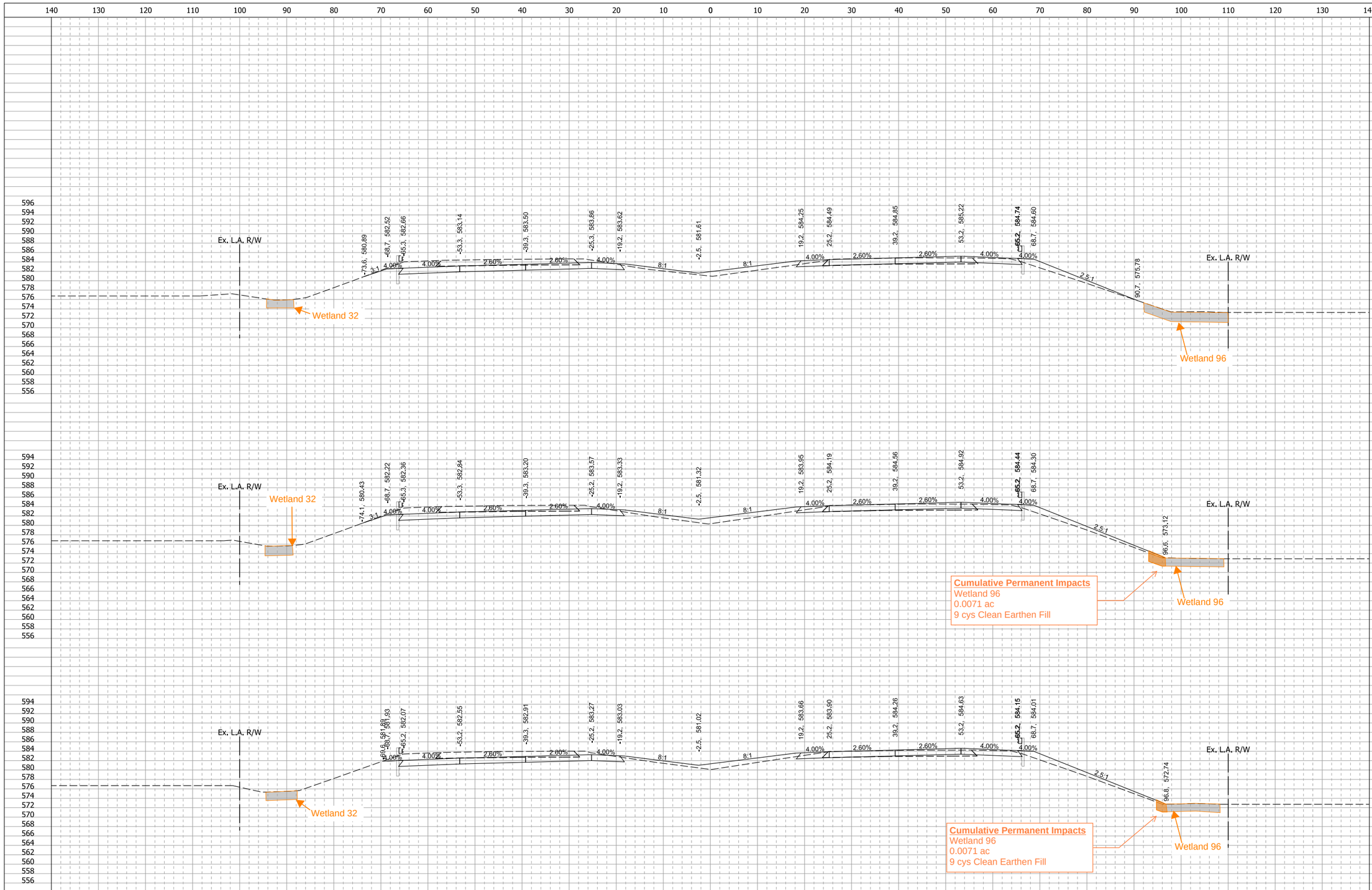

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: SMS / DRAWN: BDM	CROSS SECTIONS I-65 - LINE "Q"
CHECKED: MJV / CHECKED: SMS	

SCALE	BRIDGE FILE
1" = 10'-0"	
	DESIGNATION
	1700135
SURVEY BOOK	SHEETS
	193 of
CONTRACT	PROJECT
R-41529	1700135

11/29/2021

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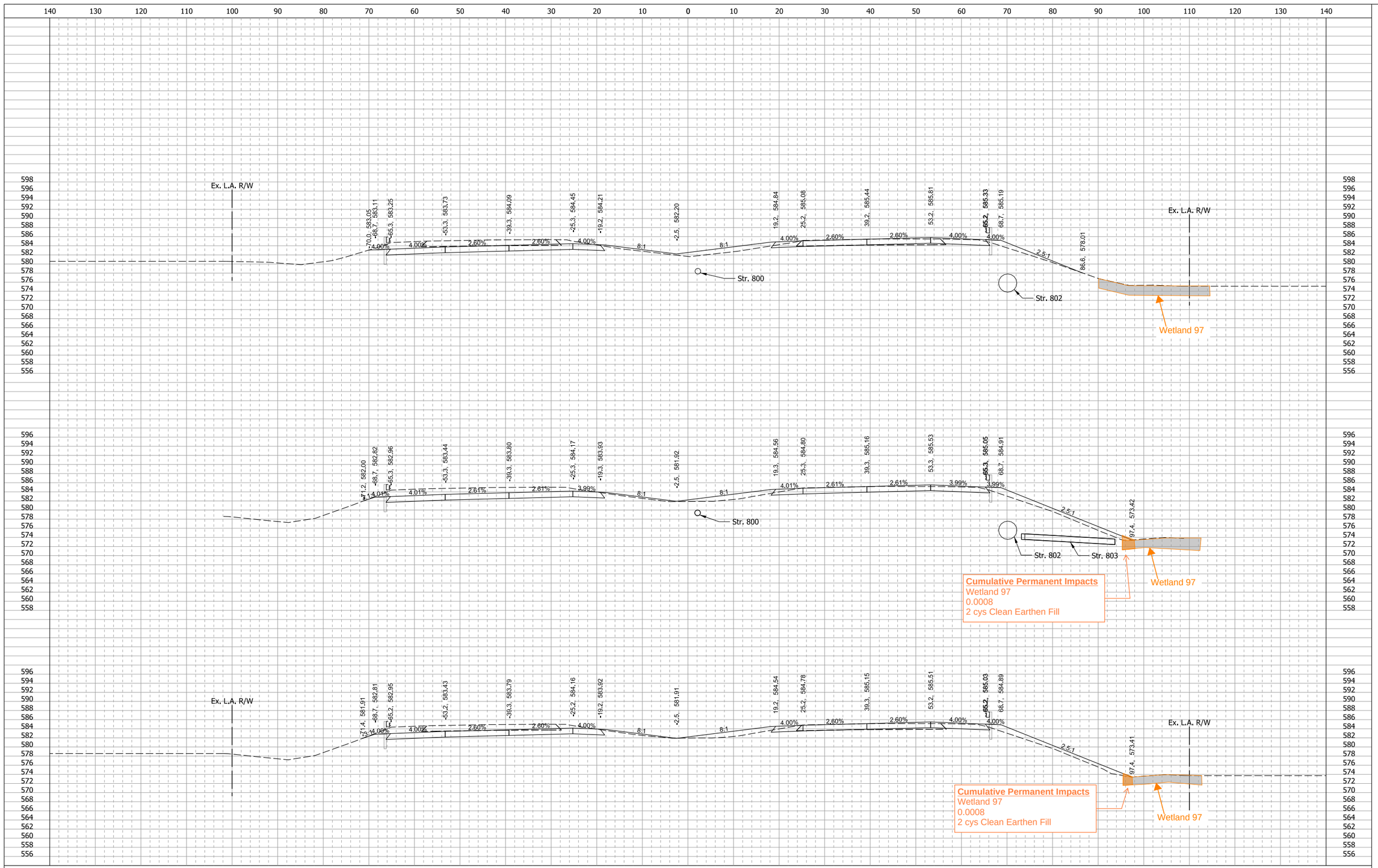

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: SMS DRAWN: BDM	CROSS SECTIONS I-65 - LINE "Q"
CHECKED: MJV CHECKED: SMS	

SCALE	BRIDGE FILE
1" = 10'-0"	
	DESIGNATION
	1700135
SURVEY BOOK	SHEETS
	194 of
CONTRACT	PROJECT
R-41529	1700135

11/29/2021

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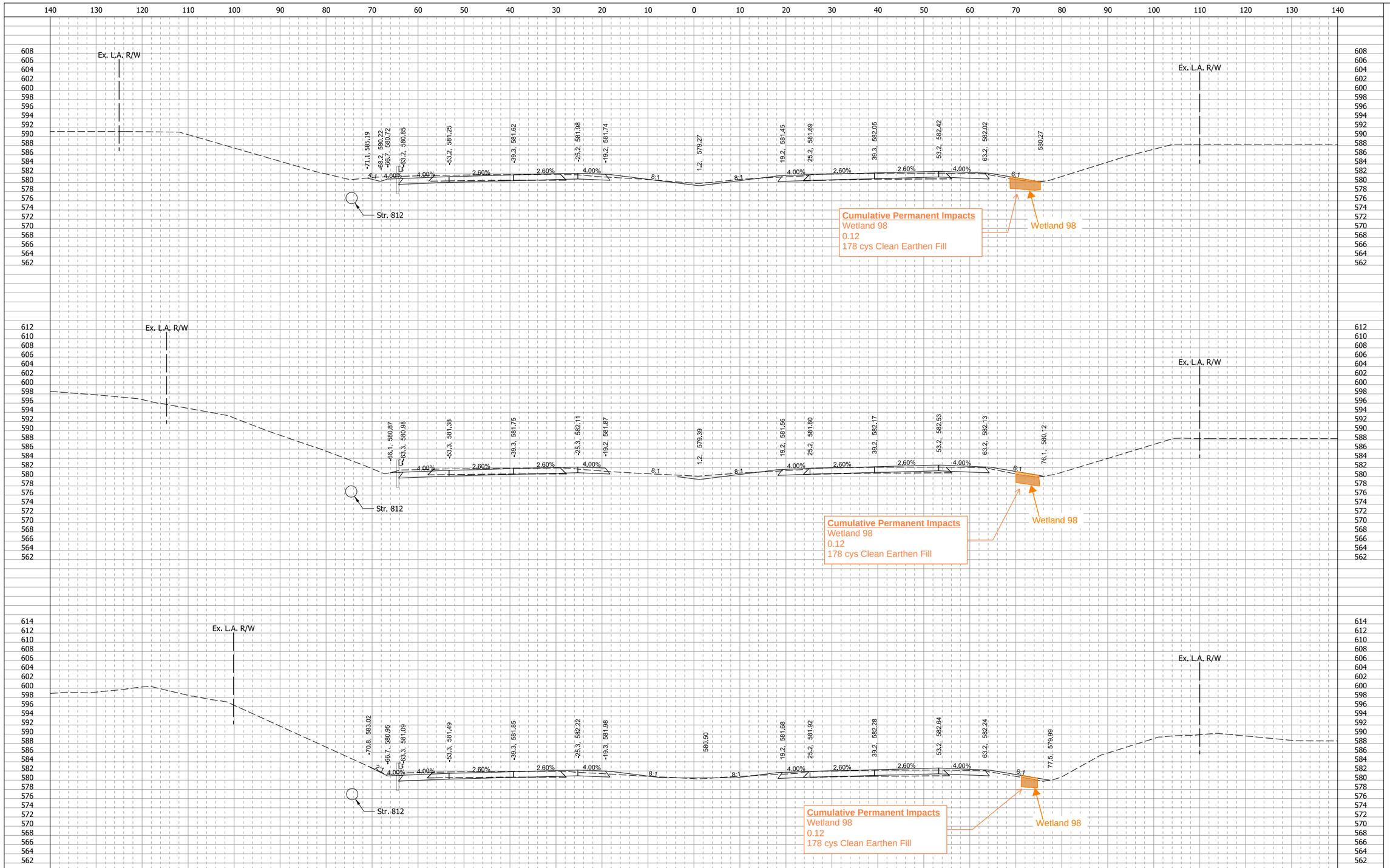

Attachment 14-1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: SMS / DRAWN: BDM	CROSS SECTIONS I-65 - LINE "Q"
CHECKED: MJV / CHECKED: SMS	

SCALE	BRIDGE FILE
1" = 10'-0"	
	DESIGNATION
	1700135
SURVEY BOOK	SHEETS
	195 of
CONTRACT	PROJECT
R-41529	1700135

11/29/2021

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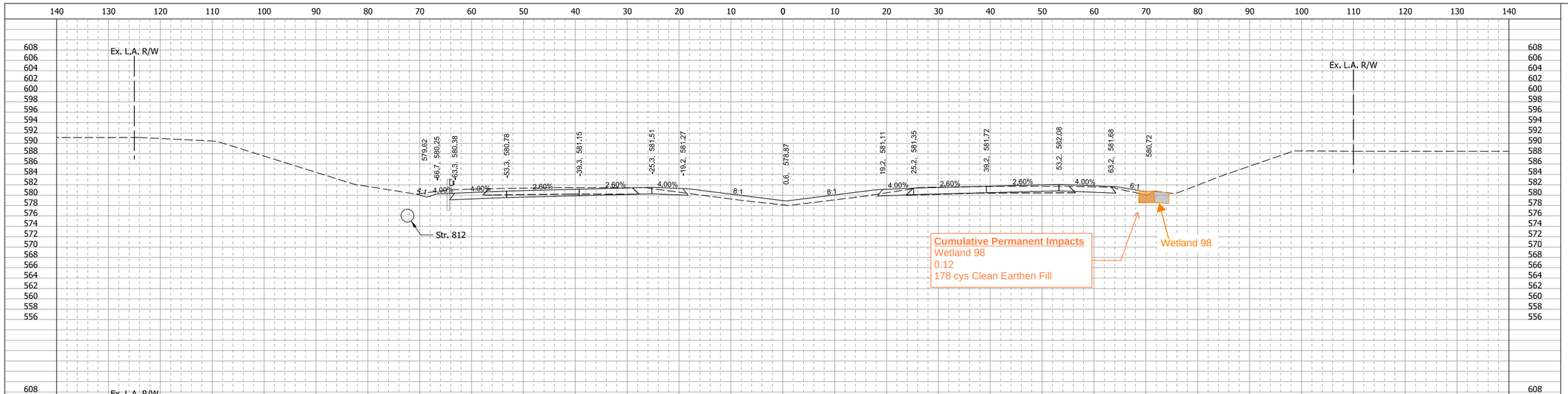

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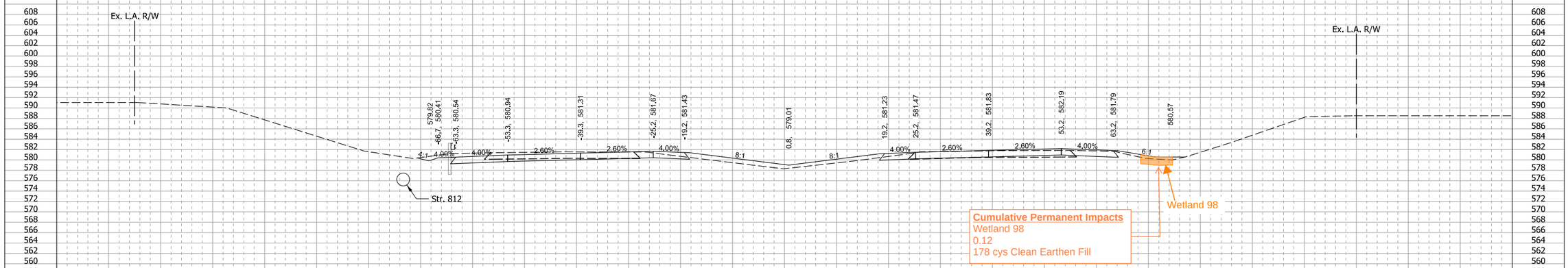

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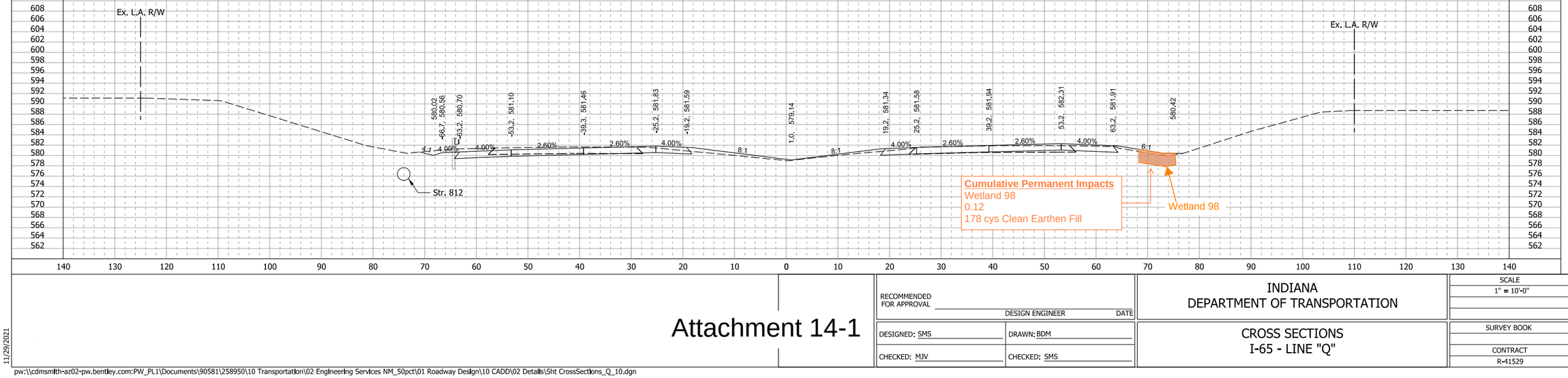

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11/29/2021

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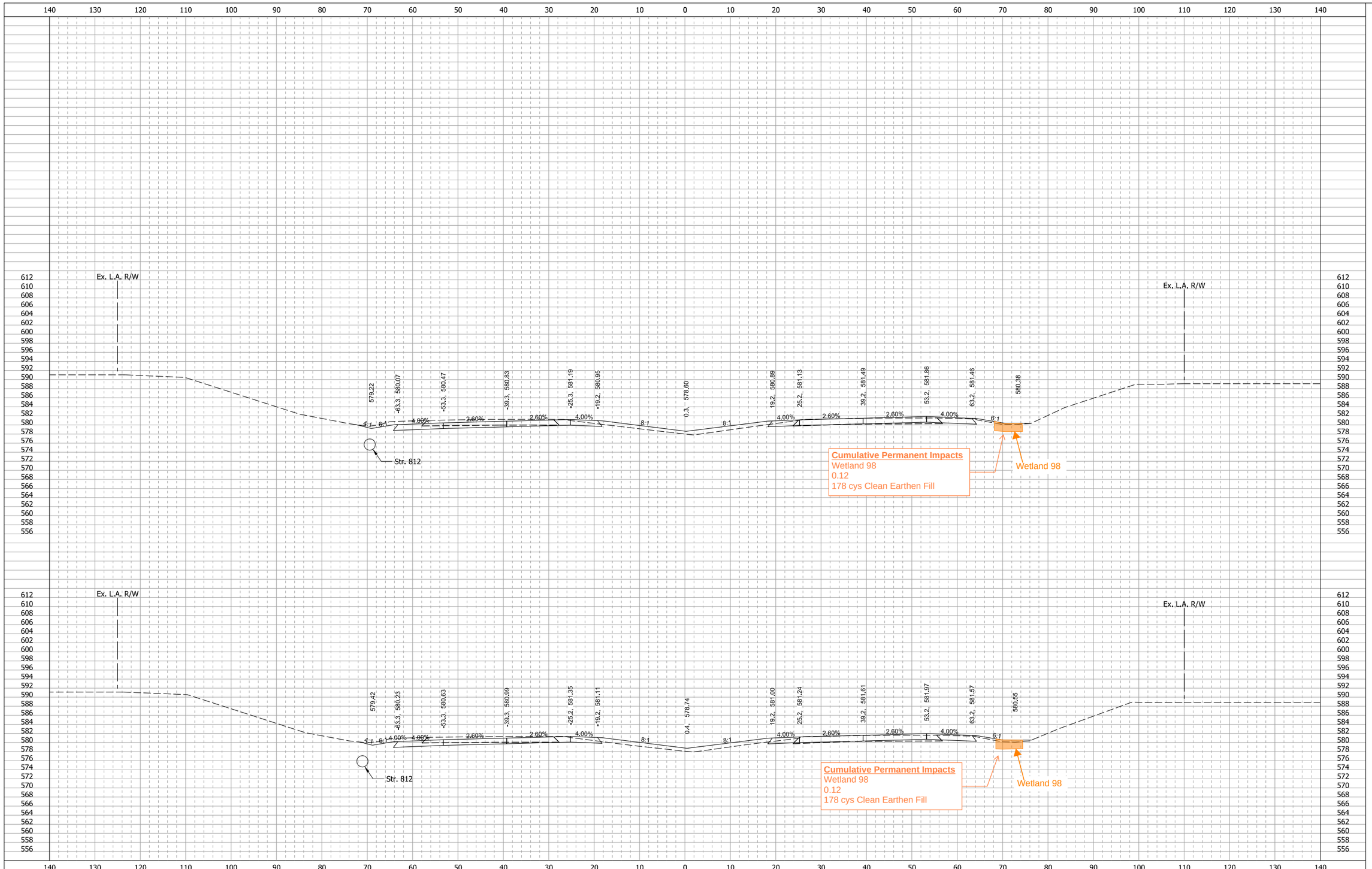

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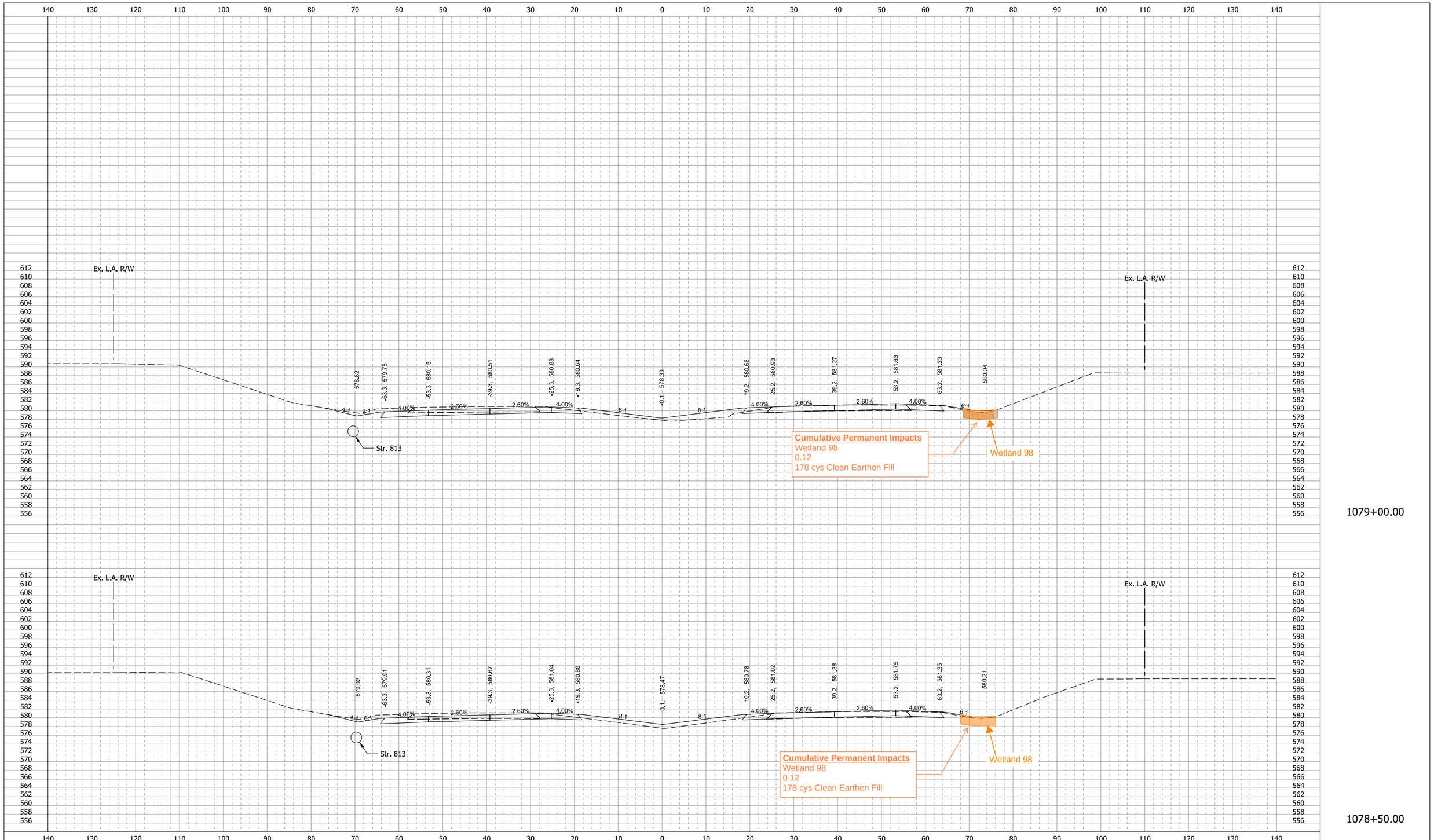

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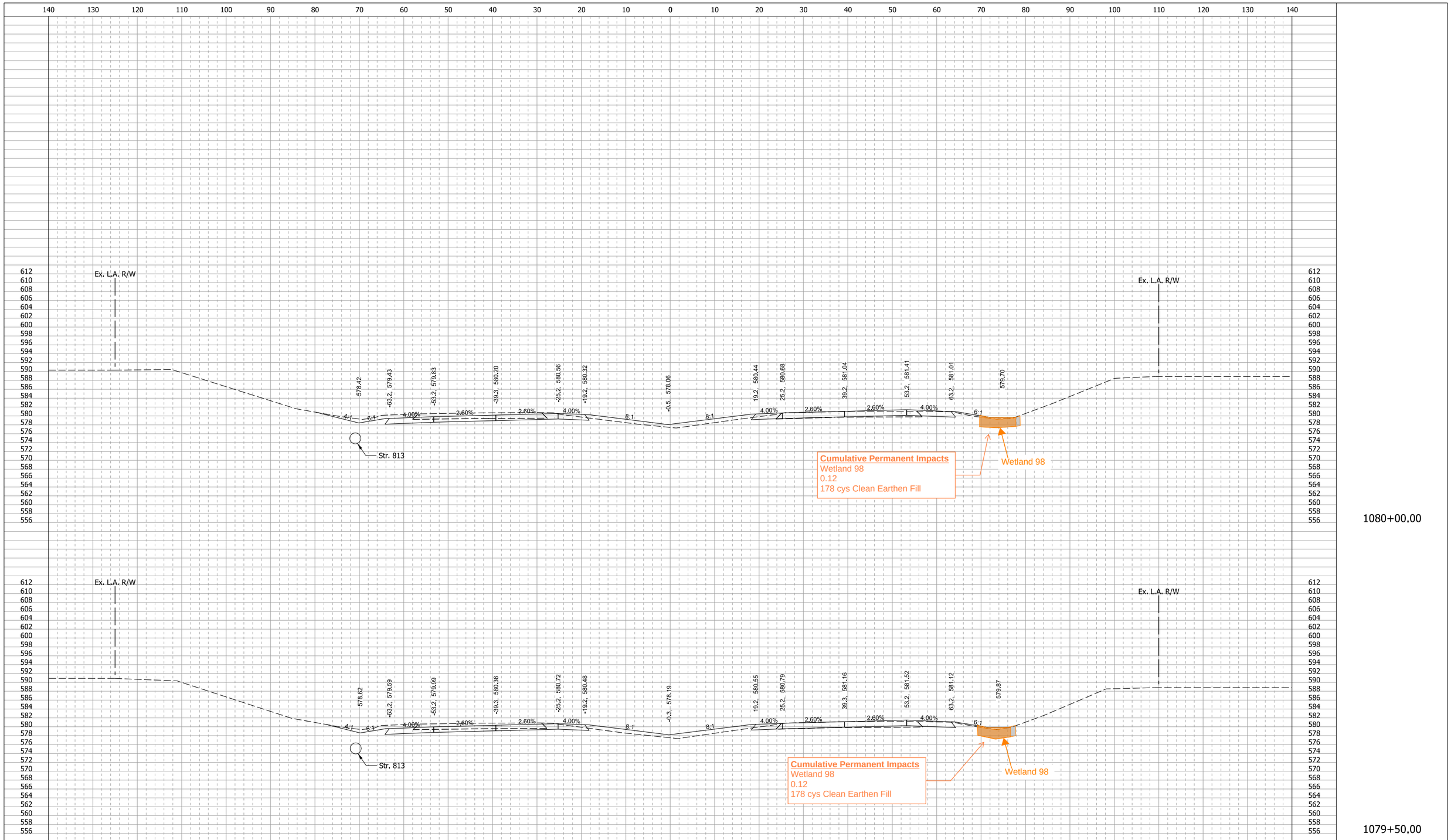

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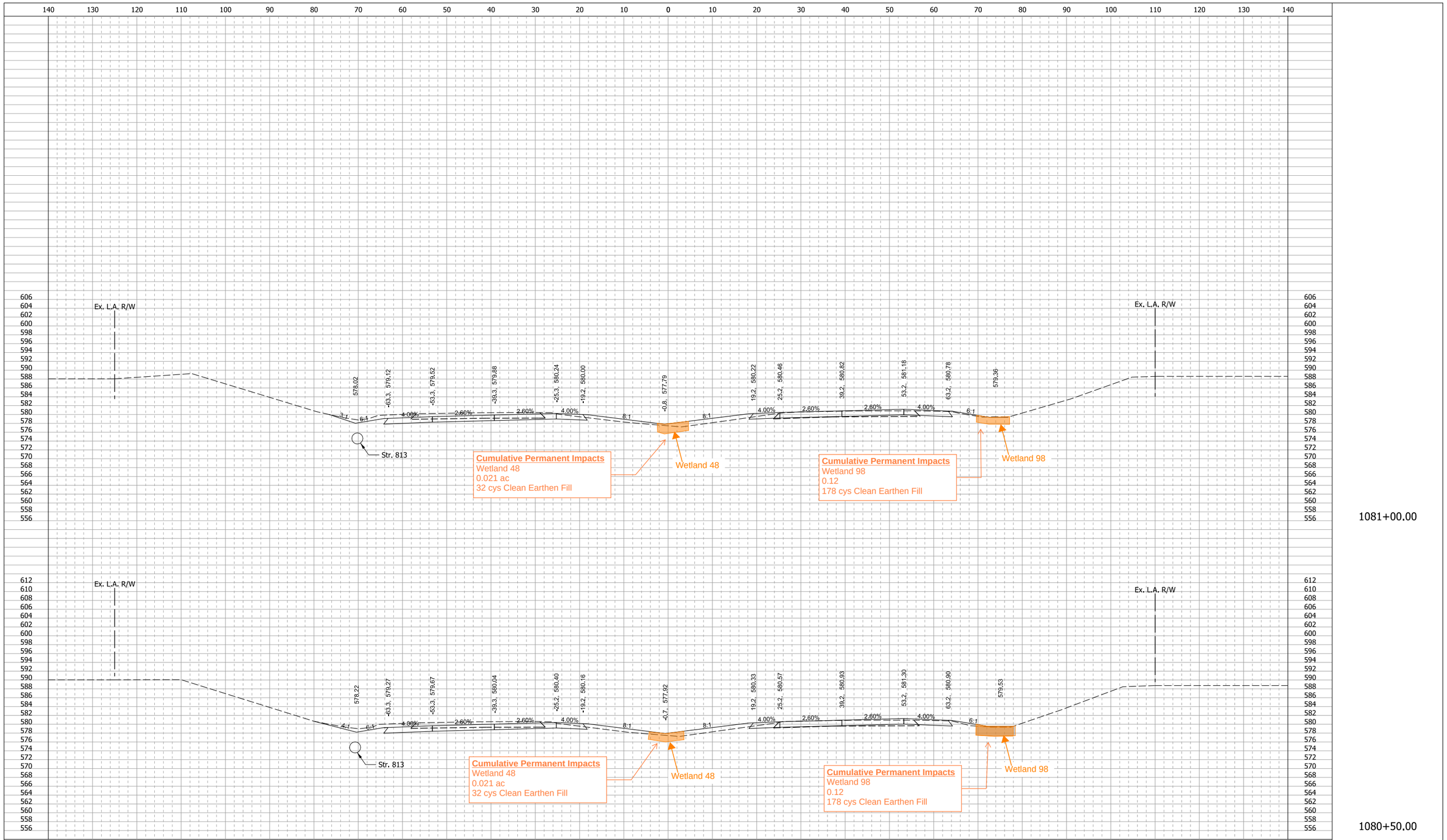

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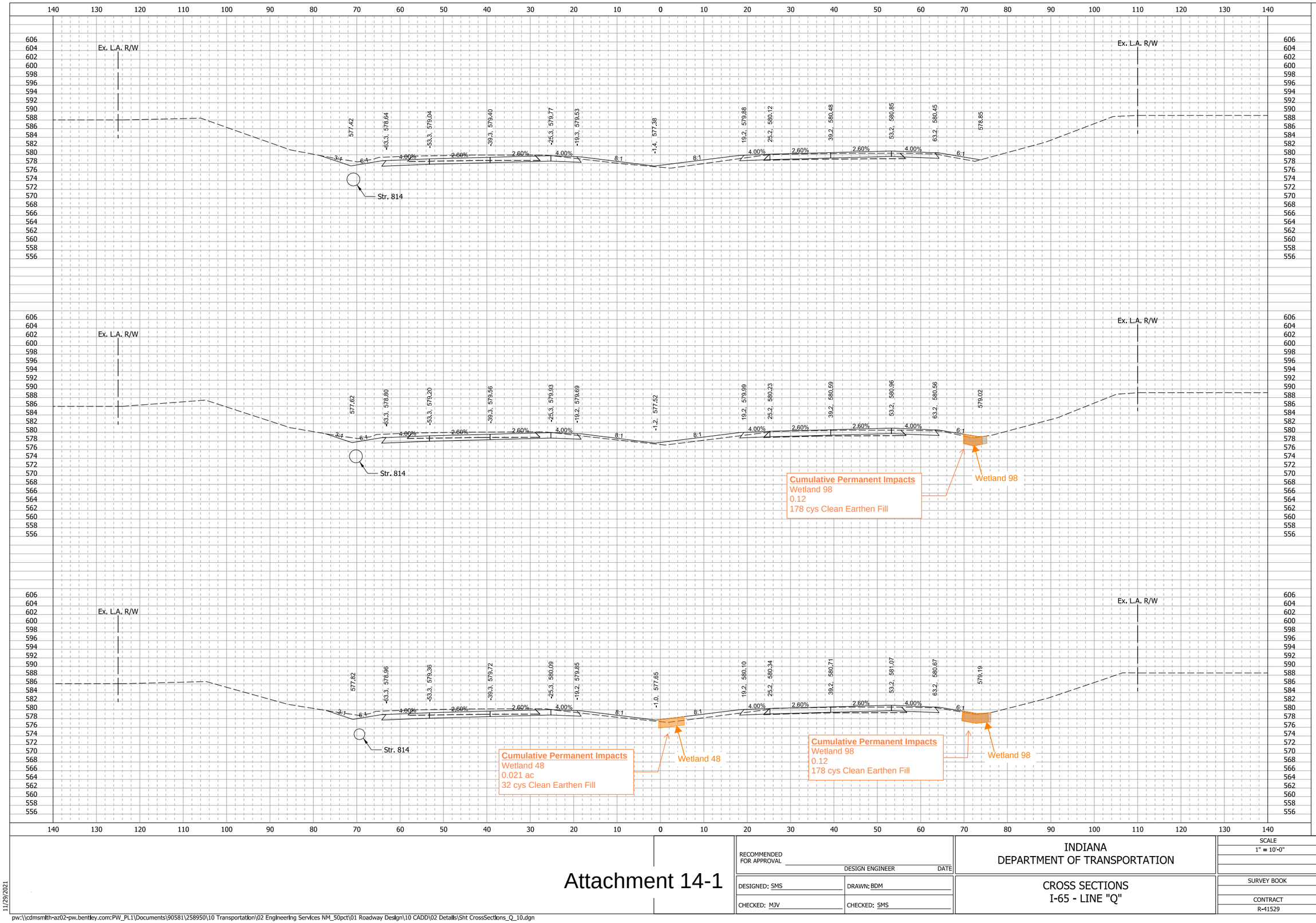

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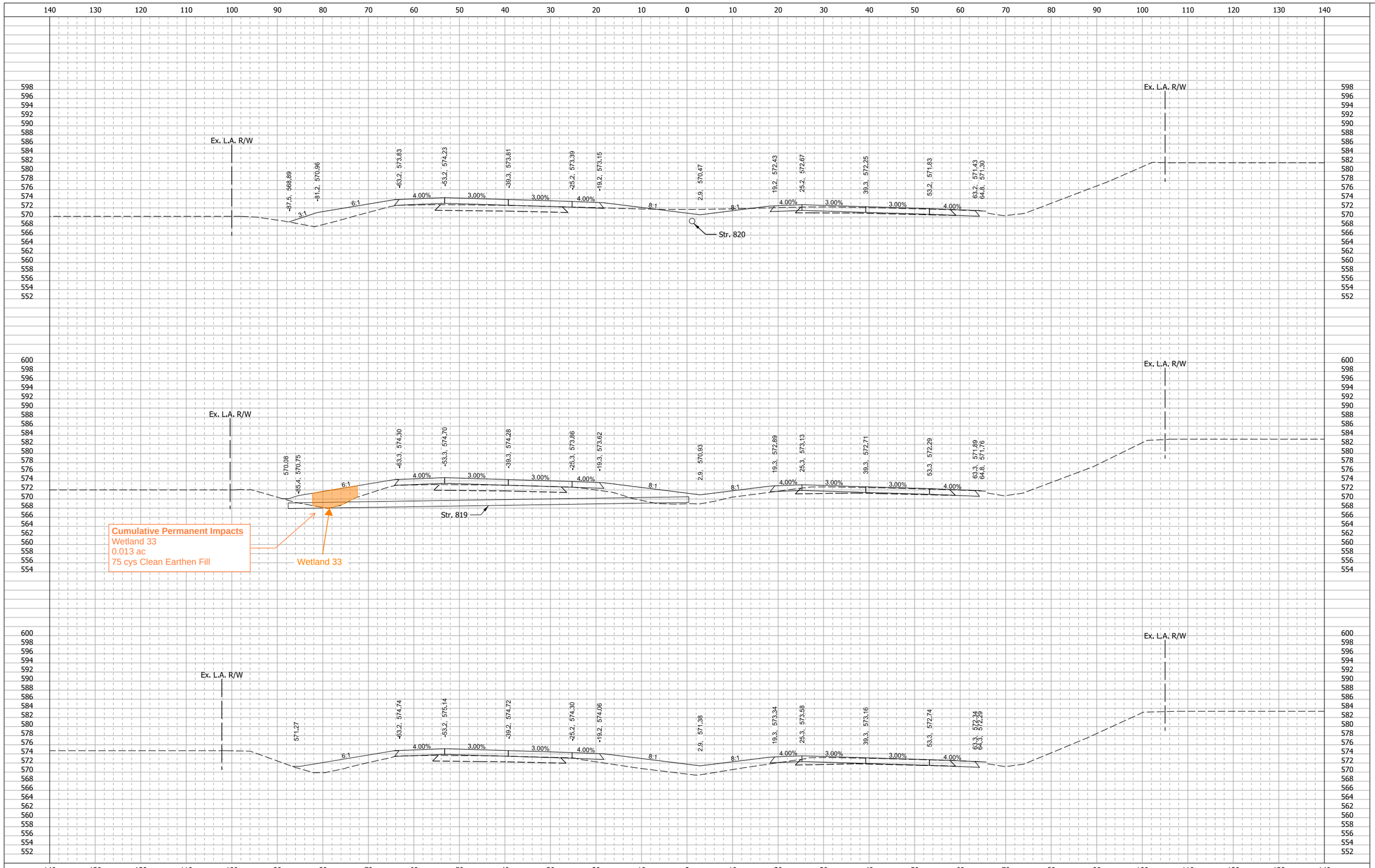

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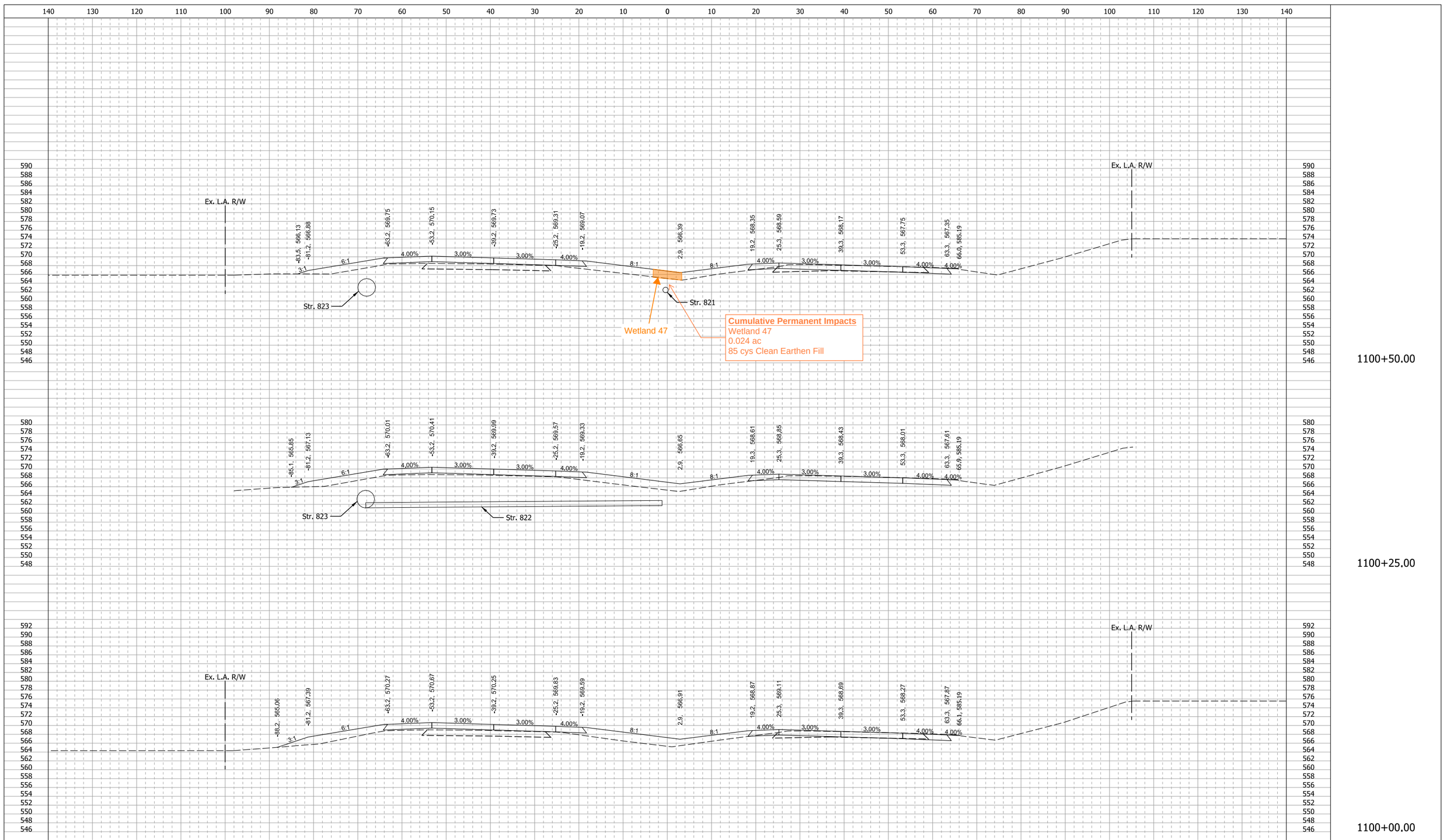

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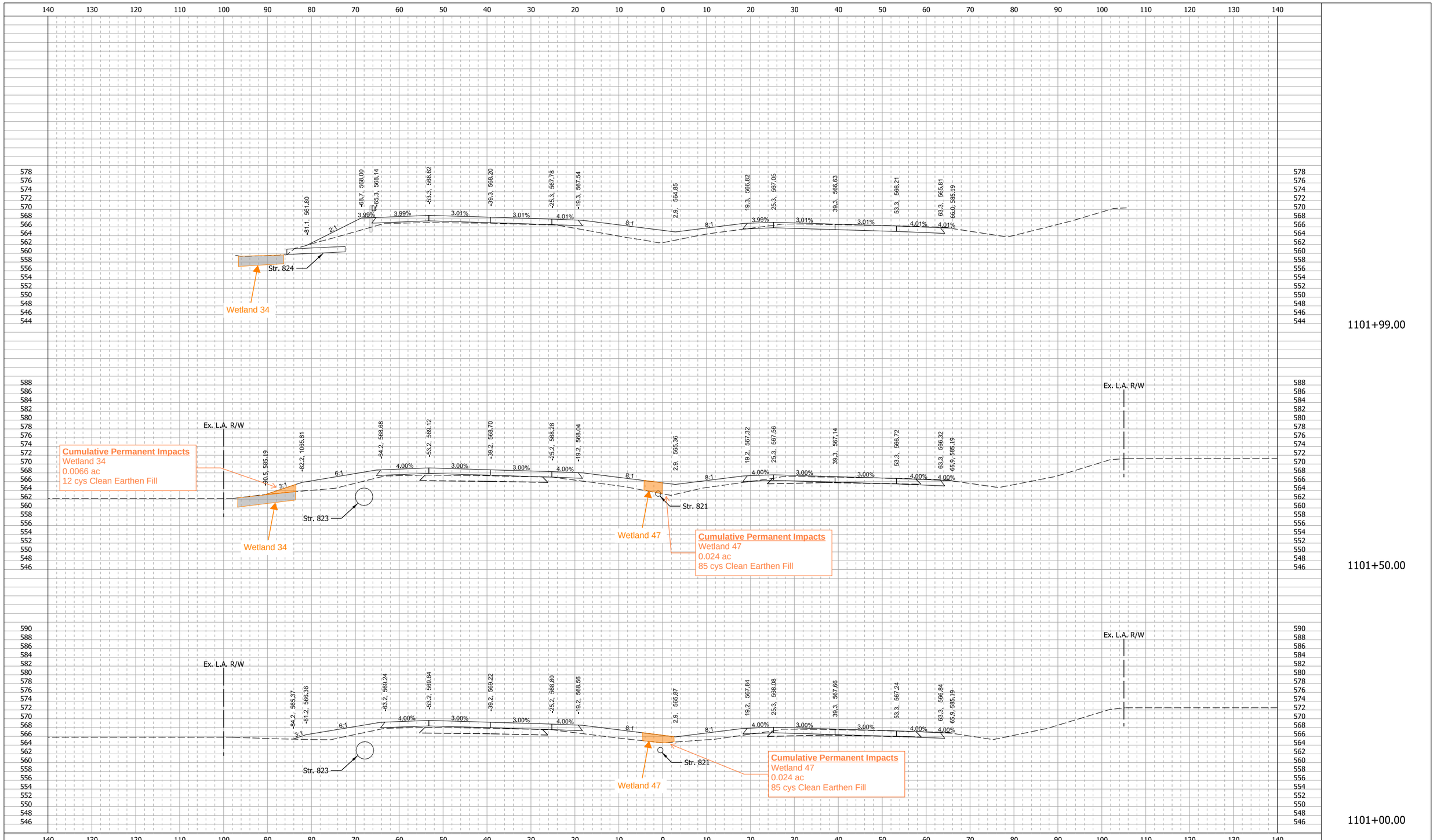

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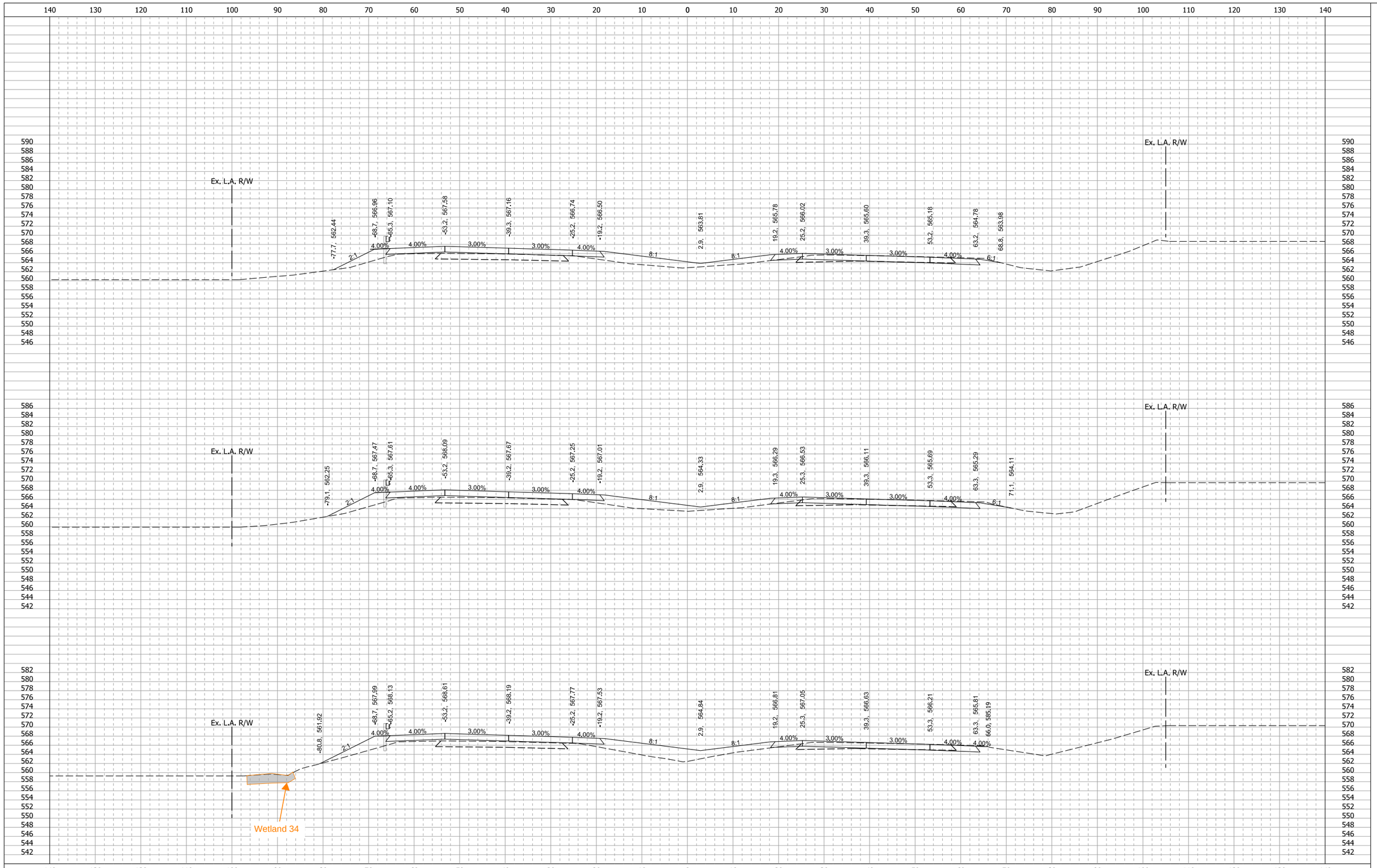

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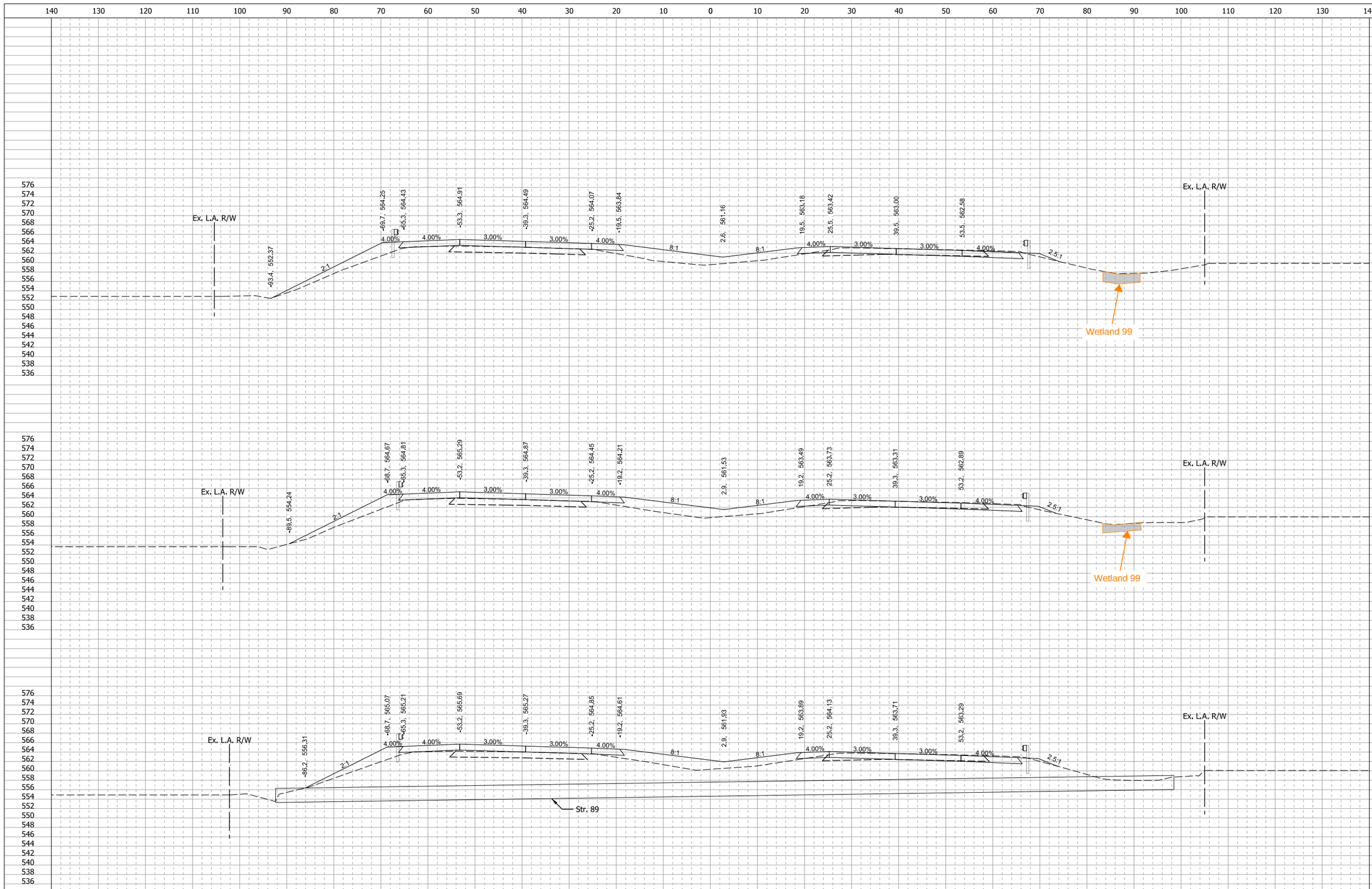

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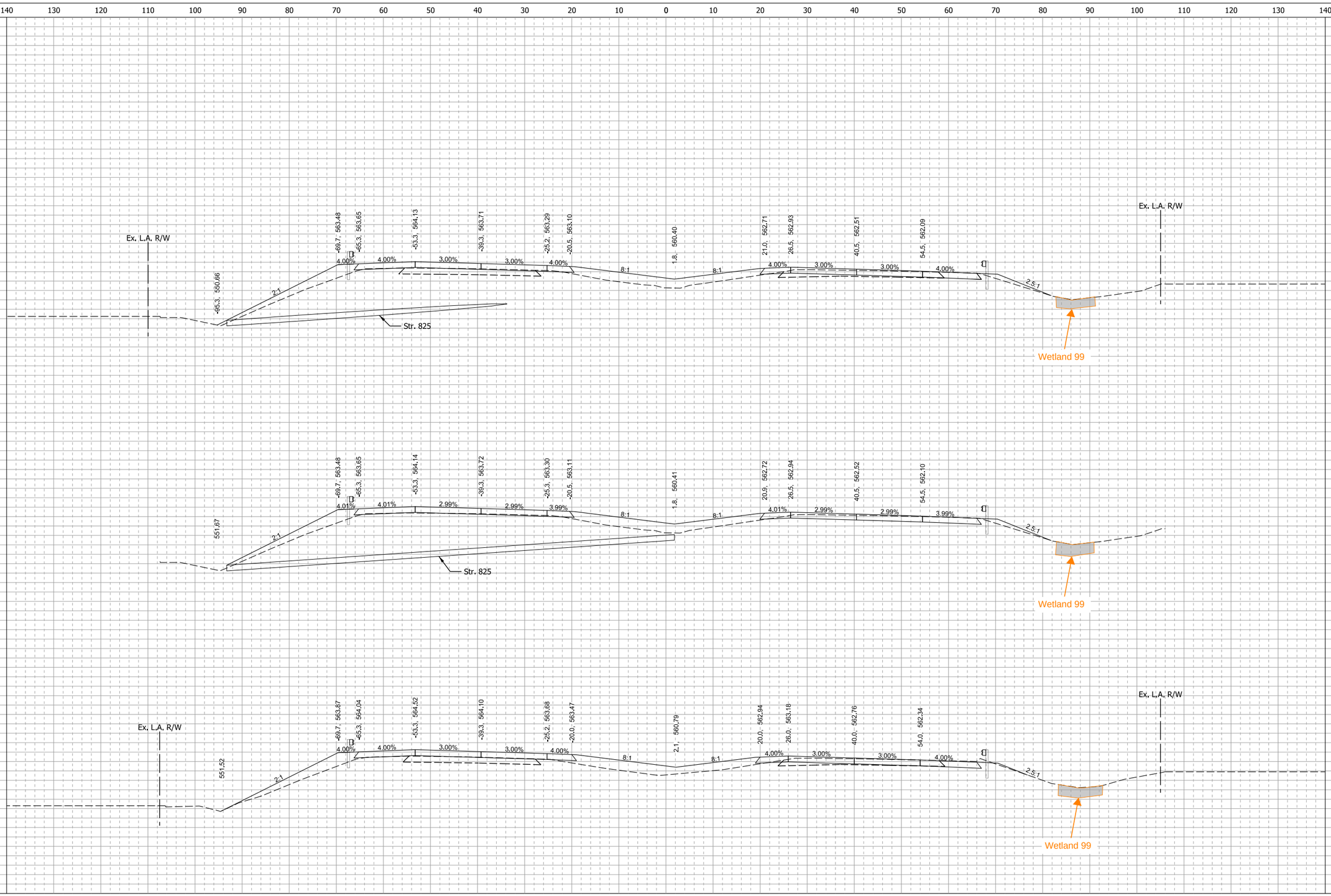

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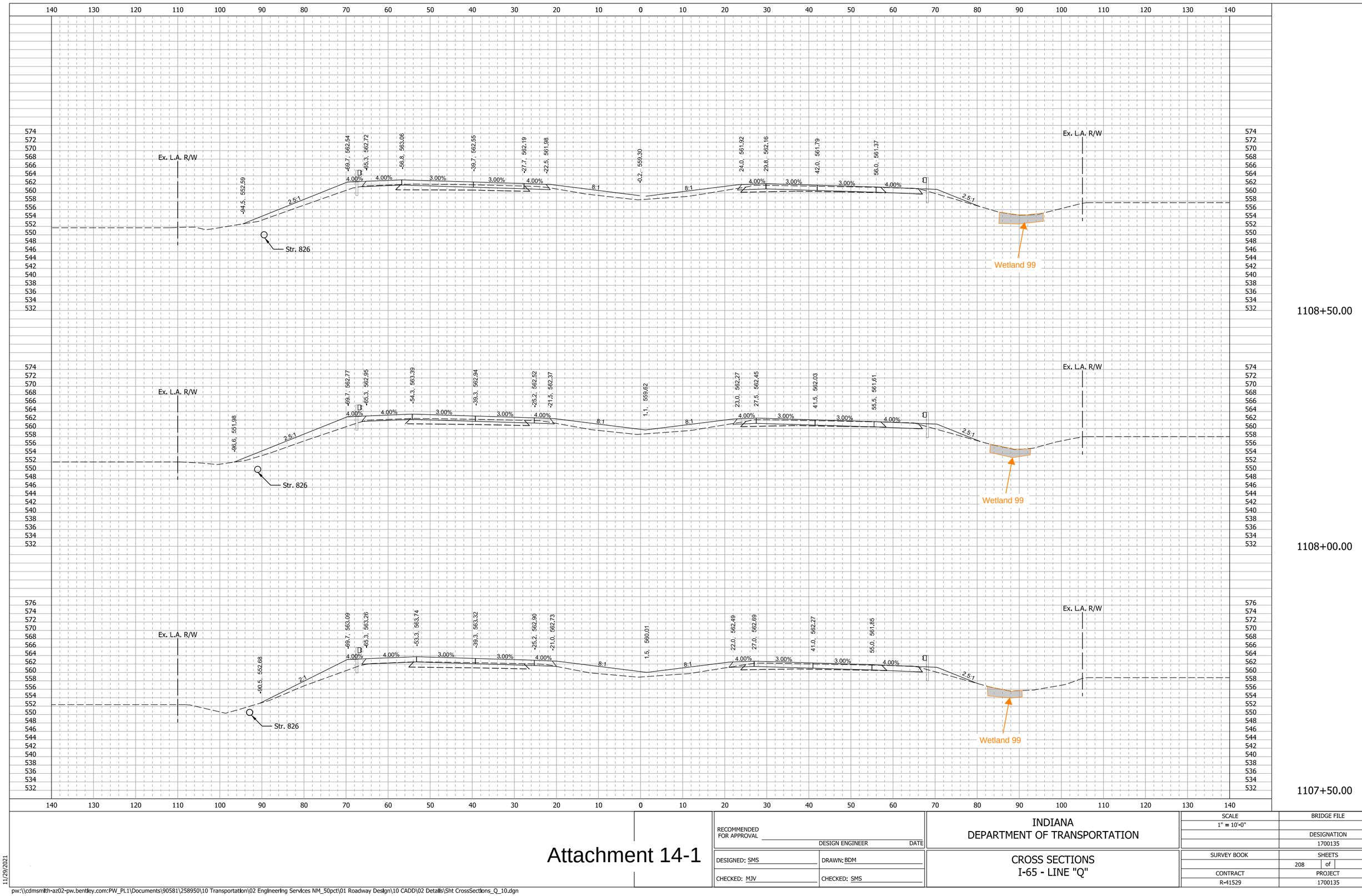

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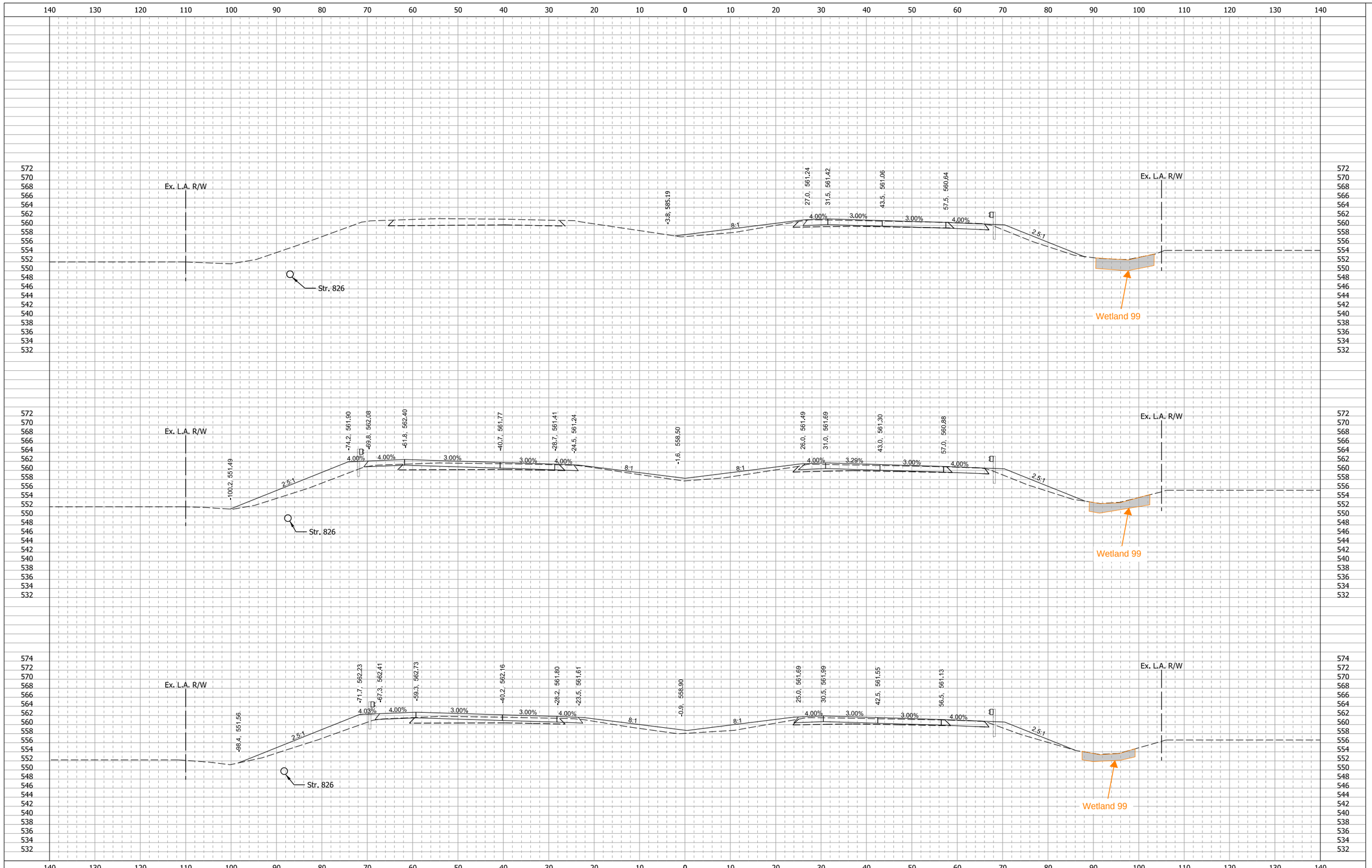

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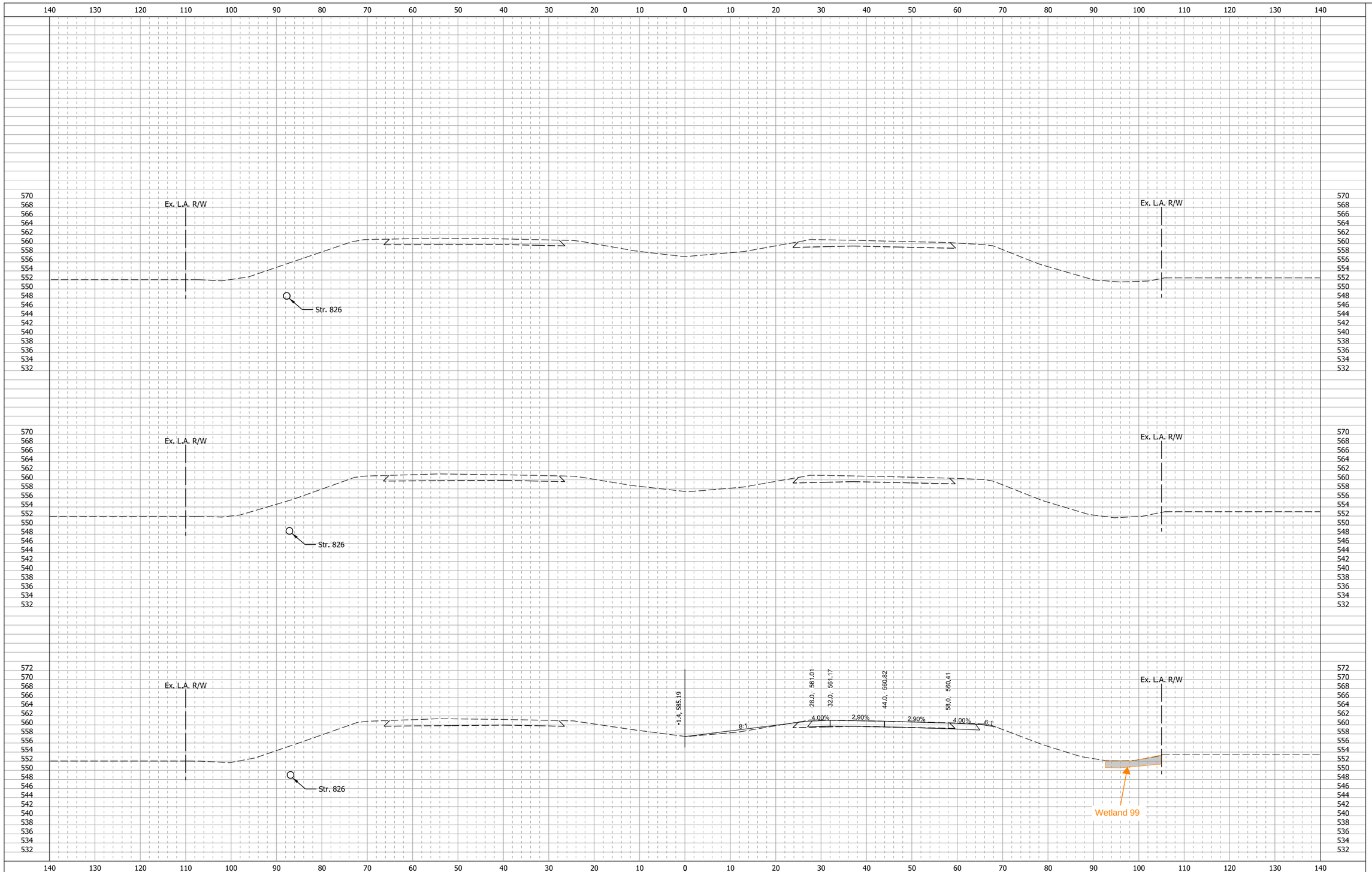

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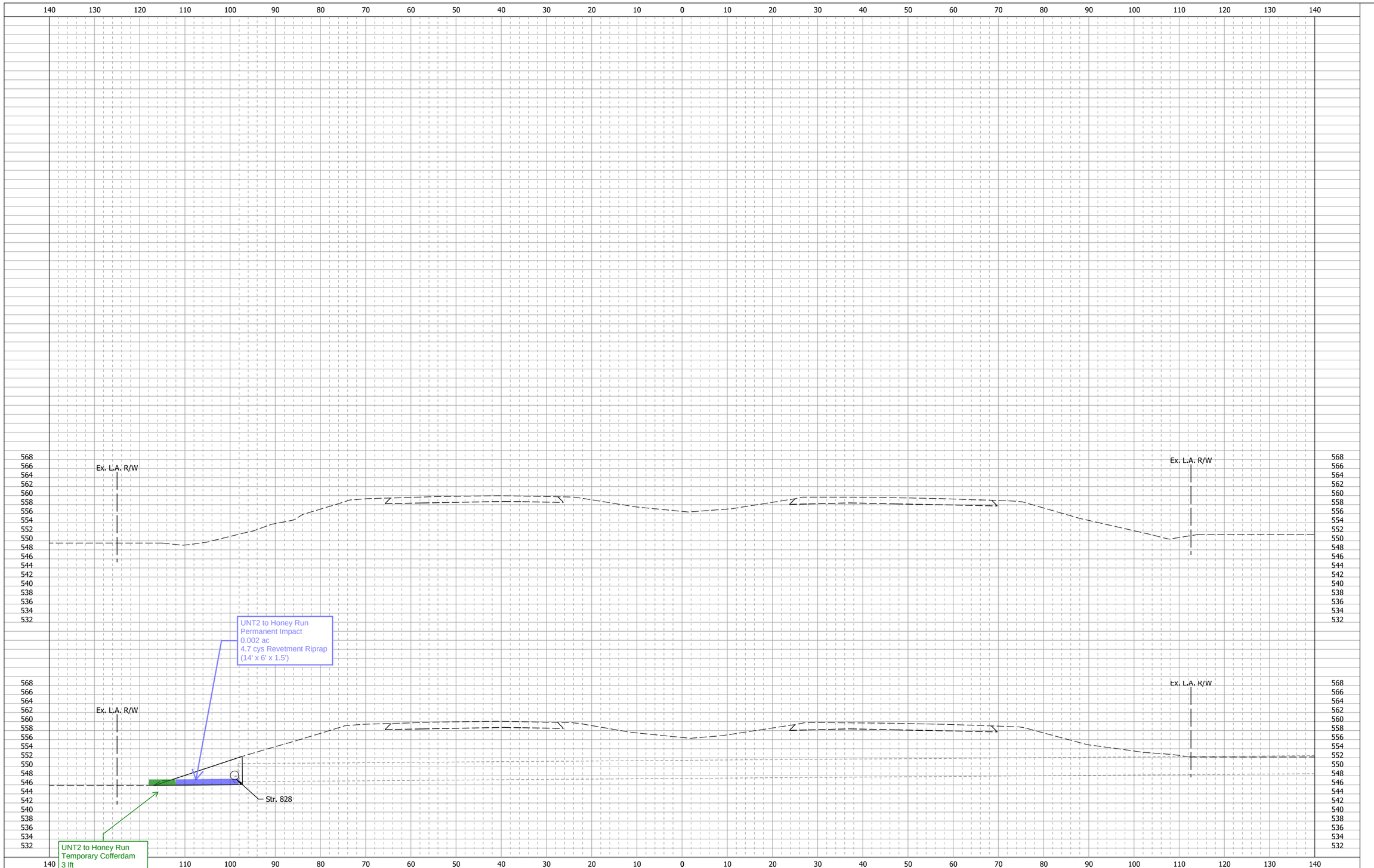

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LiKang 01-12-2021

WETLAND DELINEATION AND WATERS REPORT

I-65 ADDED TRAVEL LANES FROM 0.5 MILE NORTH OF BLUE LICK ROAD TO 1.5 MILES NORTH OF SR 56
DES. NO. 1700135
SCOTTSBURG AND HENRYVILLE, CLARK AND SCOTT COUNTIES, INDIANA
38.604767/-85.781478



Prepared for:
INDIANA DEPARTMENT OF TRANSPORTATION
SEYMOUR DISTRICT
185 AGRICO LANE
SEYMOUR, INDIANA 47274

Prepared by:
AMERICAN STRUCTUREPOINT, INC.
9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, INDIANA 46240
(317) 547-5580

DECEMBER 09, 2020

Attachment 14-1

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Appendix A - Aquatic Resource Summary Tables
Appendix B - Routine Wetland Determination Data Forms
Appendix C - Quality Assessment Forms
Appendix D - Mapping
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1.0 Introduction

American Structurepoint, Inc. was contracted by the Indiana Department of Transportation (INDOT) Seymour District to perform a wetland delineation and waters investigation for the proposed Interstate 65 (I-65) Added Travel Lanes Project (Lead Des. No. 1700135, for additional Des. Nos. associated with this project and current anticipated scope, see Table 1 below). The project proposes a full mainline replacement and the addition of one northbound and one southbound travel lane within the current median. Additionally, INDOT anticipates bridge and small structure work (see details in Table 1 below).

Table 1. Additional Des. Nos. associated with Lead Des. 1700135

Bridges			
Des. No.	**Bridge No.**	**Location**	**Work Type**
1600729, 1600733	I65-17-4222D	I-65 NB and SB over Caney Fork Creek	Widening and Superstructure Replacement
1600744, 1600750	I65-16-4220D	I-65 NB and SB over Blue Lick Creek	Superstructure Replacement
2001600, 2001601	I65-21-4225D	I-65 at Brownstown Road (NB and SB)	Widening
2001603	I65-23-4227A	County Line Road over I-65	Superstructure Replacement
2001604, 2001605	I65-24-4229A	I-65 NB and SB over Pigeon Roost Creek	Widening and Superstructure Replacement
2001607	I65-28-4232A	Lake Road Bridge over I-65	Superstructure Replacement
Small Drainage Structures			
Des. No.	**Culvert No.**	**Location**	**Work Type**
2001593	I65-072-26.20	I-65 6.97 miles N of SR 160	Small Structure Pipe Lining
2001594	I65-072-25.05	I-65 5.82 miles N of SR 160	Small Structure Pipe Lining
2001595	I65-010-22.77	I-65 3.54 miles N of SR 160	Small Structure Replacement
2001596	I65-072-25.83	I-65 6.60 miles N of SR 160	Small Structure Replacement
2001597	I65-010-22.65	I-65 3.42 miles N of SR 160	Small Structure Pipe Lining
2001598	I65-010-19.90	I-65 0.67 miles N of SR 160	Small Structure Pipe Lining
2001599	I65-010-18.35	I-65 9.21 miles N of SR 160	Small Structure Pipe Lining

The I-65 Added Travel Lanes project is 14.8 miles long beginning approximately 0.5 mile north of Blue Lick Road and extending to 1.5 miles north of State Road (SR) 56 in Clark and Scott Counties. The center coordinates of the site are 38.604767, -85.781478. The investigated area generally encompasses the state owned right-of-way and ranges from approximately 175 to 325 feet wide. From Moonglo Road to the northern limits (approximately 0.2 miles) only the 50-foot wide median was investigated. The investigated area also extends along the intersecting roadways and interchanges at SR 160, the I-65 over Brownstown Road Bridge, the Henryville Rest Areas, the Liberty Knob Road over I-65 Bridge, the Lake Road over I-65 Bridge, and at SR 56. The investigated area is located on the Henryville, Scottsburg, and Speed United State Geological Survey (USGS) 7.5 Minute Quadrangle Maps. The location and approximate boundaries of the investigated area can be seen in the attached maps and aerial photographs (Appendix D).

American Structurepoint, Inc. staff visited the site on August 31st through September 3rd, 2020, to conduct a wetland delineation and waters investigation. The proposed project is located in Land Resource Region (LRR) M and N, as recognized by the US Department of Agriculture. As the majority of the proposed project is located in LRR M, this wetland delineation was conducted in accordance with the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (US Army Corps of Engineers, 2010) following coordination with INDOT Ecological and Waterway Permitting Office.

A total of 109 wetlands (Wetlands 1, 2, 3.1, 3.2, 4-20, 21.1, 21.2, 22-40, 41.1, 41.2, 42– 106) totaling approximately 7.69 acres and 43 streams (for stream names, see the Aquatic Resources Summary: Streams Table in Appendix A) totaling 11,703 linear feet (1.581 acres) were identified within the investigated area. Wetlands 2, 3.1, 3.2, 9, 12, 21.1, 21.2, 26, 32, 40, 65, 68-69, 74, 76, 78, 86, 89, and 105 as well as 24 of the streams (for jurisdictional information, see the Aquatic Resources Summary: Streams Table in Appendix A) appear to have a hydrologic connection to a Traditional Navigable Waterway (TNW). Therefore, these wetlands and streams are anticipated to be considered jurisdictional waters of the US.

Wetlands 1, 4-8, 10, 11, 13-20, 22-25, 27-31, 33-39, 41.1, 41.2, 42- 64, 66-67, 70-73, 75, 77, 79-85, 87-88, 90-104, and 106 do not abut jurisdictional waters of the US and are not flooded within a typical year. Therefore, these features are anticipated to be considered jurisdictional waters of the State.

Nineteen of the streams were determined to be ephemeral streams. Additionally, culverts and maintenance pipes associated with intermittent and perennial streams within the project area are anticipated to be considered artificial drainage features (for jurisdictional information, see the Aquatic Resources Summary: Streams Table in Appendix A). Therefore, these resources are anticipated to be non-jurisdictional.

2.0 Site Characterization – Records Review

2.1 USGS Topographic Mapping

The investigated area is located on the Henryville, Scottsburg, and Speed USGS Topographic Quadrangles in Section 25, Township 3 North, and Range 5 East; Section 26, Township 1 N, Range 5 East; Section 27, Township 4N, Range 5 East; Section 30, Township 3 North, Range 6 East; Section 20, Township 1 North, Range 6 East; Section 10, Township 2 North, Range 5 East; Sections 15, 20, 27, and 36, Township 2 North, Range 6 East; Sections 28 and 32, Township 3 North, Range 5 East; Sections 13, 23, 27, and 34, Township 3 North, Range 6 East; and Tract Numbers 220, 238, 240, 250, 265 and 268.

The topographic map depicts the investigated area as mostly cleared land along I-65. Some forested areas are depicted along streams and along the boundary of the investigated area. The topography is generally rolling, draining generally to the east. Twenty-one streams are depicted within the investigated area. An additional three streams, depicted as adjacent on the topographic map, were field verified as present within the investigated area. See the table below for more details:

Stream Name	Flow Regime	Field Verified
Henryville Quadrangle- Clark County		
Blue Lick Creek	Perennial	Yes
Caney Fork	Perennial	Yes
Henry Brook (two crossings)	Intermittent	Yes; two crossings were verified
Ville Run	Intermittent	Yes
Wolf Run	Perennial	Yes
UNT to Miller Fork	Perennial	Yes; identified as UNT 3 to Miller Fork.
Miller Fork	Perennial	Yes
UNT to Meal Run *Mapped adjacent, east of I-65	Intermittent	Yes; UNT 1 to Meal Run
Meal Run	Intermittent	Yes
Wheel Run	Intermittent	Yes
West Fork Silver Creek	Perennial	Yes
UNT to West Fork Silver Creek	Intermittent	Yes
UNT to West Fork Silver Creek	Intermittent	No
UNT to Underwood Run	Intermittent	No
Pigeon Roost Creek	Perennial	Yes
UNT to Underwood Run	Intermittent	Yes
Scottsburg Quadrangle- Scott County		
Tree Creek	Perennial	Yes
UNT to Tree Creek	Intermittent	Yes
Sycamore Run	Intermittent	Yes
UNT to Sycamore Run *Mapped adjacent, east of I-65	Intermittent	Yes; UNT 2 to Sycamore Run
UNT to Nest Run	Intermittent	Yes; identified as UNT 2 to Nest Run.
Nest Run	Intermittent	Yes
Elm Branch *Mapped adjacent, east of I-65	Intermittent	Yes
Honey Run	Perennial	No

Twenty-one of the mapped streams (Blue Lick Creek, Caney Fork, Henry Brook, Ville Run, Wolf Run, UNT to Miller Fork, Miller Fork, UNT to Meal Run, Meal Run, Wheel Run, West Fork Silver Creek, UNT to West Fork Silver Creek, Pigeon Roost Creek, UNT to Underwood Run, Tree Creek, UNT to Tree Creek, Sycamore Run, UNT to Sycamore Run, UNT to Nest Run, Nest Run, and Elm Branch) were field verified during the August 31st through September 3rd, 2020 field investigation. Honey Run was not field verified due to the investigated area being confined to the median and the feature is encapsulated beneath I-65 in this location.

2.2 National Wetlands Inventory Mapping (NWI) Maps

The NWI Mapping was reviewed for the investigated area. Nine mapped wetlands are located within the investigated area and four NWI wetlands were field verified as present within the investigated area. See the below NWI Summary table for more details:

NWI Summary		
Mapped NWI	**Location**	**Field Verified**
Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A)	West of I-65, approximately 0.5 mile south of Blue Lick Road	Yes; a portion of this wetland is mapped within emergent Wetland 1 confined to the ditchline.
Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A)	West of I-65, approximately 1.6 mile south of SR 160	Yes; a portion of this wetland is mapped within emergent Wetland 3.2 confined to the ditchline.
Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A)	West of I-65, approximately 1.5 mile south of SR 160	No
Palustrine, Unconsolidated Bottom, intermittently exposed, diked/impounded (PUBGh)	West of I-65; approximately 0.7 mile north of LEOTA ROAD	No; it is associated with the channel of Wolf Run.
Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded (PFO1C)	East of I-65, south of Pigeon Roost Creek	No
Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A)	East of I-65, just south of Pigeon Roost Creek	Yes; a portion of this wetland is within emergent Wetland 89 confined to the ditchline.
Palustrine, Unconsolidated Bottom, intermittently exposed, diked/impounded (PUBGh)	East of I-65, north of Pigeon Roost Creek	Yes; a portion of this wetland is within emergent Wetland 91 confined to the ditchline.
Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A)	East of I-65, at Nest Run	No; Nest Run was delineated running through this area.
Palustrine, Unconsolidated Bottom, intermittently exposed, diked/impounded (PUBGh)	West of I-65, north of Nest Run	No

2.3 County Soil Survey

The *Clark County* and *Scott County SSURGO* mapping was reviewed to determine soil classification within the investigated area. Soil types mapped within the investigated area include:

Map Unit Name	Map Unit Symbol	SSURGO Hydric Rating by Map Unit
Bartle silt loam, 0 to 2 percent slopes	BbhA	10
Bartle silt loam, 2 to 4 percent slopes	BbhB	5
Beanblossom silt loam, 1 to 3 percent slopes, occasionally flooded, very brief duration	BcrAW	0
Blocher, soft bedrock substratum-Weddel complex, 6 to 12 percent slopes, severely eroded	BfcC3	0
Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded	BfbC2	0
Blocher-Cincinnati silt loams, 6 to 12 percent slopes, eroded	CldC2	0
Bonnell clay loam, 12 to 22 percent slopes, severely eroded	BnyD3	0
Bonnie silt loam, 0 to 1 percent slopes, frequently flooded, brief duration	BodAH	95
Bonnie silt loam, 0 to 1 percent slopes, occasionally flooded, very brief duration	BodAW	95
Cincinnati silt loam, 2 to 6 percent slopes, eroded	CkkB2	0
Cincinnati-Blocher silt loams, 6 to 12 percent slopes, severely eroded	CldC3	0
Coolville silt loam, 6 to 12 percent slopes	ComC	0
Coolville-Rarden complex, 12 to 18 percent slopes	ConD	0
Coolville-Rarden complex, 6 to 12 percent slopes, severely eroded	ConC3	0
Deam silty clay loam, 20 to 55 percent slopes	DbrG	0
Deputy-Trappist silt loams, 6 to 12 percent slopes, eroded	DtvC2	0
Dubois silt loam, 0 to 2 percent slopes	DfnA	5
Dubois silt loam, 2 to 6 percent slopes, eroded	DfnB2	3
Elkinsville silt loam, 18 to 35 percent slopes	EepF	0
Haubstadt silt loam, 0 to 2 percent slopes	HccA	0
Haubstadt silt loam, 2 to 6 percent slopes, eroded	HccB2	0
Haubstadt silt loam, 2 to 6 percent slopes, eroded	HccB2	0
Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded	HceC3	0
Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded	HcdC2	0
Haymond silt loam, 0 to 2 percent slopes, frequently flooded, very brief duration	HcgAV	0
Haymond silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	HcgAW	0
Holton silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	HleAW	5
Jennings silt loam, 2 to 6 percent slopes, eroded	JaeB2	0

Map Unit Name	Map Unit Symbol	SSURGO Hydric Rating by Map Unit
Jennings-Blocher, hard bedrock substratum, silt loams, 6 to 12 percent slopes, eroded	JafC2	0
Medora silt loam, 2 to 6 percent slopes, eroded	MhyB2	0
Medora silt loam, 6 to 12 percent slopes, severely eroded	MhyC3	0
Nabb silt loam, 0 to 2 percent slopes	NaaA	0
Nabb silt loam, 2 to 6 percent slopes, eroded	NaaB2	0
Oldenburg loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	OfbAW	0
Pekin silt loam, 2 to 6 percent slopes, eroded	PcrB2	0
Pekin silt loam, 2 to 6 percent slopes, eroded	PcrB2	0
Pekin silt loam, 6 to 12 percent slopes, eroded	PcrC2	0
Pekin silt loam, 6 to 12 percent slopes, eroded	PcrC2	0
Pekin silt loam, 6 to 12 percent slopes, severely eroded	PcrC3	0
Peoga silt loam, 0 to 1 percent slopes	PhaA	93
Peoga silt loam, 0 to 1 percent slopes	PhaA	93
Pits, quarry	Pml	0
Scottsburg silt loam, 2 to 4 percent slopes, eroded	SceB2	0
Steff silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	StaAW	0
Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	StdAH	7
Stendal silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	StdAW	7
Stendal silt loam, 0 to 2 percent slopes, rarely flooded	StdAQ	5
Trappist-Deputy complex, 6 to 12 percent slopes, severely eroded	TsaC3	0
Trappist-Rohan complex, 12 to 25 percent slopes, severely eroded	ThcD3	0
Udorthents, cut and filled	Uaa	0
Urban land-Udarents, fragipan substratum, complex, till plain, 0 to 12 percent slopes	UngB	0
Wakeland silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	WaaAH	10
Wakeland silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	WaaAW	10
Wakeland silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	WaaAW	10
Weddel silt loam, 2 to 6 percent slopes, eroded	WedB2	0
Whitcomb silt loam, 0 to 2 percent slopes	WnmA	3
Wilbur silt loam, 0 to 2 percent slopes, frequently flooded, very brief duration	WokAV	0
Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	WokAW	0
Wirt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	WprAW	0

2.4 Aerial Photography

Aerial photography from 2017 (IndianaMap) was reviewed for the investigated area. The 2017 aerial photography depicts the investigated area as primarily maintained right-of-way with wooded vegetation corresponding to field verified stream locations throughout the investigated area. The 2017 Indiana Map Aerial depicts the investigated area as it was observed during the August 31st through September 3rd, 2020 field investigation.

2.5 Floodways and Floodplains

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Mapping (FIRM) was reviewed for the investigated area. The investigated area is mapped within the floodplains associated with Blue Lick Creek, Caney Fork, Miller Fork, and Silver Creek.

2.6 Legal Drain

The Clark and Scott County Surveyors Offices were contacted on October 30, 2020 by American Structurepoint, Inc. staff. In a response on October 30, 2020, the Clark County Surveyor indicated there are no legal drains in Clark County. In a response on November 19, 2020, the Scott County Surveyor indicated that he is unaware of any regulated drains in the corridor.

2.7 NHD Flowlines

Seven NHD Flowlines are depicted within the investigated area. Six of the seven NHD Flowlines were field verified during the August 31st through September 3rd, 2020 field investigation. Honey Run was not field verified due to the investigated area being confined to the median and the feature is encapsulated beneath I-65 in this location.

NHD Flowline Name	Field Verified
Blue Lick Creek	Yes
Lodge Creek	Yes; Identified as Caney Fork
Unnamed	Yes; Identified as Miller Fork
Silver Creek	Yes; Identified as West Fork Silver Creek
Pigeon Roost Creek	Yes
Tree Creek	Yes
Honey Run	No

2.8 12-Digit Hydrologic Unit Code

The USGS 12-Digit Hydrologic Unit Code (HUC) mapping was reviewed for the project. The investigated area is located within the Henry Creek-Cammie Thomas Ditch (051202070803), Pigeon Roost Creek (051202070504), Headwaters Silver Creek (051401010802), Miller Fork (051401010801) and Blue Lick Creek (051401010803) 12-Digit HUCs.

3.0 Field Reconnaissance

The I-65 Added Travel Lanes Project from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56 in Clark and Scott Counties (Des. No. 1700135) was examined for the presence of wetlands and waters of the US on the site on August 31st through September 3rd, 2020. Data points were strategically placed to identify appropriate boundaries of delineated wetlands and to determine the presence or absence of jurisdictional wetlands and waters of the US. A total of 109 wetlands (Wetlands 1, 2, 3.1, 3.2, 4-20, 21.1, 21.2, 22-40, 41.1, 41.2, 42– 106) totaling approximately 7.69 acres and 43 streams (for a list of stream names, see Appendix A) totaling 11,703 linear feet (1.243 acres) were identified within the investigated area. Data sheets and a map indicating the location of data points documenting the field investigation are included in the appendix.

3.1 Wetlands

3.1.1 Wetland 1

Wetland 1 is an emergent wetland located along the southbound lanes of I-65. The wetland is located approximately 0.20 mile south of Blue Lick Creek and extends north for 280 linear feet before terminating. Wetland 1 extends west outside of State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 1 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 1 is a Class I Non-Forested (NF) wetland located within mapped upland soils. The wetland extends west beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent forested land, Wetland 1 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Fraxinus pennsylvanica* and *Quercus palustris* within the sapling/shrub stratum; and *Persicaria pensylvanicum* and *Echinochloa crus-galli* within the herbaceous stratum. Although the wetland included sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Drift Deposits (B3), Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 1	0-18	90% 10YR 5/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 1 would be considered Palustrine, Emergent, Seasonally Flooded/Saturated (PEME) under the Cowardin Classification System. Wetland 1 is 0.107 acre and extends beyond the investigated area. Wetland 1 would be considered a poor quality wetland due to its location within a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 1 included in the Appendix B. DP 2 included in Appendix B is representative of the upland areas surrounding Wetland 1. DP 2 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.2 Wetland 2

Wetland 2 is a forested wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.02 mile north of Biggs Road and extends north for 585 linear feet before terminating. The wetland derives water from runoff from I-65 and Howser Road.

Wetland 2 directly abuts UNT to Blue Lick Creek (an intermittent stream), which drains to Blue Lick Creek, which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 2 would be considered a water of the US.

The dominant vegetation consisted of *Acer rubrum* within the tree stratum; *Liquidambar styraciflua* and *Fraxinus pennsylvanica* within the sapling/shrub stratum; and *Carex muskingumensis* and *Persicaria pensylvanicum* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 8 inches, Saturation (A3) at 5 inches, Drift Deposits (B3), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 3	0-4	97% 10YR 3/3 with 3% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	4-18	90% 10YR 4/1 with 10% 10YR 3/6 as a concentration in the matrix	Loamy/Clayey

Wetland 2 would be considered Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A) under the Cowardin Classification System. Wetland 2 is 0.098 acre and wholly contained within the investigated area. Wetland 2 would be considered a poor quality wetland due to its location in a roadside ditch between I-65 and Howser Road. For reference to field data collected for this wetland see DP 3 included in the Appendix B. DP 4 included in Appendix B is representative of the upland areas surrounding Wetland 2. DP 4 did possess hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.3 Wetland 3.1

Wetland 3.1 is a forested wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.02 mile north of Caney Fork and extends north for 345 linear feet before terminating. The wetland derives water from runoff from I-65 as well as flooding from Caney Fork.

Wetland 3.1 appears to drain south via a maintenance pipe to and is flooded in a typical year by Caney Fork (a perennial stream), which drains to Miller Fork, which drains to the Ohio River, a TNW. Therefore, it is anticipated Wetland 3.1 would be considered a water of the US.

The dominant vegetation consisted of *Fraxinus pennsylvanica* within the tree stratum; *Fraxinus pennsylvanica* within the sapling/shrub stratum; and *Impatiens capensis* and *Symphyotrichum lateriflorum* within the herbaceous stratum. Hydrologic indicators included Drift Deposits (B3), Water-Stained Leaves (B9), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 5	0-4	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	4-18	90% 10YR 5/2 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 3.1 would be considered PFO1E under the Cowardin Classification System. Wetland 3.1 is 0.117 acre and wholly contained within the investigated area. Wetland 3.1 would be considered a poor quality wetland due to its location within a roadside ditch deriving water from I-65. For reference to field data collected for this wetland see DP 5 included in the Appendix B. DP 6 included in Appendix B is representative of the upland areas surrounding Wetland 3.1. DP 6 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

Wetland 3.2

Wetland 3.2 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.05 mile north of Caney Fork and extends north for 745 linear feet before terminating. The wetland derives water from runoff from I-65. Wetland 3.2 and Wetland 3.1 are part of a single emergent and forested wetland complex which drains south to Caney Fork as described in Wetland 3.1. Therefore, it is anticipated Wetland 3.2 would be considered a water of the US.

The dominant vegetation consisted of *Paspalum floridanum* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Drift Deposits (B3), Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 7	0-3	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	3-18	90% 10YR 5/2 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 3.2 would be considered PEME under the Cowardin Classification System. Wetland 3.2 is 0.116 acre and wholly contained within the investigated area. Wetland 3.2 would be considered a poor quality wetland

due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 7 included in the Appendix B. DP 8 included in Appendix B is representative of the upland areas surrounding Wetland 3.2. DP 8 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.5 Wetland 4

Wetland 4 is a forested wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 1.35 miles south of SR 160 and extends north for 126 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 4 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 4 is a Class I Forested (F) wetland confined to a roadside ditch wholly within the investigated area and is mapped within upland soils. Wetland 4 is entirely within the State owned right-of-way; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Acer rubrum, Platanus occidentalis,* and *Quercus palustris* within the tree stratum; *Fraxinus pennsylvanica* and *Celtis occidentalis* within the sapling/shrub stratum; *Carex muskingumensis* within the herbaceous stratum; and *Vitis aestivalis* and *Toxicodendron radicans* within the woody vine stratum. Hydrologic indicators included Sediment Deposits (B2), Water-Stained Laves (B9), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 9	0-4	97% 10YR 3/2 with 3% 10YR 3/6 as a concentration in the matrix	Loamy/Clayey
	4-18	90% 10YR 5/2 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 4 would be considered PFO1E under the Cowardin Classification System. Wetland 4 is 0.029 acre and wholly contained within the investigated area. Wetland 4 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 9 included in the Appendix B. DP 10 included in Appendix B is representative of the upland areas surrounding Wetland 4. DP 10 did possess hydrophytic vegetation and hydric soil but lacked the hydrology to be determined a wetland.

3.1.6 Wetland 5

Wetland 5 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.68

mile south of SR 160 and extends north for 875 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 5 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 5 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 5 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Paspalum floridanum* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Drift Deposits (B3), Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 11	0-6	93% 10YR 3/1 with 7% 10YR 3/4 as a concentration in the matrix	Loamy/Clayey
	6-18	60% 10YR 6/2 with 40% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 5 would be considered PEME under the Cowardin Classification System. Wetland 5 is 0.125 acre and wholly contained within the investigated area. Wetland 5 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 11 included in the Appendix B. DP 12 included in Appendix B is representative of the upland areas surrounding Wetland 5. DP 12 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.7 Wetland 6

Wetland 6 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.39 mile south of SR 160 and extends north for 782 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 6 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 6 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 6 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Agrostis stolonifera* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 8 inches, Saturation (A3) at 4 inches, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 13	0-5	97% 10YR 3/2 with 3% 10YR 4/4 as a concentration in the matrix	Loamy/Clayey
	5-12	90% 10YR 3/1 with 10% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey
	12-18	85% 10YR 6/2 with 15% 10YR 5/4 as concentration in the matrix	Loamy/Clayey

Wetland 6 would be considered PEME under the Cowardin Classification System. Wetland 6 is 0.132 acre and wholly contained within the investigated area. Wetland 6 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 13 included in the Appendix B. DP 14 included in Appendix B is representative of the upland areas surrounding Wetland 6. DP 14 did possess hydrophytic vegetation and hydric soil but lacked the hydrology to be determined a wetland.

3.1.8 Wetland 7

Wetland 7 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.20 mile south of SR 160 and extends north for 20 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 7 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 7 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 7 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Fraxinus pennsylvanica* within the sapling/shrub stratum; and *Typha latifolia* and *Dipsacus laciniatus* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 8 inches, Saturation (A3) at 4 inches, and FAC-Neutral Test (D5). Hydric soil indicators included Sandy Mucky Mineral (S1) and Sandy Redox (S5). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 15	0-6	90% 10YR 4/2 with 10% 10YR 4/6 as a concentration in the matrix	Sandy
	6-18	60% 10YR 4/1 and 40% 10YR 2/1 as a dual matrix	Mucky Sand

Wetland 7 would be considered PEME under the Cowardin Classification System. Wetland 7 is 0.003 acre and wholly contained within the investigated area. Wetland 7 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia*). For reference to field data collected for this wetland see DP 15 included in the Appendix B. DP 16 included in Appendix B is representative of the upland areas surrounding Wetland 7. DP 16 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.9 Wetland 8

Wetland 8 is an emergent wetland located in the southwest quadrant the I-65 and SR 160 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.02 mile south of SR 160 and extends south for 485 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 8 appears to drain south via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 8 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 8 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Typha latifolia* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.5 inches, High Water Table (A2) at the surface, Saturation (A3) at the surface, Iron Deposits (B5), Hydrogen Sulfide Odor (C1), and FAC-Neutral Test (D5). Hydric soil indicators included Hydrogen Sulfide (A4) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 17	0-8	97% 10YR 4/1 with 3% 10YR 4/4 as a concentration in the matrix	Loamy/Clayey
	8-18	90% 10YR 5/2 with 10% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey

Wetland 8 would be considered PEME under the Cowardin Classification System. Wetland 8 is 0.099 acre and wholly contained within the investigated area. Wetland 8 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field

data collected for this wetland see DP 17 included in the Appendix B. DP 18 included in Appendix B is representative of the upland areas surrounding Wetland 8. DP 18 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.10 Wetland 9

Wetland 9 is an emergent wetland located along the southbound lanes of I-65. The wetland is entirely within State owned right-of-way. The wetland begins approximately 0.32 mile south of Winding Road and extends north for 345 linear feet before terminating. The wetland derives water from upland runoff from the forested land, west of I-65.

Wetland 9 directly abuts UNT 1 to Wolf Run (an intermittent stream), which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 9 would be considered a water of the US.

The dominant vegetation consisted of *Leersia oryzoides, Scirpus atrovirens,* and *Juncus effusus* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 6 inches, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 19	0-18	95% 10YR 5/2 with 5% 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 9 would be considered PEME under the Cowardin Classification System. Wetland 9 is 0.054 acre and wholly contained within the investigated area. Wetland 9 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 19 included in the Appendix B. DP 20 included in Appendix B is representative of the upland areas surrounding Wetland 9. DP 20 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.11 Wetland 10

Wetland 10 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 0.06 mile south of Winding Road. The wetland derives water from runoff from I-65.

Wetland 10 appears to drain south via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 10 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 10 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Impatiens capensis* and *Leersia virginica* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 11 inches, Saturation (A3) at 8 inches, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 21	0-6	95% 10YR 3/1 with 5% 4/6 as a concentration in the matrix	Loamy/Clayey
	6-18	97% 10YR 5/2 with 3% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 10 would be considered PEME under the Cowardin Classification System. Wetland 10 is 0.019 acre and wholly contained within the investigated area. Wetland 10 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 21 included in the Appendix B. DP 22 included in Appendix B is representative of the upland areas surrounding Wetland 10. DP 22 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.12 Wetland 11

Wetland 11 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.04 mile north of Winding Road and extends north for 120 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 11 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 11 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 11 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Agrostis gigantea* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 3 inches, High Water Table (A2) at the surface, Saturation (A3) at the surface, Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 23	0-3	97% 10YR 5/2 with 3% 5/6 as a concentration in the matrix	Loamy/Clayey
	3-18	100% 10YR 5/6	Loamy/Clayey

Wetland 11 would be considered PEME under the Cowardin Classification System. Wetland 11 is 0.017 acre and wholly contained within the investigated area. Wetland 11 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 23 included in the Appendix B. DP 24 included in Appendix B is representative of the upland areas surrounding Wetland 10. DP 24 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.13 Wetland 12

Wetland 12 is a forested wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.16 mile south of Brownstown Road and extends north for 430 linear feet before terminating. The wetland derives water from the floodplain of Miller Fork and runoff from I-65.

Wetland 12 directly abuts Miller Fork (a perennial stream), which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 12 would be considered a water of the US.

The dominant vegetation consisted of *Acer rubrum* within the tree stratum; *Lindera benzoin* within the sapling/shrub stratum; and *Lycopus americanus* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 2 inches, Saturation (A3) at the surface, Water-Stained Leaves (B9), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 25	0-18	90% 10YR 5/1 with 10% 4/4 as a concentration in the matrix	Loamy/Clayey

Wetland 12 would be considered PFO1E under the Cowardin Classification System. Wetland 12 is 0.118 acre and wholly contained within the investigated area. Wetland 12 would be considered a poor quality wetland due to its location within a roadside ditch A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 25 included in the Appendix B. DP 26 included in Appendix B is representative of the upland areas surrounding Wetland 10. DP 26 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.14 Wetland 13

Wetland 13 is an emergent wetland located in the southwest quadrant of the I-65 and Brownstown Road overpass. The wetland is located within a depressional area adjacent to a riprap lined ditch within the investigated area limits. The wetland begins in the southwest quadrant of the I-65 and Brownstown Road overpass and extends west for 88 linear feet before extending outside of the investigated area. The wetland derives water from runoff from Brownstown Road.

Wetland 13 appears to drain southeast via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 13 is a Class I NF wetland located within mapped upland soils. The wetland

extends west beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent forested land, Wetland 13 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides, Echinochloa crus-galli* and *Glechoma hederacea* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 10 inches, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Redox Dark Surface (F6). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 27	0-8	100% 10YR 2/1	Loamy/Clayey
	8-18	97% 10YR 3/1 with 3% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 13 would be considered PEME under the Cowardin Classification System. Wetland 13 is 0.011 acre and extends west beyond the investigated area. Wetland 13 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and *Glechoma hederacea*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 27 included in the Appendix B. DP 28 included in Appendix B is representative of the upland areas surrounding Wetland 13. DP 28 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.15 Wetland 14

Wetland 14 is an emergent wetland located in the northwest quadrant of the I-65 and Brownstown Road overpass. The wetland is located within a depressional area adjacent to a riprap lined ditch and is entirely within State owned right-of-way. The wetland derives water from runoff from Brownstown Road.

Wetland 14 appears to drain southeast via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 14 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Salix nigra, Fraxinus pennsylvanica* and *Platanus occidentalis* within the tree stratum; and *Carex hystericina* and *Echinochloa crus-galli* within the herbaceous stratum. Although the wetland included trees this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Saturation (A3) at 10 inches, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 29	0-4	100% 10YR 4/1	Loamy/Clayey
	4-18	80% 10YR 4/1 with 20% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 14 would be considered PEME under the Cowardin Classification System. Wetland 14 is 0.009 acre and wholly contained within the investigated area. Wetland 14 would be considered a poor quality wetland due to its association with a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 29 included in the Appendix B. DP 30 included in Appendix B is representative of the upland areas surrounding Wetland 14. DP 30 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.16 Wetland 15

Wetland 15 is an emergent wetland located along Brownstown Road under I-65 southbound lanes. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins under I-65 southbound lanes and extends east for 50 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 15 appears to drain southeast via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 15 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 15 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Bidens frondosa*, *Bidens aristosa*, and *Schedonorus arundinaceus* within the herbaceous stratum. Hydrologic indicators included Depleted Matrix (F3). Hydric soil indicators included Surface Soil Cracks (B6), Drainage Patterns (B10), and FAC-Neutral Test (D5). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 31	0-2	100% 10YR 4/2	Loamy/Clayey
	2-6	65% 10YR 4/2 with 35% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	6-8*	95% 10YR 5/2 with 5% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

*Restrictive gravel layer at 8 inches

Wetland 15 would be considered PEME under the Cowardin Classification System. Wetland 15 is 0.003 acre and wholly contained within the investigated area. Wetland 15 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Schedonorus arundinaceus*). A

continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 31 included in the Appendix B. DP 32 included in Appendix B is representative of the upland areas surrounding Wetland 15. DP 32 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.17 Wetland 16

Wetland 16 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.07 mile north of Brownstown Road and extends north for 48 linear feet before terminating 0.08 mile north of Brownstown Road. The wetland derives water from runoff from an I-65.

Wetland 16 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 16 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 16 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli, Juncus effusus,* and *Carex frankii* within the herbaceous stratum. Hydrologic indicators included Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 33	0-3	100% 10YR 4/3	Loamy/Clayey
	3-18	90% 10YR 5/2 with 10% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 16 would be considered PEME under the Cowardin Classification System. Wetland 16 is 0.004 acre and wholly contained within the investigated area. Wetland 16 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 33 included in the Appendix B. DP 34 included in Appendix B is representative of the upland areas surrounding Wetland 16. DP 34 did possess hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.18 Wetland 17

Wetland 17 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.6 mile north of Brownstown Road and extends north for 196 linear feet. The wetland derives water from runoff from I-65.

Wetland 17 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a

waters of the State. Wetland 17 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 17 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus effusus* and *Poa pratensis* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 7 inches, Saturation (A3) at 5 inches, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 35	0-5	100% 10YR 4/3	Loamy/Clayey
	5-18	85% 10YR 6/2 with 15% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 17 would be considered PEME under the Cowardin Classification System. Wetland 17 is 0.022 acre and wholly contained within the investigated area. Wetland 17 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 35 included in the Appendix B. DP 36 included in Appendix B is representative of the upland areas surrounding Wetland 17. DP 36 did possess hydrophytic vegetation and hydric soil but lacked the wetland hydrology to be determined a wetland.

3.1.19 Wetland 18

Wetland 18 is an emergent wetland located along the southbound lanes of I-65. The wetland is located within a depressional area associated with the roadside ditch, approximately 0.8 mile north of Brownstown Road. The wetland derives water from runoff from I-65.

Wetland 18 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 18 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Typha latifolia* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 10 inches, Saturation (A3) at 8 inches and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 37	0-5	80% 10YR 4/3 and 20% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey
	5-18	90% 10YR 6/2 and 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 18 would be considered PEME under the Cowardin Classification System. Wetland 18 is 0.015 acre and wholly contained within the investigated area. Wetland 18 would be considered a poor quality wetland due to its association with a roadside ditch and dominance of invasive vegetation (*Typha latifolia*). For reference to field data collected for this wetland see DP 37 included in the Appendix B. DP 38 included in Appendix B is representative of the upland areas surrounding Wetland 18. DP 38 did possess hydrophytic vegetation and hydric soil but lacked the wetland hydrology to be determined a wetland.

3.1.20 Wetland 19

Wetland 19 is an emergent wetland located along the southbound lanes of I-65 along the rest area onramp. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 1.4 mile south of Liberty Knob Road and extends north for 673 linear feet before terminating 1.3 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65 and the I-65 onramp.

Wetland 19 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 19 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 19 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Poa pratensis* and *Carex frankii* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 6 inches, Saturation (A3) at 4 inches, Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Redox Dark Surface (F6). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 40	0-18	95% 10YR 3/1 with 5% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 19 would be considered PEME under the Cowardin Classification System. Wetland 19 is 0.095 acre and wholly contained within the investigated area. Wetland 19 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 40 included in the Appendix B. DP 41 included in Appendix B is representative of the upland areas surrounding Wetland 19. DP 41 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.21 Wetland 20

Wetland 20 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 1.2 mile south of Liberty Knob Road and extends north for 265 linear feet before terminating 1.1 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65 and the rest area off-ramp.

Wetland 20 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 20 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 20 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 8 inches, Saturation (A3) at the surface, Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 42	0-3	100% 10YR 4/3	Loamy/Clayey
	3-18	60% 10YR 6/1 with 40% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 20 would be considered PEME under the Cowardin Classification System. Wetland 20 is 0.027 acre and wholly contained within the investigated area. Wetland 20 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 42 included in the Appendix B. DP 43 included in Appendix B is representative of the upland areas surrounding Wetland 20. DP 43 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.22 Wetland 21.1

Wetland 21.1 is a forested wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and a depressional area within the investigated area. Wetland 21.1 extends outside State owned right-of-way. The wetland begins approximately 1.1 mile south of Liberty Knob Road and extends north for 358 linear feet before terminating approximately 1.0 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 21.1 directly abuts West Fork Silver Creek (an intermittent stream), which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 21.1 would be considered a water of the US.

The dominant vegetation consisted of *Liquidambar styraciflua, Platanus occidentalis,* and *Taxodium distichum* within the tree stratum; *Cephalanthus occidentalis* within the sapling/shrub stratum; and *Leersia*

oryzoides within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 45	0-4	80% 10YR 4/2 and 20% 10YR 2/1 organic material	Loamy/Clayey
	4-18	80% 10YR 5/1, 10% 10YR 4/6 as a concentration in the matrix and 10% 10YR 2/1 organic material	Loamy/Clayey

Wetland 21.1 would be considered PFO1E under the Cowardin Classification System. Wetland 21.1 is 0.072 acre and extends west outside of the investigated area. Wetland 21.1 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 45 included in the Appendix B. DP 46 included in Appendix B is representative of the upland areas surrounding Wetland 21.1. DP 46 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.23 Wetland 21.2

Wetland 21.2 is an emergent wetland located along the southbound lanes of I-65. The wetland is located within a depressional area and the roadside ditch approximately 1.0 mile south of Liberty Knob Road and is entirely within State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 21.1 and 21.2 are part of a single emergent and forested wetland. Wetland 21.2 is functionally connected to Wetland 21.1, which abuts West Fork Silver Creek (an intermittent stream), which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 21.2 would be considered a water of the US.

The dominant vegetation consisted of *Scirpus atrovirens* and *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.5 inch deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 44	0-4	80% 10YR 4/2 and 20% 10YR 2/1 as organic material	Loamy/Clayey
	4-18	80% 10YR 5/1, 10% 10YR 4/6 as a concentration in the matrix and 10% 10YR 2/1 as organic material	Loamy/Clayey

Wetland 21.2 would be considered PEME under the Cowardin Classification System. Wetland 21.2 is 0.007 acre and wholly contained within the investigated area. Wetland 21.2 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 44

included in the Appendix B. DP 46 included in Appendix B is representative of the upland areas surrounding Wetland 21.2. DP 46 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.24 Wetland 22

Wetland 22 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and a seep area associated with an underdrain outlet on the side slope of the roadway embankment and is entirely within State owned right-of-way. The wetland begins approximately 0.9 mile south of Liberty Knob Road and extends north for 153 linear feet before terminating approximately 0.9 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 22 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 22 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Poa pratensis* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch deep, High Water Table (A2) at the surface, Saturation at the surface (A3), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 47	0-5	100% 10YR 4/1	Loamy/Clayey
	5-18	70% 10YR 6/1 with 30% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 22 would be considered PEME under the Cowardin Classification System. Wetland 22 is 0.023 acre and wholly contained within the investigated area. Wetland 22 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 47 included in the Appendix B. DP 48 included in Appendix B is representative of the upland areas surrounding Wetland 22. DP 48 did not possess the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.25 Wetland 23

Wetland 23 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and a seep area associated with an underdrain outlet on the side slope of the roadway embankment and is entirely within State owned right-of-way. The wetland is bounded to the south by a concrete-lined ditch. The wetland begins approximately 0.7 mile south of Liberty Knob Road and extends north for 402 linear feet before terminating approximately 0.7 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 23 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 22 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Typha latifolia* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 49	0-5	100% 10YR 4/3	Loamy/Clayey
	5-18	85% 10YR 6/1 and 15% 10YR 6/6 as a concentration in the matrix	Loamy/Clayey

Wetland 23 would be considered PEME under the Cowardin Classification System. Wetland 23 is 0.064 acre and wholly contained within the investigated area. Wetland 23 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 49 included in the Appendix B. DP 50 included in Appendix B is representative of the upland areas surrounding Wetland 23. DP 50 did not possess the hydrophytic vegetation, hydric soil, and wetland hydrology to be determined a wetland.

3.1.26 Wetland 24

Wetland 24 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined a depressional area approximately 0.6 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 24 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 24 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Scirpus atrovirens* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 51	0-3	100% 10YR 4/3	Loamy/Clayey
	3-18	83% 10YR 5/2 with 10% 10YR 5/6 and 7% 10YR 2/1 as organic material	Loamy/Clayey

Wetland 24 would be considered PEME under the Cowardin Classification System. Wetland 24 is 0.008 acre and wholly contained within the investigated area. Wetland 24 would be considered a poor quality wetland due to deriving water from runoff from I-65. For reference to field data collected for this wetland see DP 51 included in the Appendix B. DP 50 included in Appendix B is representative of the upland areas surrounding Wetland 24. DP 50 did possess hydrophytic vegetation but lacked the hydric soil and wetland hydrology to be determined a wetland.

3.1.27 Wetland 25

Wetland 25 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is bounded to the south by a concrete-lined ditch. The wetland begins approximately 0.6 mile south of Liberty Knob Road and extends north for 364 linear feet before terminating approximately 0.5 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 25 appears to drain south via a non-jurisdictional concrete-lined ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 25 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 25 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included 2cm Muck (A10), Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 52	0-2	100% 10YR 2/1	Muck
	2-18	90% 10YR 5/1 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 25 would be considered PEME under the Cowardin Classification System. Wetland 25 is 0.037 acre and wholly contained within the investigated area. Wetland 25 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 52 included in

the Appendix B. DP 53 included in Appendix B is representative of the upland areas surrounding Wetland 25. DP 53 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.28 Wetland 26

Wetland 26 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.8 mile north of Liberty Knob Road and extends north for 1,121 linear feet before terminating at Pigeon Roost Creek approximately 1.0 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 26 directly abuts Pigeon Roost Creek (a perennial stream), which drains to Stucker Fork, which drains to the Muscatatuck River, a TNW. Therefore, it is anticipated Wetland 26 would be considered a water of the US.

The dominant vegetation consisted of *Carex hystericina* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 3 inches deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 54	0-18	90% 10YR 5/1 with 10% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 26 would be considered PEME under the Cowardin Classification System. Wetland 26 is 0.122 acre and wholly contained within the investigated area. Wetland 26 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 54 included in the Appendix B. DP 55 included in Appendix B is representative of the upland areas surrounding Wetland 26. DP 55 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.29 Wetland 27

Wetland 27 is an emergent wetland located along the southbound lanes of I-65. Within the investigated area, the wetland is located within a depressional area at a maintenance pipe outlet located between two concrete lined ditches approximately 1.1 mile north of Liberty Knob Road. Wetland 27 extends outside State owned right-of-way. The wetland derives water from runoff from I-65 and from the maintenance pipe at its eastern end that conveys drainage underneath I-65.

Wetland 27 appears to drain west via a non-jurisdictional swale. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 27 is a Class I NF wetland located within mapped upland soils. The wetland extends west beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent forested land, Wetland 27 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus effusus* and *Schedonorus arundinaceus* within the herbaceous stratum. The vegetation met the Prevalence Index for Hydrophytic vegetation. Hydrologic indicators included Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 56	0-6	90% 10YR 4/2 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

*Restrictive riprap layer at 6 inches

Wetland 27 would be considered PEME under the Cowardin Classification System. Wetland 27 is 0.004 acre and extends west beyond the investigated area. Wetland 27 would be considered a poor quality wetland due to the dominance of invasive vegetation *(Schedonorus arundinaceus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 56 included in the Appendix B. DP 57 included in Appendix B is representative of the upland areas surrounding Wetland 27. DP 57 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.30 Wetland 28

Wetland 28 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. Wetland 28 is bounded to the south by a riprap lined ditch. The wetland begins approximately 1.9 mile north of Liberty Knob Road and extends north for 101 linear feet before terminating approximately 1.9 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 28 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 28 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 28 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Poa pratensis* and *Bidens frondosa* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Loamy Mucky Mineral (F1). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 58	0-5	50% 10YR 4/2 and 50% 10YR 2/1 organic material	Mucky Loam/Clay

*Restrictive riprap layer at 5 inches

Wetland 28 would be considered PEME under the Cowardin Classification System. Wetland 28 is 0.012 acre and wholly contained within the investigated area. Wetland 28 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 58 included in the Appendix B. DP 59 included in Appendix B is representative of the upland areas surrounding Wetland 28. DP 59 did possess hydrophytic vegetation but lacked the hydric soil and wetland hydrology to be determined a wetland.

3.1.31 Wetland 29

Wetland 29 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 2.1 mile north of Liberty Knob Road and extends north for 86 linear feet before terminating approximately 2.1 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 29 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 29 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 29 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus torreyi* within the herbaceous stratum. Hydrologic indicators included Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 60	0-9	97% 10YR 4/2 with 3% 10YR 7/8 as a concentration in the matrix	Loamy/Clayey
	9-18	85% 2.5YR 7/2 with 15% 10YR 6/8 as a concentration in the matrix	Loamy/Clayey

Wetland 29 would be considered PEME under the Cowardin Classification System. Wetland 29 is 0.006 acre and wholly contained within the investigated area. Wetland 29 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 60 included in the Appendix B. DP 61 included in Appendix B is representative of the upland areas surrounding Wetland 29. DP 61 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.32 Wetland 30

Wetland 30 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.53 mile north of Leota Road and extends north for 876 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 30 appears to drain north via a non-jurisdictional rock chute. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 30 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 30 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* and *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at the surface, Saturation Present (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 62	0-18	90% 10YR 4/2 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 30 would be considered PEME under the Cowardin Classification System. Wetland 30 is 0.085 acre and wholly contained within the investigated area. Wetland 30 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli).* A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 62 included in the Appendix B. DP 63 included in Appendix B is representative of the upland areas surrounding Wetland 30. DP 63 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.33 Wetland 31

Wetland 31 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.60 mile south of Lake Road and extends south for 771 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 31 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 31 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 31 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Schoenoplectus tabernaemontani* and *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at 4 inches, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 64	0-15*	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Mucky Loam/Clay

*Restrictive riprap layer at 15 inches

Wetland 31 would be considered PEME under the Cowardin Classification System. Wetland 31 is 0.091 acre and wholly contained within the investigated area. Wetland 31 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 64 included in the Appendix B. DP 65 included in Appendix B is representative of the upland areas surrounding Wetland 31. DP 65 did possess hydric soils, but lacked the hydrophytic vegetation and hydrologic indicators to be determined a wetland.

3.1.34 Wetland 32

Wetland 32 is an emergent wetland located along the southbound lanes of I-65. The wetland is located within a depressional area adjacent to a riprap lined ditch and is entirely within State owned right of way. The wetland begins approximately 0.40 mile south of Lake Road and extends south for 769 linear feet before terminating. The wetland derives water from runoff from I-65 and Elm Branch.

Wetland 32 directly abuts Elm Branch (an intermittent stream), which drains to Maple Run, which drains to Roost Creek, which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated Wetland 32 would be considered a water of the US.

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 66	0-18	90% 10YR 4/1 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 32 would be considered PEME under the Cowardin Classification System. Wetland 32 is 0.054 acre and wholly contained within the investigated area. Wetland 32 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 66 included in the Appendix B. DP 67 included in Appendix B is representative of the upland areas surrounding Wetland 32. DP 67 did possess hydrophytic vegetation, but lacked the hydric soils and wetland hydrology to be determined a wetland.

3.1.35 Wetland 33

Wetland 33 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.40

mile north of Lake Road and extends north for 47 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 33 appears to drain southeast via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 33 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 33 is entirely within State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* and *Leersia oryzoides* within the herbaceous stratum. The vegetation met the Rapid Test for Hydrophytic Vegetation. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 68	0-18	90% 10YR 4/1 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 33 would be considered PEME under the Cowardin Classification System. Wetland 33 is 0.013 acre and wholly contained within the investigated area. Wetland 33 would be considered a poor quality wetland due to its association with the roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). For reference to field data collected for this wetland see DP 68 included in the Appendix B. DP 69 included in Appendix B is representative of the upland areas surrounding Wetland 33. DP 69 did possess hydrophytic vegetation, but lacked the hydric soil and hydrology to be determined a wetland.

3.1.36 Wetland 34

Wetland 34 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to a depressional area adjacent to the roadside ditch. Two sections are located within the investigated area. The wetland begins approximately 0.52 mile north of Lake Road and extends west beyond the State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 34 appears to drain west via a non-jurisdictional swale. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 34 is a Class I NF wetland located within mapped upland soils. The wetland extends west beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent undeveloped residential land, Wetland 34 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Panicum virgatum* and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Surface Water Present (A1) at 0.25 inch deep, High Water Table (A2) at 3 inches, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 70	0-3	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	3-18	92% 2.5Y 4/1 with 8% 2.5Y 4/4 as a concentration in the matrix	Mucky Loam/Clay

Wetland 34 would be considered PEME under the Cowardin Classification System. Wetland 34 is 0.024 acre and extends beyond the investigated area. Wetland 34 would be considered a poor quality wetland due to its association with the roadside ditch and dominance of invasive vegetation (*Cyperus esculentus*). For reference to field data collected for this wetland see DP 70 included in the Appendix B. DP 71 included in Appendix B is representative of the upland areas surrounding Wetland 34. DP 71 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.37 Wetland 35

Wetland 35 is an emergent wetland located in the southwest quadrant of the I-65 and SR 56 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.08 mile south of the I-65 and SR 56 overpass and extends north and west for 472 feet before terminating. The wetland derives water from runoff from I-65.

Wetland 35 appears to drain south via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 35 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 35 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus* and *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 72	0-3	100% 10YR 3/1	Loamy/Clayey
	3-18	92% 10YR 5/1 with 8% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 35 would be considered PEME under the Cowardin Classification System. Wetland 35 is 0.130 acre and wholly contained within the investigated area. Wetland 35 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 72 included in the Appendix B. DP 73 included in Appendix B is representative of the upland areas surrounding Wetland 35. DP 73 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.38 Wetland 36

Wetland 36 is an emergent wetland located in the southwest quadrant of the I-65 and SR 56 overpass. The wetland is located within a depressional area within the interchange infield and is entirely within State owned right-of-way. The wetland begins approximately 0.02 mile south of the I-65 and SR 56 overpass. The wetland derives water from runoff from I-65 and from a maintenance pipe outlet that carries water underneath I-65.

Wetland 36 appears to drain south via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 36 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides, Typha latifolia, Cyperus esculentus, Schoenoplectus tabernaemontani,* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Crayfish Burrows (C8), Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 74*	0-18	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
DP 75	0-3	98% 10YR 4/1 with 2% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	3-18	95% 10YR 4/2 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

*DP 74 was taken to see if the area met the wetland indicators. It was determined that this narrow strip connected the wetland within the interchange infield to the linear wetland along I-65 southbound.

Wetland 36 would be considered PEME under the Cowardin Classification System. Wetland 36 is 0.431 acre and wholly contained within the investigated area. Wetland 36 would be considered a poor quality wetland due to its association with the roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli, Cyperus esculentus,* and *Typha latifolia*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 74 and DP 75 included in the Appendix B. DP 76 included in Appendix B is representative of the upland areas surrounding Wetland 36. DP 76 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.39 Wetland 37

Wetland 37 is an emergent wetland located in the northwest quadrant of the I-65 and SR 56 overpass. The wetland is located within a depressional area within the interchange infield and is entirely within State owned right-of-way. The wetland begins approximately 0.01 mile north of the I-65 and SR 56 overpass. The wetland derives water from runoff from I-65.

Wetland 37 appears to drain northwest via a non-jurisdictional culvert (CV I65-072-29.40SB). Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 37 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 6 inches, Saturation (A3) at the surface, Hydrogen Sulfide Odor (C1), Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Hydrogen Sulfide (A4) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 77	0-18	97% 10YR 4/1 with 3% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 37 would be considered PEME under the Cowardin Classification System. Wetland 37 is 0.128 acre and wholly contained within the investigated area. Wetland 37 would be considered a poor quality wetland due to its association with the roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 77 included in the Appendix B. DP 78 included in Appendix B is representative of the upland areas surrounding Wetland 37. DP 78 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.40 Wetland 38

Wetland 38 is an emergent wetland located in the northwest quadrant of the I-65 and SR 56 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.08 mile north of the I-65 and SR 56 overpass and extends north for 351 linear feet before terminating. The wetland derives water from runoff from I-65 and from a maintenance pipe outlet that carries water underneath I-65.

Wetland 38 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 38 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 38 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 79	0-18	95% 10YR 5/1 with 5% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 38 would be considered PEME under the Cowardin Classification System. Wetland 38 is 0.189 acre and wholly contained within the investigated area. Wetland 38 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 79 included in the Appendix B. DP 80 included in Appendix B is representative of the upland areas surrounding Wetland 38. DP 80 did possess the hydrophytic vegetation, but lacked the hydric soil and hydrology to be determined a wetland.

3.1.41 Wetland 39

Wetland 39 is an emergent wetland located along the southbound exit ramp in the northwest quadrant of the I-65 and SR 56 overpass. The wetland is located within a depressional area associated with the roadside ditch upstream of UNT 4 to Honey Run and is entirely within State owned right of way. The wetland begins 0.14 mile north of the I-65 and SR 56 overpass and extends northeast for 280 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 39 appears to drain south via non-jurisdictional ephemeral stream (UNT 4 to Honey Run). Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 39 is a Class I NF wetland associated with the roadside ditch wholly within the investigated area. Wetland 39 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Platanus occidentalis* within the sapling/shrub stratum; and *Leersia oryzoides* within the herbaceous stratum. Although the wetland included sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included High Water Table (A2) at 11 inches, Saturation (A3) at the surface, Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Loamy Gleyed Matrix (F2). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 81	0-10	100% 10YR 3/1	Loamy/Clayey
	10-18	100% GLEY 1 2.5/N	Loamy/Clayey

Wetland 39 would be considered PEME under the Cowardin Classification System. Wetland 39 is 0.060 acre and wholly contained within the investigated area. Wetland 39 would be considered a poor quality wetland due to its association with the roadside ditch. For reference to field data collected for this wetland see DP 81 included in the Appendix B. DP 82 included in Appendix B is representative of the upland areas

surrounding Wetland 39. DP 82 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.42 Wetland 40

Wetland 40 is an emergent wetland located along the southbound lanes of I-65. The wetland is located within a depressional area associated with the roadside ditch and extends west beyond the State owned right-of-way. The wetland begins approximately 0.24 mile north of the I-65 and SR 56 overpass. The wetland derives water from runoff from I-65 and from a maintenance pipe outlet that carries water underneath I-65.

Wetland 40 extends west beyond the investigated area and appears to directly abut Honey Run (a perennial stream), which drains to Big Ox Creek, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated Wetland 40 would be considered a water of the US.

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. The vegetation met the Rapid Test for Hydrophytic Vegetation. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Hydrogen Sulfide Odor (C1), and FAC-Neutral Test (D5). Hydric soil indicators included Hydrogen Sulfide (A4). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 83	0-18	100% 10YR 2/1	Mucky Loam/Clay

Wetland 40 would be considered PEME under the Cowardin Classification System. Wetland 40 is 0.002 acre and extends beyond the investigated area. Wetland 40 would be considered a poor quality wetland due to its association with the roadside ditch and receiving water from roadway runoff. For reference to field data collected for this wetland see DP 83 included in the Appendix B. DP 84 included in Appendix B is representative of the upland areas surrounding Wetland 40. DP 84 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.43 Wetland 41.1

Wetland 41.1 is an emergent wetland located along the southbound lanes of I-65 and is associated with a larger wetland complex which includes Wetland 41.2. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.44 mile north of the I-65 and SR 56 overpass and extends north for 1,511 linear feet before terminating. The wetland derives water from UNT 6 to Honey Run and UNT 7 to Honey Run as well as runoff from I-65.

Wetland 41.1 directly abuts Wetland 41.2, which appears to drain south via non-jurisdictional ephemeral streams (UNT 6 to Honey Run and UNT 7 to Honey Run). Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 41.1 is a Class 1 NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 41.1 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Oxidized Rhizospheres on Living Roots (C3), Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Loamy Gleyed Matrix (F2) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 85	0-4	97% 10YR 4/1 with 3% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	4-18	80% GLEY 1 7/10Y with 20% 10YR 4/6 as a concentration in the matrix.	Loamy/Clayey

Wetland 41.1 would be considered PEME under the Cowardin Classification System. Wetland 41.1 is 0.163 acre and wholly contained within the investigated area. Wetland 41.1 would be considered a poor quality wetland due to receiving water from roadway runoff and dominance of invasive vegetation (*Echinochloa crus-galli* and *Cyperus esculentus*). For reference to field data collected for this wetland see DP 85 included in the Appendix B. DP 86 and DP 87 included in Appendix B are representative of the upland areas surrounding Wetland 41.1. DP 86 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland. DP 87 was taken to confirm the boundary of Wetland 41.1. DP 87 did possess the hydric soil, but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.44 Wetland 41.2

Wetland 41.2 is a forested wetland located along the southbound lanes of I-65 and is associated with a larger wetland complex which includes Wetland 41.1. The wetland is located within the depressional areas associated with UNT 6 to Honey Run and UNT 7 to Honey Run and extends southwest beyond the State owned right-of-way. Wetland 41.2 is dissected by an upland area between the (valleys/floodplains) of UNT 6 to Honey Run and UNT 7 to Honey Run. The wetland begins approximately 0.70 mile north of the I-65 and SR 56 overpass. The wetland derives water from UNT 6 to Honey Run and UNT 7 to Honey Run as well as runoff from I-65.

Wetland 41.1 and Wetland 41.2 are part of a single emergent and forested wetland complex which appear to drain east via non-jurisdictional ephemeral streams (UNT 6 to Honey Run and UNT 7 to Honey Run) as described in Wetland 41.1. Wetland 41.2 is a Class I F wetland located within mapped upland soils. The wetland extends southwest beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent forested land, Wetland 41.2 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Acer saccharinum* and *Salix nigra* within the tree stratum; *Acer saccharinum, Quercus palustris,* and *Rosa palustris* within the sapling/shrub stratum; and *Saururus cernuus* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3).

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 88	0-3	98% 10YR 4/2 with 2% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	3-18	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 41.2 would be considered PFO1A under the Cowardin Classification System. Wetland 41.2 is 0.280 acre and extends beyond the investigated area. Wetland 41.2 would be considered an average quality wetland due to its lack of invasive species. For reference to field data collected for this wetland see DP 88 included in the Appendix B. DP 89 included in Appendix B is representative of the upland area surrounding Wetland 41.2. DP 89 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.45 Wetland 42

Wetland 42 is a forested wetland located along the southbound lanes of I-65. The wetland is located within a depressional area associated with the roadside ditch. The wetland begins approximately 0.73 mile north of the I-65 and SR 56 overpass and extends west beyond the State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 42 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 42 is a Class I NF wetland located within mapped upland soils. The wetland extends west beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent forested land, Wetland 42 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted *Liquidambar styraciflua, Acer saccharinum,* and *Fraxinus pennsylvanica* within the tree stratum; *Cephalanthus occidentalis, Fraxinus pennsylvanica,* and *Rosa palustris* within the sapling/shrub stratum; *Echinochloa crus-galli, Typha latifolia*, *Juncus effusus,* and *Bidens frondosa* within the herbaceous stratum; and *Toxicodendron radicans* and *Lonicera japonica* within the woody vine stratum. Although the wetland included trees and sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 90	0-18	90% 2.5Y 5/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
DP 93	0-18	93% 10YR 4/2 with 7% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 42 would be considered PFO1A under the Cowardin Classification System. Wetland 42 is 0.051 acre and extends beyond the investigated area. Wetland 42 would be considered a poor quality wetland due to its association with the roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and *Typha latifolia*). For reference to field data collected for this wetland see DP 90 and DP 93 included in the Appendix B. DP 91 and DP 92 included in Appendix B are representative of the upland areas surrounding Wetland 42. DP 91 did possess hydric soil, but lacked the hydrophytic vegetation and hydrology to be determined a wetland. DP 92 did possess the hydrophytic vegetation, but lacked the hydric soil and hydrology to be determined a wetland.

3.1.46 Wetland 43

Wetland 43 is an emergent wetland located along the southbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.63 mile south of Moonglo Road and extends south for 444 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 43 appears to drain south via non-jurisdictional ephemeral stream (UNT 8 to Honey Run). Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 43 Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 43 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Pyrus calleryana, Liquidambar styraciflua,* within the sapling/shrub stratum; and *Phalaris arundinacea, Typha latifolia, Echinochloa crus-galli, Juncus effusus,* and *Juncus torreyi* within the herbaceous stratum. Although the wetland included sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included High Water Table (A2) at 6 inches deep, Saturation (A3) at the surface, Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Loamy Gleyed Matrix (F2) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 94	0-4	95% 10YR 4/2 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	4-18	90% 10YR 5/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
DP 96	0-3	90% 10YR 4/4 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	3-6	55% 10YR 5/2 with 45% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	6-18	100% GLEY 1 6/5G	Loamy/Clayey

Wetland 43 would be considered PEME under the Cowardin Classification System. Wetland 43 is 0.037 acre and wholly contained within the investigated area. Wetland 43 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli, Phalaris arundinacea,* and *Typha latifolia*). For reference to field data collected for this wetland see DP 94 and DP 96 included in the Appendix B. Data points were recorded at both ends of Wetland 43 to document the termini of Wetland 43. DP 95 included in Appendix B is representative of the upland areas surrounding Wetland 43. DP 95 did possess the hydrophytic vegetation and hydric soil, but lacked the hydrology to be determined a wetland.

3.1.47 Wetland 44

Wetland 44 is an emergent wetland located along the southbound lanes of I-65. The wetland is located in a depressional area associated with the roadside ditch. The wetland begins approximately 0.56 mile south of Moonglo road and extends southwest beyond the State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 44 appears to drain southwest via a non-jurisdictional swale. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 44 is a Class I NF wetland located within mapped upland soils. The wetland extends southwest beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent commercial land, Wetland 44 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Fraxinus pennsylvanica* within the tree stratum; *Fraxinus pennsylvanica* within the sapling/shrub stratum; and *Typha latifolia* and *Hibiscus moscheutos* within the herbaceous stratum. Although the wetland included tree and sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 97	0-5*	95% 10YR 4/2 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

*Multiple attempts were made to sample soils past 5 inches but the wetland area was underlain by gravel.

Wetland 44 would be considered PEME under the Cowardin Classification System. Wetland 44 is 0.011 acre and extends beyond investigated area. Wetland 44 would be considered a poor quality wetland due to its association with the roadside ditch. For reference to field data collected for this wetland see DP 97 included in the Appendix B. DP 98 included in Appendix B is representative of the upland areas surrounding Wetland 44. DP 98 did possess the hydrophytic vegetation, but lacked the hydric soil and hydrology to be determined a wetland.

3.1.48 Wetland 45

Wetland 45 is an emergent wetland located within the I-65 median. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. From the northern limits of the investigated area, the wetland extends southeast for 371 linear feet to approximately 0.2 mile north of Moonglo Road. The wetland derives water from runoff from I-65.

Wetland 45 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 45 is a Class I NF wetland confined to a roadside ditch extending beyond the investigated area. Wetland 45 is entirely within the State owned right-of-way and constructed in mapped upland and hydric soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli, Paspalum floridanum,* and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 3 inches deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 99	0-4	100% 10YR 4/3	Loamy/Clayey
	4-18	85% 10YR 5/2 with 15% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 45 would be considered PEME under the Cowardin Classification System. Wetland 45 is 0.005 acre and extends northwest beyond the investigated area. Wetland 45 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and *Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 99 included in the Appendix B. DP 100 included in Appendix B is representative of the upland areas surrounding Wetland 45. DP 100 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.49 Wetland 46

Wetland 46 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.87 mile south of Moonglo Road and extends south for 115 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 46 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 46 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 46 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Panicum dichotomiflorum* and *Paspalum floridanum* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Redox Dark Surface (F6) and Redox Depressions (F8). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 101	0-4	95% 10YR 3/2 with 5% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey
	4-18	80% 10YR 5/6 with 15% 10YR 5/2 and 5% 10YR 4/6 as concentration in the matrix	Loamy/Clayey

Wetland 46 would be considered PEME under the Cowardin Classification System. Wetland 46 is 0.014 acre and wholly contained within the investigated area. Wetland 46 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 101 included in the Appendix B. DP 102 included in Appendix B is representative of the upland areas surrounding Wetland 46. DP 102 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.50 Wetland 47

Wetland 47 is an emergent wetland located within the I-65 median. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is bounded to the north by a drain. The wetland begins approximately 0.5 mile north of SR 56 and extends south for 189 linear feet before terminating approximately 0.5 mile north of SR 56. The wetland derives water from runoff from I-65.

Wetland 47 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 47 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 47 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Typha latifolia, Echinochloa crus-galli* and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 5 inches, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 103	0-18	70% 10YR 5/2 with 10% 10YR 4/6 as a concentration in the matrix and 10% 10YR 4/1 as a depletion in the matrix	Loamy/Clayey

Wetland 47 would be considered PEME under the Cowardin Classification System. Wetland 47 is 0.024 acre and wholly contained within the investigated area. Wetland 47 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia, Echinochloa crus-galli* and *Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 103 included in the Appendix B. DP 104 included in Appendix B is representative of the upland areas surrounding Wetland 47. DP 104 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.51 Wetland 48

Wetland 48 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.15 mile north of Lake Road and extends south for 140 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 48 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 48 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 48 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus* and *Panicum dichotomiflorum* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.25 inch, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 105	0-2	95% 10YR 4/2 with 5% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey
	2-18	100% 10YR 5/6	Loamy/Clayey

Wetland 48 would be considered PEME under the Cowardin Classification System. Wetland 48 is 0.021 acre and wholly contained within the investigated area. Wetland 48 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 105 included in the Appendix B. DP 106 included in Appendix B is representative of the upland areas surrounding Wetland 48. DP 106 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.52 Wetland 49

Wetland 49 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.15 mile south of Leota Road and extends south for 60 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 49 appears to drain west via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 49 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area and mapped within upland soils. Wetland 49 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus interior, Setaria pumila,* and *Panicum virgatum* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 107	0-4	100% 10YR 4/2	Loamy/Clayey
	4-18	70% 10YR 6/2 with 30% 10YR 6/6 as concentration in the matrix	Loamy/Clayey

Wetland 49 would be considered PEME under the Cowardin Classification System. Wetland 49 is 0.018 acre and wholly contained within the investigated area. Wetland 49 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 107 included in the Appendix B. DP 108 included in Appendix B is representative of the upland areas surrounding Wetland 49. DP 108 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.53 Wetland 50

Wetland 50 is an emergent wetland located within the I-65 median. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.56 mile south of Leota Road and extends south for 213 linear feet before terminating approximately 0.55 mile south of Leota Road. The wetland derives water from runoff from I-65.

Wetland 50 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 50 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 50 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* and *Cyperus bipartitus* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 3 inches deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Algal Mat or Crust (B4), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 109	0-7	100% 10YR 4/2	Loamy/Clayey
	7-18	80% 10YR 5/2 with 20% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 50 would be considered PEME under the Cowardin Classification System. Wetland 50 is 0.019 acre and wholly contained within the investigated area. Wetland 50 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 109 included in the Appendix B. DP 110 included in Appendix B is representative of the upland areas surrounding Wetland 50. DP 110 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.54 Wetland 51

Wetland 51 is an emergent wetland located within the I-65 median. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 1 mile south of Leota Road and extends south for 112 linear feet before terminating approximately 1 mile south of Leota Road. The wetland derives water from runoff from I-65.

Wetland 51 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 51 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 51 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* and *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 2 inches deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 111	0-7	100% 10YR 3/2	Loamy/Clayey
	7-18	85% 10YR 6/1 with 15% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 51 would be considered PEME under the Cowardin Classification System. Wetland 51 is 0.012 acre and wholly contained within the investigated area. Wetland 51 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference

to field data collected for this wetland see DP 111 included in the Appendix B. DP 112 included in Appendix B is representative of the upland areas surrounding Wetland 51. DP 112 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.55 Wetland 52

Wetland 52 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.99 mile south of Liberty Knob Road and extends south for 145 linear feet before terminating. The wetland derives water from runoff from I-65.

Although Wetland 52 is located in the median above the structure which conveys West Fork Silver Creek beneath I-65, no underdrain or inlet was present connecting the wetland to the stream. Wetland 52 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 52 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 52 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli, Bothriochloa laguroides*, and *Eleocharis palustris* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch, High Water Table (A2) at the surface, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 114	0-5	100% 10YR 4/1	Loamy/Clayey
	5-18	95% 10YR 5/1 with 5% 10YR 5/6 as concentration in the matrix	Loamy/Clayey

Wetland 52 would be considered PEME under the Cowardin Classification System. Wetland 52 is 0.030 acre and wholly contained within the investigated area. Wetland 52 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 114 included in the Appendix B. DP 115 included in Appendix B is representative of the upland areas surrounding Wetland 52. DP 115 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.56 Wetland 53

Wetland 53 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 1.14 miles south of Liberty Knob Road and extends south for 150 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 53 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 53 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 53 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Bothriochloa laguroides*, *Echinochloa crus-galli,* and *Panicum dichotomiflorum* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at the surface, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Loamy Gleyed Matrix (F2) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 116	0-4	100% GLEY 1 6/5GY	Loamy/Clayey
	4-18	97% 10YR 5/2 with 3% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey

Wetland 53 would be considered PEME under the Cowardin Classification System. Wetland 53 is 0.020 acre and wholly contained within the investigated area. Wetland 53 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 116 included in the Appendix B. DP 117 included in Appendix B is representative of the upland areas surrounding Wetland 52. DP 117 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.57 Wetland 54

Wetland 54 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 1.33 miles south of Liberty Knob Road and extends south for 120 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 54 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 5 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 54 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 118	0-2	100% 10YR 4/2	Loamy/Clayey
	2-18	70% 10YR 5/2 with 30% 10YR 5/8 as concentration in the matrix	Loamy/Clayey

Wetland 54 would be considered PEME under the Cowardin Classification System. Wetland 54 is 0.034 acre and wholly contained within the investigated area. Wetland 54 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 118 included in the Appendix B. DP 119 included in Appendix B is representative of the upland areas surrounding Wetland 54. DP 119 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.58 Wetland 55

Wetland 55 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.94 mile north of Brownstown Road and extends south for 135 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 55 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 55 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 55 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli, Paspalum floridanum*, and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 120	0-2	100% 10YR 4/2	Loamy/Clayey
	2-18	70% 10YR 5/2 with 30% 10YR 5/8 as concentration in the matrix	Loamy/Clayey

Wetland 55 would be considered PEME under the Cowardin Classification System. Wetland 55 is 0.042 acre and wholly contained within the investigated area. Wetland 55 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and *Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 120 included in the Appendix

B. DP 121 included in Appendix B is representative of the upland areas surrounding Wetland 55. DP 121 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.59 Wetland 56

Wetland 56 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.53 mile north of Brownstown Road and extends south for 350 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 56 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 56 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 56 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Panicum virgatum* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 12 inches, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 122	0-2	100% 10YR 4/2	Loamy/Clayey
	2-18	60% 10YR 5/2 with 40% 10YR 5/4 as concentration in the matrix	Loamy/Clayey

Wetland 56 would be considered PEME under the Cowardin Classification System. Wetland 56 is 0.042 acre and wholly contained within the investigated area. Wetland 56 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 122 included in the Appendix B. DP 123 included in Appendix B is representative of the upland areas surrounding Wetland 56. DP 123 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.60 Wetland 57

Wetland 57 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.28 mile north of Brownstown Road and extends south for 110 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 57 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 57 is a Class I NF wetland confined to a roadside ditch wholly within the

investigated area. Wetland 57 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Bothriochloa laguroides* and *Setaria pumila* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 1 inch, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 124	0-3	100% 10YR 3/1	Loamy/Clayey
	3-18	70% 10YR 5/1 with 30% 10YR 5/6 as concentration in the matrix	Loamy/Clayey

Wetland 57 would be considered PEME under the Cowardin Classification System. Wetland 57 is 0.044 acre and wholly contained within the investigated area. Wetland 57 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Setaria pumila)*. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 124 included in the Appendix B. DP 125 included in Appendix B is representative of the upland areas surrounding Wetland 57. DP 125 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.61 Wetland 58

Wetland 58 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.16 mile north of Winding Road and extends south for 110 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 58 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 58 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 58 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus* and *Juncus interior* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.5 inch, Saturation (A3) at the surface, Algal Mat or Crust (B4), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 126	0-18	90% 10YR 5/1 with 10% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey

Wetland 58 would be considered PEME under the Cowardin Classification System. Wetland 58 is 0.021 acre and wholly contained within the investigated area. Wetland 58 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 126 included in the Appendix B. DP 127 included in Appendix B is representative of the upland areas surrounding Wetland 58. DP 127 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.62 Wetland 59

Wetland 59 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.05 mile north of Winding Road and extends north for 145 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 59 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 59 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 59 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.25 inch, Saturation (A3) at the surface, Algal Mat or Crust (B4), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 128	0-7	100% 10YR 4/2	Loamy/Clayey
	7-18	95% 10YR 5/2 with 5% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 59 would be considered PEME under the Cowardin Classification System. Wetland 59 is 0.020 acre and wholly contained within the investigated area. Wetland 59 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli)*. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 128 included in the Appendix B. DP 129 included in Appendix B is representative of the upland areas surrounding Wetland 59. DP 129 did possess the hydrophytic vegetation and hydric soil but lacked the hydrology to be determined a wetland.

3.1.63 Wetland 60

Wetland 60 is an emergent wetland located within the median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins 0.67 mile north of SR 160 and extends north for 188 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 60 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 60 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 60 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at 3 inches deep, Inundation Visible on Aerial Imagery (B7), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 130	0-18	90% 10YR 4/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 60 would be considered PEME under the Cowardin Classification System. Wetland 60 is 0.041 acre and wholly contained within the investigated area. Wetland 60 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 130 included in the Appendix B. DP 131 included in Appendix B is representative of the upland areas surrounding Wetland 60. DP 131 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.64 Wetland 61

Wetland 61 is an emergent wetland located within the median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.14 mile north of SR 160 and extends north for 126 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 61 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 61 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 61 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at 7 inches and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 132	0-6	96% 10YR 4/2 with 4% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey
	6-18	90% 10YR 4/1 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 61 would be considered PEME under the Cowardin Classification System. Wetland 61 is 0.033 acre and wholly contained within the investigated area. Wetland 61 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and *Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 132 included in the Appendix B. DP 133 included in Appendix B is representative of the upland areas surrounding Wetland 61. DP 133 did possess the hydric soil, but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.65 Wetland 62

Wetland 62 is an emergent wetland located along the roadway median of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.32 mile south of SR 160 and extends south for 155 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 62 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 62 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 62 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Panicum virgatum* and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at 1 inch, Drift Deposits (B3), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 134	0-6	95% 10YR 3/2 with 5% 10YR 3/6 as a concentration in the matrix	Loamy/Clayey
	6-18	90% 10YR 542 with 10% 7.5R 4/4 as a concentration in the matrix	Loamy/Clayey

Wetland 62 would be considered PEME under the Cowardin Classification System. Wetland 62 is 0.030 acre and wholly contained within the investigated area. Wetland 62 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 134 included in

the Appendix B. DP 135 included in Appendix B is representative of the upland areas surrounding Wetland 62. DP 135 did possess hydric soil and hydrophytic vegetation, but lacked the hydrology to be determined a wetland.

3.1.66 Wetland 63

Wetland 63 is an emergent wetland located along the northbound lanes of I-65. The wetland begins 0.25 mile south of Blue Lick Creek and extends north for 180 linear feet before terminating. Wetland 63 extends south out of the investigated area. The wetland derives water from runoff from I-65.

Wetland 63 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 63 is a Class I NF wetland confined to a roadside ditch extending beyond the investigated area. Wetland 63 is entirely within the State owned right-of-way and constructed in mapped hydric soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus* and *Carex atherodes* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 8 inches, Saturation (A3) at 6 inches, Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 136	0-18	90% 10YR 5/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 63 would be considered PEME under the Cowardin Classification System. Wetland 63 is 0.218 acre and extends beyond the investigated area. Wetland 63 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 136 included in the Appendix B. DP 137 included in Appendix B is representative of the upland areas surrounding Wetland 63. DP 137 did possess the hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.67 Wetland 64

Wetland 64 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 0.57 mile north of Biggs Road extends north for 45 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 64 appears to drain south via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 64 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 64 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 4 inches, Saturation (A3) at the surface, Sediment Deposits (B2), Iron Deposits (B5), Water-Stained Leaves (B9), and FAC-Neutral Test (D5). Hydric soil indicators included Redox Dark Surface (F6). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 138	0-18	95% 10YR 3/1 with 5% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 64 would be considered PEME under the Cowardin Classification System. Wetland 64 is 0.013 acre and wholly contained within the investigated area. Wetland 64 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 138 included in the Appendix B. DP 139 included in Appendix B is representative of the upland areas surrounding Wetland 64. DP 139 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.68 Wetland 65

Wetland 65 is a forested wetland located along the northbound lanes of I-65. The wetland extends east beyond the State owned right-of-way. The wetland is located in a low lying area within the active floodplain on the right bank of Caney Fork approximately 0.70 mile north of Biggs Road. The wetland derives water from Caney Fork.

Wetland 65 directly abuts Caney Fork (a perennial stream), which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 65 would be considered a water of the US.

The dominant vegetation consisted of *Platanus occidentalis* within the tree stratum; *Ulmus rubra*, *Fraxinus pennsylvanica,* and *Juglans nigra* within the sapling/shrub stratum; and *Solidago gigantea, Rudbeckia laciniata, Microstegium vimineum,* and *Glechoma hederacea* within the herbaceous stratum. Hydrologic indicators included Drift Deposits (B3), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 140	0-7	100% 10YR 4/2	Loamy/Clayey
	7-18	95% 10YR 4/1 with 5% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 65 would be considered PFO1E under the Cowardin Classification System. Wetland 65 is 0.033 acre and extends beyond the investigated area. Wetland 65 would be considered a poor quality wetland due to its dominance of invasive species (*Microstegium vimineum* and *Glechoma hederacea)*. For reference to field

data collected for this wetland see DP 140 included in the Appendix B. DP 141 included in Appendix B is representative of the upland areas surrounding Wetland 65. DP 141 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.69 Wetland 66

Wetland 66 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 0.05 mile north of Caney Fork and extends north for 770 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 66 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 66 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 66 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Typha latifolia* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 4 inches, Saturation (A3) at the surface, Sediment Deposits (B2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 142	0-6	95% 10YR 5/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	6-18	95% 10YR 6/1 with 5% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 66 would be considered PEME under the Cowardin Classification System. Wetland 66 is 0.136 acre and wholly contained within the investigated area. Wetland 66 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 142 included in the Appendix B. DP 143 included in Appendix B is representative of the upland areas surrounding Wetland 66. DP 143 did possess the hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.70 Wetland 67

Wetland 67 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 0.21 mile north of Caney Fork and extends north for 950 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 67 appears to drain south via a non-jurisdictional rock chute. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 67 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 67 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 5 inches, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 144	0-8	97% 2.5YR 4/2 with 3% 10YR 4/4 as a concentration in the matrix	Loamy/Clayey
	8-18	90% 2.5YR 5/2 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 67 would be considered PEME under the Cowardin Classification System. Wetland 67 is 0.099 acre and wholly contained within the investigated area. Wetland 67 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli).* A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 144 included in the Appendix B. DP 145 included in Appendix B is representative of the upland areas surrounding Wetland 67. DP 145 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.71 Wetland 68

Wetland 68 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 1.18 miles south of SR 160 and extends north for 1,640 linear feet before terminating at the crossing of Henry Brook. The wetland derives water from runoff from I-65.

Wetland 68 directly abuts Henry Brook (an intermittent stream), which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 68 would be considered a water of the US.

The dominant vegetation consisted of *Paspalum floridanum* and *Juncus effusus* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 4 inches, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 146	0-7	97% 10YR 4/2 with 3% 10YR 4/4 as a concentration in the matrix	Loamy/Clayey
	7-18	97% 10YR 5/2 with 3% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 68 would be considered PEME under the Cowardin Classification System. Wetland 68 is 0.322 acre and wholly contained within the investigated area. Wetland 68 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 146 included in the Appendix B. DP 147 included in Appendix B is representative of the upland areas surrounding Wetland 68. DP 147 did possess the hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.72 Wetland 69

Wetland 69 is an emergent wetland located along the northbound lanes of I-65. The wetland is associated with the floodplain of Henry Brook and is entirely within State owned right-of-way. The wetland is located 0.68 mile south of SR 160 and extends north for 110 linear feet before terminating. The wetland derives water from runoff from I-65 and the floodplain of Henry Brook.

Wetland 69 directly abuts Henry Brook (an intermittent stream), which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 68 would be considered a water of the US.

The dominant vegetation consisted of *Fraxinus pennsylvanica* within the sapling/shrub stratum and *Bidens aristosa* within the herbaceous stratum. Although the wetland included saplings/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Drift Deposits (B3), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 148	0-5	100% 10YR 4/2	Loamy/Clayey
	5-18	95% 10YR 5/2 with 5% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey

Wetland 69 would be considered PEME under the Cowardin Classification System. Wetland 69 is 0.048 acre and wholly contained within the investigated area. Wetland 69 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 148 included in the Appendix B. DP 149 included in Appendix B is representative of the upland areas surrounding Wetland 69. DP 149 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.73 Wetland 70

Wetland 70 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 0.50 mile south of SR 160 and extends north for 178 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 70 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 70 is a Class I NF located within mapped upland soils.

Wetland 70 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 70 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Fraxinus pennsylvanica* within the sapling/shrub stratum and *Typha latifolia* within the herbaceous stratum. Although the wetland included sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included High Water Table (A2) at 0.5 inch, Saturation (A3) at the surface, Water-Stained Leaves (B9), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 150	0-3	100% 10YR 4/2	Loamy/Clayey
	3-18	95% 10YR 5/2 with 5% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 70 would be considered PEME under the Cowardin Classification System. Wetland 70 is 0.023 acre and wholly contained within the investigated area. Wetland 70 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia).* A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 150 included in the Appendix B. DP 151 included in Appendix B is representative of the upland areas surrounding Wetland 70. DP 151 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.74 Wetland 71

Wetland 71 is an emergent wetland located in the southeast quadrant the I-65 and SR 160 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins 0.02 mile south of SR 160 and extends south for 488 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 71 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 71 is a Class I NF wetland confined to a roadside ditch wholly within the

investigated area. Wetland 71 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Typha latifolia* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 6 inches, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 152	0-6	95% 10YR 5/2 with 5% 7.5YR 4/6 as a concentration in the matrix	Loamy/Clayey
	6-18	95% 10YR 6/2 with 5% 10YR 6/6 as a concentration in the matrix	Loamy/Clayey

Wetland 71 would be considered PEME under the Cowardin Classification System. Wetland 71 is 0.114 acre and wholly contained within the investigated area. Wetland 71 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia).* A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 152 included in the Appendix B. DP 153 included in Appendix B is representative of the upland areas surrounding Wetland 71. DP 153 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.75 Wetland 72

Wetland 72 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 0.24 mile north of SR 160 and extends north for 80 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 72 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 72 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 72 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides*, *Typha latifolia,* and *Juncus effusus* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at 6 inches, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 154	0-4	90% 10YR 4/2 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	4-18	90% 10YR 5/1 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 72 would be considered PEME under the Cowardin Classification System. Wetland 72 is 0.013 acre and wholly contained within the investigated area. Wetland 72 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Typha latifolia).* A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 154 included in the Appendix B. DP 155 included in Appendix B is representative of the upland areas surrounding Wetland 72. DP 155 did possess the hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.76 Wetland 73

Wetland 73 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is located 0.45 mile north of SR 160 and extends north for 132 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 73 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 73 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 73 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at the surface, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 156	0-18	95% 10YR 4/1 with 5% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 73 would be considered PEME under the Cowardin Classification System. Wetland 73 is 0.015 acre and wholly contained within the investigated area. Wetland 73 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli).* A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 156 included in the Appendix B. DP 157 included in Appendix

B is representative of the upland areas surrounding Wetland 73. DP 157 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.77 Wetland 74

Wetland 74 is an emergent wetland located along the northbound lanes of I-65. The wetland is entirely within State owned right-of-way. The wetland is located 0.48 mile south of Brownstown Road. The wetland derives water from runoff from I-65 and UNT 3 to Miller Fork.

Wetland 74 directly abuts UNT 3 to Miller Fork (an intermittent stream), which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 74 would be considered a water of the US.

The dominant vegetation consisted of *Salix nigra* within the sapling/shrub stratum and *Glyceria striata* and *Leersia oryzoides* within the herbaceous stratum. Although the wetland included sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Surface Water (A1) at 1 inch and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 158	0-18	100% 10YR 5/1	Loamy/Clayey

Wetland 74 would be considered PEME under the Cowardin Classification System. Wetland 74 is 0.014 acre and wholly contained within the investigated area. Wetland 74 would be considered a poor quality wetland due to its location in a roadside ditch. For reference to field data collected for this wetland see DP 158 included in the Appendix B. DP 159 included in Appendix B is representative of the upland areas surrounding Wetland 74. DP 159 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.78 Wetland 75

Wetland 75 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.2 mile south of Brownstown Road and extends north for 259 linear feet before terminating approximately 0.2 mile south of Brownstown Road. The wetland derives water from runoff from I-65.

Wetland 75 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 75 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 75 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Scirpus atrovirens* and *Poa pratensis* within the herbaceous stratum. Hydrologic indicators included Surface Soil Cracks (B6), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Redox Dark Surface (F6). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 160	0-6	97% 10YR 3/1 with 3% 10YR 5/4 as a concentration in the matrix	Loamy/Clayey

*Restrictive concrete pavement layer at 6 inches

Wetland 75 would be considered PEME under the Cowardin Classification System. Wetland 75 is 0.022 acre and wholly contained within the investigated area. Wetland 76 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 160 included in the Appendix B. DP 161 included in Appendix B is representative of the upland areas surrounding Wetland 75. DP 161 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.79 Wetland 76

Wetland 76 is a forested wetland located along the northbound lanes of I-65. The wetland is located within a depressional area approximately 0.1 mile south of Brownstown Road and extends outside State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 76 is likely flooded within a typical year by Miller Fork, an intermittent stream. Therefore, it is anticipated Wetland 76 would be considered a water of the US.

Wetland 76 had problematic hydrophytic vegetation due to being a sparsely vegetated concave surface. Hydrologic indicators included Sparsely Vegetated Concave Surface (B8), Water-Stained Leaves (B9), and Geomorphic Position (D2). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 162	0-10	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	10-18	90% 10YR 6/1 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 76 would be considered PFO1E under the Cowardin Classification System. Wetland 76 is 0.023 acre and extends east beyond the investigated area. Wetland 76 would be considered a poor quality wetland due to its deriving water from roadside runoff. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 162 included in the Appendix B. DP 163 included in Appendix B is representative of the upland areas surrounding Wetland

76. DP 163 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.80 Wetland 77

Wetland 77 is an emergent wetland located along the westbound lane of Brownstown Road. The wetland is located within a depressional area adjacent to a drive and roadside ditch in the northeast quadrant of the I-65 and Brownstown Road overpass and extends out of State owned right-of-way. The wetland derives water from runoff from Brownstown Road.

Wetland 77 appears to drain southeast via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 77 is a Class I NF wetland located within mapped upland soils. The wetland extends north beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent residential land, Wetland 77 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Scirpus atrovirens* within the herbaceous stratum. Hydrologic indicators included Algal Mat or Crust (B4), Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 164	0-8	90% 10YR 4/1 with 10% 5YR 3/4 as a concentration in the matrix	Loamy/Clayey
	8-18	75% 10YR 5/1 with 25% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 77 would be considered PEME under the Cowardin Classification System. Wetland 77 is 0.003 acre and extends beyond the investigated area. Wetland 77 would be considered a poor quality wetland due to its association with a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 164 included in the Appendix B. DP 165 included in Appendix B is representative of the upland areas surrounding Wetland 77. DP 165 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.81 Wetland 78

Wetland 78 is an emergent wetland located along the northbound lanes of I-65. The wetland is located within a depressional area at the confluence of two roadside ditches adjacent to the rest area. Wheel Run appears to be conveyed via a maintenance pipe through this location; however a continuous defined bed and bank or OHWM was not observed during the site reconnaissance. Based upon the aerial photography, Wheel Run appears to re-establish a defined bed and bank and OHWM east of the investigated area. Wetland 78 is entirely within State owned right-of-way. The wetland derives water from runoff from I-65 and the northbound rest area ramps.

Wetland 78 abuts Wheel Run (an intermittent stream), which drains to Mill Branch, which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wetland 78 would be considered a water of the US.

The dominant vegetation consisted of *Juncus effusus* and *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at 5 inches, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 166	0-7	90% 10YR 4/1 with 10% 10YR 3/6 as a concentration in the matrix	Loamy/Clayey

*Restrictive riprap layer at 7 inches

Wetland 78 would be considered PEME under the Cowardin Classification System. Wetland 78 is 0.009 acre and wholly contained within the investigated area. Wetland 78 would be considered a poor quality wetland due to its association with a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 166 included in the Appendix B. DP 167 included in Appendix B is representative of the upland areas surrounding Wetland 78. DP 167 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.82 Wetland 79

Wetland 79 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 1.3 mile south of Liberty Knob Road and extends north for 97 linear feet before terminating approximately 1.3 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 79 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 79 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 79 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus, Juncus effusus,* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Surface Soil Cracks (B6), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 168	0-4	95% 10YR 5/2 with 5% 10YR 7/8 as a concentration in the matrix	Loamy/Clayey
	4-18	85% 10YR 7/1 with 15% 10YR 7/8 as a concentration in the matrix	Loamy/Clayey

Wetland 79 would be considered PEME under the Cowardin Classification System. Wetland 79 is 0.009 acre and wholly contained within the investigated area. Wetland 79 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Cyperus esculentus* and *Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 168 included in the Appendix B. DP 169 included in Appendix B is representative of the upland areas surrounding Wetland 169. DP 169 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.83 Wetland 80

Wetland 80 is an emergent wetland located along the northbound lanes of I-65. The wetland is located within a depressional area associated with the roadside ditch approximately 1.0 mile south of Liberty Knob Road and is entirely within State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 80 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 80 is a Class I NF wetland wholly within the investigated area and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 170	0-2	100% 10YR 4/3	Loamy/Clayey
	2-18	85% 10YR 5/1 with 15% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 80 would be considered PEME under the Cowardin Classification System. Wetland 80 is 0.004 acre and wholly contained within the investigated area. Wetland 80 would be considered a poor quality wetland due to its association with a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 170 included in the Appendix B. DP 171 included in Appendix B is representative of the upland areas surrounding Wetland 80. DP 171 did possess hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.84 Wetland 81

Wetland 81 is an emergent wetland located along the northbound lanes of I-65. The wetland is located within a depressional area associated with the roadside ditch approximately 0.8 mile south of Liberty Knob Road and is entirely within State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 81 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 81 is a Class I NF wetland located within mapped upland soils and entirely within State owned right-of-way; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus effusus* and *Juncus torreyi* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 3 inches deep, High Water Table (A2) at the surface, Saturation (A3) at the surface, Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 172	0-1	100% 10YR 2/1	Loamy/Clayey
	1-7	90% 10YR 5/1 with 10% 10YR 6/8 as a concentration in the matrix	Loamy/Clayey
	7-18	80% 10YR 7/1 with 20% 10YR 6/8 as a concentration in the matrix	Loamy/Clayey

Wetland 81 would be considered PEME under the Cowardin Classification System. Wetland 81 is 0.005 acre and wholly contained within the investigated area. Wetland 81 would be considered a poor quality wetland due to its association with the roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 172 included in the Appendix B. DP 173 included in Appendix B is representative of the upland areas surrounding Wetland 81. DP 173 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.85 Wetland 82

Wetland 82 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.1 mile south of Liberty Knob Road and extends north for 422 linear feet before terminating approximately 0.1 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 82 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 82 is a Class I NF wetland confined to a roadside ditch wholly within the

investigated area. Wetland 82 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* and *Juncus effusus* within the herbaceous stratum. Hydrologic indicators included Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Sandy Redox (S5). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 174	0-5	100% 10YR 5/3	Sandy
	5-18	95% 10YR 6/2 with 5% 10YR 7/8 as a concentration in the matrix	Sandy

Wetland 82 would be considered PEME under the Cowardin Classification System. Wetland 82 is 0.039 acre and wholly contained within the investigated area. Wetland 82 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 174 included in the Appendix B. DP 175 included in Appendix B is representative of the upland areas surrounding Wetland 82. DP 175 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.86 Wetland 83

Wetland 83 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.05 mile south of Liberty Knob Road and extends north for 182 linear feet before terminating approximately 0.01 mile south of Liberty Knob Road. The wetland derives water from runoff from I-65 and from a maintenance pipe at the northern end of the wetland that conveys water underneath I-65.

Wetland 83 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 83 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 83 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus effusus* within the herbaceous stratum. Hydrologic indicators included Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 176	0-6	100% 10YR 5/2	Loamy/Clayey
	6-18	70% 10YR 5/2 with 30% 10YR 6/8 as a concentration in the matrix	Loamy/Clayey

Wetland 83 would be considered PEME under the Cowardin Classification System. Wetland 83 is 0.015 acre and wholly contained within the investigated area. Wetland 83 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 176 included in the Appendix B. DP 177 included in Appendix B is representative of the upland areas surrounding Wetland 83. DP 177 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.87 Wetland 84

Wetland 84 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.01 mile north of Liberty Knob Road and extends north for 201 linear feet before terminating approximately 0.05 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 84 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 84 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 84 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Surface Soil Cracks (B6), Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 178	0-5	100% 10YR 3/2	Loamy/Clayey
	5-18	80% 10YR 5/1 with 20% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 84 would be considered PEME under the Cowardin Classification System. Wetland 84 is 0.020 acre and wholly contained within the investigated area. Wetland 84 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Cyperus esculentus* and *Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 178 included in the Appendix B. DP 179 included in Appendix B is representative of the upland areas surrounding Wetland 84. DP 179 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.88 Wetland 85

Wetland 85 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.2

mile north of Liberty Knob Road and extends north for 217 linear feet before terminating approximately 0.3 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 85 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 85 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 85 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus effusus* within the herbaceous stratum. Hydrologic indicators included Drainage Patterns (B10) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 180	0-3	100% 10YR 4/3	Loamy/Clayey
	3-6	100% 10YR 5/2	Loamy/Clayey
	6-18	75% 10YR 6/1 and 25% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 85 would be considered PEME under the Cowardin Classification System. Wetland 85 is 0.024 acre and wholly contained within the investigated area. Wetland 85 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 180 included in the Appendix B. DP 181 included in Appendix B is representative of the upland areas surrounding Wetland 85. DP 181 did possess hydric soil but lacked the hydrophytic vegetation and hydrology to be determined a wetland.

3.1.89 Wetland 86

Wetland 86 is a scrub-shrub wetland located along the northbound lanes of I-65. The wetland is located within a depressional area approximately 0.3 mile north of Liberty Knob Road that is associated with the roadside ditch and a UNT to Underwood Run that is immediately adjacent to the wetland outside of the investigated area and State owned right of way. The wetland extends out of State owned right-of-way and makes confluence with a UNT to Underwood Run outside of the investigated area. The wetland derives water from runoff from I-65 and from a maintenance pipe at the northern end of the wetland that conveys water underneath I-65.

Wetland 86 directly abuts a UNT to Underwood Run outside of the investigated area, which drains to Underwood Run, which drains to Pigeon Roost Creek, which drains to Stucker Fork, which drains to the Muscatatuck River, a TNW. Therefore, it is anticipated Wetland 86 would be considered a water of the US.

The dominant vegetation consisted of *Fraxinus pennsylvanica* and *Diospyros virginiana* within the sapling/shrub stratum; and *Leersia oryzoides* and *Carex hystericina* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 6 inches, Saturation (A3) at the surface, Drainage

Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 182	0-4	100% 10YR 4/3	Loamy/Clayey
	4-18	80% 10YR 5/1 with 20% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 86 would be considered Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded/Saturated (PSS1E) under the Cowardin Classification System. Wetland 86 is 0.010 acre and extends east beyond the investigated area. Wetland 86 would be considered a poor quality wetland due to it receiving runoff from I-65. For reference to field data collected for this wetland see DP 182 included in the Appendix B. DP 183 included in Appendix B is representative of the upland areas surrounding Wetland 86. DP 183 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.90 Wetland 87

Wetland 87 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.4 mile north of Liberty Knob Road and extends north for 69 linear feet before terminating approximately 0.4 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 87 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 87 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 87 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus torreyi* within the herbaceous stratum. Hydrologic indicators included Crayfish Burrows (C8) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 184	0-4	100% 10YR 4/2	Loamy/Clayey
	4-18	80% 10YR 6/1 and 20% 10YR 5/8 as a concentration in the matrix	Loamy/Clayey

Wetland 87 would be considered PEME under the Cowardin Classification System. Wetland 87 is 0.027 acre and wholly contained within the investigated area. Wetland 87 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 184 included in the Appendix B. DP 185 included in Appendix B is representative of the upland areas surrounding Wetland

87. DP 185 did possess hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.91 Wetland 88

Wetland 88 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.6 mile north of Liberty Knob Road and extends north for 287 linear feet before terminating approximately 0.7 mile north of Liberty Knob Road. The wetland is bounded to the north by a maintenance pipe that conveys UNT to Pigeon Roost Creek. The wetland derives water from runoff from I-65.

Wetland 88 appears to drain north via a non-jurisdictional ephemeral stream (UNT to Pigeon Roost Creek). Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 88 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 88 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Scirpus atrovirens* and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 186	0-18	90% 20YR 6/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 88 would be considered PEME under the Cowardin Classification System. Wetland 88 is 0.022 acre and wholly contained within the investigated area. Wetland 88 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 186 included in the Appendix B. DP 187 included in Appendix B is representative of the upland areas surrounding Wetland 88. DP 185 did possess hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.92 Wetland 89

Wetland 89 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch at the edge of a forested area and is entirely within State owned right-of-way. The wetland begins approximately 0.9 mile north of Liberty Knob Road and extends north for 952 linear feet before terminating at Pigeon Roost Creek approximately 1.0 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 89 directly abuts Pigeon Roost Creek (a perennial stream), which drains to Stucker Fork, which drains to the Muscatatuck River, a TNW. Therefore, it is anticipated Wetland 89 would be considered a water of the US.

The dominant vegetation consisted of *Cyperus esculentus* and *Juncus effusus* within the herbaceous stratum. Hydrologic indicators included Sediment Deposits (B2), Water-Stained Leaves (B9), Surface Soil Cracks (B6), Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 188	0-3	100% 10YR 4/3	Loamy/Clayey
	3-18	90% 10YR 5/1 with 10% 10YR 5/6 as a concentration in the matrix	Loamy/Clayey

Wetland 89 would be considered PEME under the Cowardin Classification System. Wetland 89 is 0.089 acre and wholly contained within the investigated area. Wetland 89 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 188 included in the Appendix B. DP 189 included in Appendix B is representative of the upland areas surrounding Wetland 89. DP 189 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.93 Wetland 90

Wetland 90 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is bounded to the north by a concrete-lined ditch and a maintenance pipe. The wetland begins approximately 1.2 mile north of Liberty Knob Road and extends north for 93 linear feet before terminating 1.2 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 90 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 90 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 90 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included Oxidized Rhizospheres on Living Roots (C3), Drainage Patterns (B10), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 190	0-3	95% 10YR 4/3 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	3-18	95% 10YR 6/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 90 would be considered PEME under the Cowardin Classification System. Wetland 90 is 0.016 acre and wholly contained within the investigated area. Wetland 90 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 190 included in the Appendix B. DP 191 included in Appendix B is representative of the upland areas surrounding Wetland 90. DP 191 did possess hydric soil but lacked the hydrophytic vegetation and wetland hydrology to be determined a wetland.

3.1.94 Wetland 91

Wetland 91 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland is bounded to the north by a concrete-lined ditch. The wetland begins approximately 1.3 mile north of Liberty Knob Road and extends north for 346 linear feet before terminating approximately 1.3 mile north of Liberty Knob Road. The wetland derives water from runoff from I-65.

Wetland 91 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded within a typical year, it is anticipated to be a waters of the State. Wetland 91 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 91 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus tenuis, Juncus effusus,* and *Paspalum floridanum* within the herbaceous stratum. Hydrologic indicators included Surface Soil Cracks (B6), Drainage Patterns (B10), Crayfish Burrows (C8), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 192	0-3	95% 10YR 6/2 with 5% 10YR 6/8 as a concentration in the matrix	Loamy/Clayey
	3-18	55% 2.5YR 7/2 with 30% 10YR 5/8 as a depletion in the matrix and 15% 10YR 3/1 as organic material	Loamy/Clayey

Wetland 91 would be considered PEME under the Cowardin Classification System. Wetland 91 is 0.031 acre and wholly contained within the investigated area. Wetland 91 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed

during the site reconnaissance. For reference to field data collected for this wetland see DP 192 included in the Appendix B. DP 192 included in Appendix B is representative of the upland areas surrounding Wetland 91. DP 193 did possess hydric soil but lacked the hydrophytic vegetation and wetland hydrology to be determined a wetland.

3.1.95 Wetland 92

Wetland 92 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.12 mile south of Leota Road and extends north for 342 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 92 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 92 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 92 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* and *Eleocharis palustris* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 3 inches, Saturation (A3) at the surface, Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted below Dark Surface (A11) and Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 194	0-2	100% 10YR 3/1	Loamy/Clayey
	2-18	90% 10YR 4/2 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 92 would be considered PEME under the Cowardin Classification System. Wetland 92 is 0.036 acre and wholly contained within the investigated area. Wetland 92 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 194 included in the Appendix B. DP 195 included in Appendix B is representative of the upland areas surrounding Wetland 92. DP 195 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.96 Wetland 93

Wetland 93 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.10 mile north of Leota Road and extends north for 169 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 93 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters

of the State. Wetland 93 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 93 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Juncus tenuis, Cyperus esculentus*, and *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at 0 inches, Saturation (A3) at the surface, Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 196	0-8	95% 10YR 4/2 with 5% 10YR 4/6 as a concentration in the matrix.	Loamy/Clayey
	8-18	92% 10YR 5/1 with 8% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 93 would be considered PEME under the Cowardin Classification System. Wetland 93 is 0.019 acre and wholly contained within the investigated area. Wetland 93 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Cyperus esculentus* and *Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 196 included in the Appendix B. DP 197 included in Appendix B is representative of the upland areas surrounding Wetland 93. DP 197 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.97 Wetland 94

Wetland 94 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.52 mile north of Leota Road and extends north for 113 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 94 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 94 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 94 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus* and *Juncus effusus* within the herbaceous stratum. The vegetation met the Rapid Test for Hydrophytic vegetation. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at 6 inches, Saturation (A3) at the surface, Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 198	0-18	90% 10YR 4/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 94 would be considered PEME under the Cowardin Classification System. Wetland 94 is 0.018 acre and wholly contained within the investigated area. Wetland 94 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 198 included in the Appendix B. DP 199 included in Appendix B is representative of the upland areas surrounding Wetland 94. DP 199 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.98 Wetland 95

Wetland 95 is an emergent wetland located along the northbound lanes of I-65. The wetland is located within a depressional area associated with the roadside ditch. The wetland begins approximately 0.70 mile south of Lake Road and extends east beyond the State owned right-of-way. The wetland derives water from runoff from I-65 and from a maintenance pipe outlet that carries water underneath I-65.

Wetland 95 appears to drain east via a non-jurisdictional swale. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 95 is a Class I NF wetland located within mapped upland soils. The wetland extends east beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent agricultural land, Wetland 95 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Salix nigra* within the sapling/shrub stratum; and *Echinochloa crus-galli* and *Cyperus esculentus* within the herbaceous stratum. Although the wetland included sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at 0.5 inches, Saturation (A3) at the surface, Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 200	0-18	90% 10YR 4/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
DP 202	0-18	90% 10YR 4/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 95 would be considered PEME under the Cowardin Classification System. Wetland 95 is 0.252 acre and extends beyond investigated area. Wetland 95 would be considered a poor quality wetland due to its association with the roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and

Cyperus esculentus). For reference to field data collected for this wetland see DP 200 and DP 202 included in the Appendix B. DP 201 and DP 203 included in Appendix B are representative of the upland areas surrounding Wetland 95. DP 201 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland. DP 203 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.99 Wetland 96

Wetland 96 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to depressional area. The wetland begins approximately 0.41 mile south of Lake Road and extends east beyond the State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 96 appears to drain east via a non-jurisdictional swale. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 96 is a Class I NF wetland located within mapped upland soils. The wetland extends east beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent land, Wetland 96 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides* and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 204	0-18	92% 10YR 4/1 with 8% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 96 would be considered PEME under the Cowardin Classification System. Wetland 96 is 0.050 acre and extends beyond the investigated area. Wetland 96 would be considered a poor quality wetland due to receiving water from roadway runoff and dominance of invasive vegetation (*Cyperus esculentus*). For reference to field data collected for this wetland see DP 204 included in the Appendix B. DP 205 included in Appendix B is representative of the upland areas surrounding Wetland 96. DP 205 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.100 Wetland 97

Wetland 97 is an emergent wetland located along the northbound lanes of I-65. The wetland is located within a depressional area associated with the roadside ditch. The wetland begins approximately 0.39 mile south of Lake Road and extends east beyond the State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 97 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 97 is a Class I NF wetland located within mapped upland soils. The wetland extends east beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State

owned right-of-way into adjacent land, Wetland 97 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Phragmites australis* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). After multiple attempts, a soil sample could not be obtained due to a restrictive layer of riprap, therefore soils are considered problematic. Based upon the hydrophytic vegetation and hydrology indicators it is assumed that hydric soils would be present.

Wetland 97 would be considered PEME under the Cowardin Classification System. Wetland 97 is 0.055 acre and extends beyond investigated area. Wetland 97 would be considered a poor quality wetland due to its association with the roadside ditch and dominance of invasive vegetation (*Phragmites australis*). For reference to field data collected for this wetland see DP 206 included in the Appendix B. DP 207 included in Appendix B is representative of the upland areas surrounding Wetland 97. DP 207 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.101 Wetland 98

Wetland 98 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.01 mile north of Lake Road and extends north for 799 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 98 appears to drain south via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 98 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 98 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 208	0-18	97% 10YR 4/1 with 3% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 98 would be considered PEME under the Cowardin Classification System. Wetland 98 is 0.123 acre and wholly contained within the investigated area. Wetland 98 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 208 included in the Appendix B. DP 209 included in Appendix B is representative of the upland areas surrounding Wetland 98. DP 209 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.102 Wetland 99

Wetland 99 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.29 mile south of the I-65 and SR 56 overpass and extends south for 876 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 99 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 99 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 99 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cyperus esculentus, Apocynum cannabinum*, and *Schoenoplectus tabernaemontani* within the herbaceous stratum. Hydrologic indicators included Saturation (A3) at 12 inches and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 210	0-18	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 99 would be considered PEME under the Cowardin Classification System. Wetland 99 is 0.232 acre and wholly contained within the investigated area. Wetland 99 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 210 included in the Appendix B. DP 211 included in Appendix B is representative of the upland areas surrounding Wetland 99. DP 211 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.103 Wetland 100

Wetland 100 is an emergent wetland located in the southeast quadrant of the I-65 and SR 56 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.01 mile south of the I-65 and SR 56 overpass and extends south for 1,228 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 100 appears to drain south via a non-jurisdictional maintenance pipe. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 100 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 100 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Cephalanthus occidentalis* within the sapling/shrub stratum; and *Leersia oryzoides* within the herbaceous stratum. Although the wetland included sapling/shrubs this was not a dominant component of the absolute cover of the wetland. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at 0 inches, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 212	0-18	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
DP 214	0-18	95% 10YR 4/1 with 5% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 100 would be considered PEME under the Cowardin Classification System. Wetland 100 is 0.800 acre and wholly contained within the investigated area. Wetland 100 would be considered a poor quality wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 212 and DP 214 included in the Appendix B. DP 213 and DP 215 included in Appendix B are representative of the upland areas surrounding Wetland 100. DP 213 did possess the hydrophytic vegetation and hydric soil, but lacked the hydrology to be determined a wetland. DP 215 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.104 Wetland 101

Wetland 101 is an emergent wetland located in the southeast quadrant of the I-65 and SR 56 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.01 mile south of the I-65 and SR 56 overpass and extends south for 628 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 101 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 101 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 101 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Inundation Visible on Aerial Imagery (B7), Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 216	0-3	100% 10YR 4/2	Loamy/Clayey
	3-18	90% 10YR 4/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 101 would be considered PEME under the Cowardin Classification System. Wetland 101 is 0.236 acre and wholly contained within the investigated area. Wetland 101 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and *Cyperus esculentus).* A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 216 included in the Appendix B. DP 217 included in Appendix B is representative of the upland areas surrounding Wetland 101. DP 217 did possess the hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.105 Wetland 102

Wetland 102 is an emergent wetland located in the northeast quadrant of the I-65 and SR 56 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right-of-way. The wetland begins approximately 0.02 mile north of the I-65 and SR 56 overpass and extends north for 480 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 102 appears to drain south via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 102 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 102 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli*, *Paspalum floridanum*, and *Cyperus esculentus* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 218	0-3	100% 10YR 4/2	Loamy/Clayey
	3-18	90% 10YR 4/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 102 would be considered PEME under the Cowardin Classification System. Wetland 102 is 0.241 acre and wholly contained within the investigated area. Wetland 102 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli* and *Cyperus esculentus*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 218 included in the Appendix

B. DP 219 included in Appendix B is representative of the upland areas surrounding Wetland 102. DP 219 did possess the hydrophytic vegetation but lacked the hydric soil and hydrology to be determined a wetland.

3.1.106 Wetland 103

Wetland 103 is an emergent wetland located in the northeast quadrant of the I-65 and SR 56 overpass. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.04 mile north of the I-65 and SR 56 overpass and extends north for 471 linear feet before terminating. The wetland derives water from runoff from I-65 and SR 56.

Wetland 103 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 103 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 103 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Persicaria maculosa* within the herbaceous stratum. Hydrologic indicators included Surface Water (A1) at 0.25 inch deep, High Water Table (A2) at 10 inches, Saturation (A3) at 7 inches, Geomorphic Position (D2), and FAC-Neutral Test (D5). After multiple attempts, a soil sample could not be obtained due to a restrictive layer of riprap, therefore soils are considered problematic. Based upon the hydrophytic vegetation and hydrology indicators it is assumed that hydric soils would be present.

Wetland 103 would be considered PEME under the Cowardin Classification System. Wetland 103 is 0.144 acre and wholly contained within the investigated area. Wetland 103 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Persicaria maculosa*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 220 included in the Appendix B. DP 221 included in Appendix B is representative of the upland areas surrounding Wetland 103. DP 221 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland

3.1.107 Wetland 104

Wetland 104 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.42 mile north of the I-65 and SR 56 overpass and extends north for 352 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 104 appears to drain north via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 104 is a Class I NF wetland confined to a roadside ditch wholly within the investigated area. Wetland 104 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore, it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Echinochloa crus-galli* within the herbaceous stratum. Hydrologic indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 222	0-3	97% 10YR 4/2 with 3% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	3-18	92% 10YR 4/1 with 8% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 104 would be considered PEME under the Cowardin Classification System. Wetland 104 is 0.017 acre and wholly contained within the investigated area. Wetland 104 would be considered a poor quality wetland due to its location in a roadside ditch and dominance of invasive vegetation (*Echinochloa crus-galli*). A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 222 included in the Appendix B. DP 223 included in Appendix B is representative of the upland areas surrounding Wetland 104. DP 223 did possess hydrophytic vegetation and hydric soil but lacked the hydrology to be determined a wetland.

3.1.108 Wetland 105

Wetland 105 is an emergent wetland located along the northbound lanes of I-65. The wetland is confined to the roadside ditch and is entirely within State owned right of way. The wetland begins approximately 0.61 mile north of the I-65 and SR 56 overpass and extends north for 698 linear feet before terminating. The wetland derives water from runoff from I-65.

Wetland 105 appears to drain south via non-jurisdictional ephemeral stream (UNT 6 to Honey Run). Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 105 is a Class I NF wetland associated with the roadside ditch wholly within the investigated area. Wetland 105 is entirely within the State owned right-of-way and constructed in mapped upland soils; therefore it is anticipated to qualify for a State exemption under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Persicaria sagitatta* and *Leersia oryzoides* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 10 inches, Saturation (A3) at the surface, Inundation Visible on Aerial Imagery (B7), Oxidized Rhizospheres on Living Roots (C3), Geomorphic Position (D2), and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 224	0-8	95% 10YR 4/2 with 5% 10YR 4/6 as a pore lining in the matrix	Mucky Loam/Clay
	8-18	100% 10YR 3/1	Mucky Loam/Clay

Wetland 105 would be considered PEME under the Cowardin Classification System. Wetland 105 is 0.218 acre and wholly contained within the investigated area. Wetland 105 would be considered a poor wetland due to its location in a roadside ditch. A continuous defined bed and bank or OHWM was not observed

during the site reconnaissance. For reference to field data collected for this wetland see DP 224 included in the Appendix B. DP 225 included in Appendix B is representative of the upland areas surrounding Wetland 105. DP 225 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.1.109 Wetland 106

Wetland 106 is an emergent wetland located along the northbound lanes of I-65. The wetland begins approximately 0.30 mile south of Moonglo Road and is associated with the roadside ditch. Wetland 106 extends northeast beyond the State owned right-of-way. The wetland derives water from runoff from I-65.

Wetland 106 appears to drain southeast via a non-jurisdictional roadside ditch. Therefore, as the wetland does not abut a jurisdictional waters of the US and is not flooded in a typical year, it is anticipated to be a waters of the State. Wetland 106 is a Class I NF wetland located within mapped upland soils. The wetland extends northeast beyond the State owned right-of-way and investigated area. As the wetland extends beyond the State owned right-of-way into adjacent forested land, Wetland 106 is not likely eligible for State exemptions under 327 IAC 17-1-3 (7).

The dominant vegetation consisted of *Leersia oryzoides*, *Impatiens capensis*, and *Persicaria pennsylvanica* within the herbaceous stratum. Hydrologic indicators included High Water Table (A2) at 1 inch, Saturation (A3) at the surface, and FAC-Neutral Test (D5). Hydric soil indicators included Depleted Matrix (F3). Soil color and texture information are located in the table below:

Data Point	Depth (inches)	Soil Color	Soil Texture
DP 226	0-10	90% 10YR 4/1 with 10% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey
	10-18	85% 10YR 4/1 with 15% 10YR 4/6 as a concentration in the matrix	Loamy/Clayey

Wetland 106 would be considered PEME under the Cowardin Classification System. Wetland 106 is 0.026 acre and extends northeast beyond investigated area. Wetland 106 would be considered a poor quality wetland due to its association with a roadside ditch. A continuous defined bed and bank or OHWM was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 226 included in the Appendix B. DP 227 included in Appendix B is representative of the upland areas surrounding Wetland 106. DP 227 lacked the hydrophytic vegetation, hydric soil, and hydrology to be determined a wetland.

3.2 Drainage Features, Streams, and Other Potential Waters of the US

3.2.1 Blue Lick Creek

Blue Lick Creek enters the investigated area approximately 0.17 mile south of Biggs Road. The stream flows east for 216 feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Blue Lick Creek is approximately 15.3 square miles. The flow regime appears to be perennial as depicted on the USGS topographic map. The stream is not a County Legal Drain. Blue Lick Creek appears to drain east to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Blue Lick Creek would be considered a jurisdictional water of the US.

Blue Lick Creek is crossed once within the proposed project area by I-65 (Bridge No. I65-16-4220D). A QHEI was taken west of I-65 outside of the bridge's influence on the channel. The stream has low embeddedness and the channel was moderately stable. The stream had sparse in-stream cover, with some woody debris. The dominant substrate was bedrock. The OHWM of Blue Lick Creek at the assessment location was 30.5 feet wide by 1.6 feet deep. Top-of-bank was 32 feet wide by 2 feet deep. Blue Lick Creek would be classified as Riverine, Lower Perennial, Rock Bottom, Bedrock (R2RB1) using the Cowardin Classification System.

The overall QHEI score for the 200-foot sampled stream segment was 57. This is a good narrative rating in the manual. Blue Lick Creek scored highest for Riparian Zone/Bank Erosion (9/10). However, the poor riffle/run quality may be a limiting factor to the quality of the stream.

3.2.2 UNT to Blue Lick Creek

UNT to Blue Lick Creek enters the investigated area approximately 0.02 mile south of Biggs Road. The stream flows east for 249 feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT to Blue Lick Creek is approximately 0.08 square mile. UNT to Blue Lick Creek is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore it is anticipated to be non-jurisdictional.

UNT to Blue Lick Creek is conveyed through a reinforced concrete pipe (RCP) maintenance pipe (UNT to Blue Lick CV) beneath I-65 which is approximately 161-linear feet in length. This portion of the stream (UNT to Blue Lick CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of UNT to Blue Lick Creek upstream and downstream of UNT to Blue Lick Creek CV within the investigated area total 88-linear feet.

A HHEI was conducted for UNT to Blue Lick Creek along the southbound lanes of I-65. A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded. The stream had moderate in-stream cover, with some overhanging vegetation. The dominant substrate was silt. The OHWM of UNT to Blue Lick Creek at the assessment location was 3 feet wide by 0.45 foot deep. Top-of-bank was 3.5 feet wide by 0.45 feet deep. UNT to Blue Lick Creek would be classified as Riverine, Unconsolidated Bottom, Mud (RUB3) using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 200-foot sampled stream segment was 31. UNT to Blue Lick Creek would be considered a poor quality stream due to the lack of development and poor stability. UNT to Blue Lick Creek scored highest for Pool Depth (15/30). However, the poor bankfull width and Substrate may be limiting factors to the quality of the stream.

3.2.3 Caney Fork

Caney Fork enters the investigated area approximately 0.70 mile north of Biggs Road. The stream flows east for 277 feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Caney Fork is approximately 7.87 square miles. The flow regime appears to be perennial as depicted on the USGS topographic map. The stream is not a County Legal Drain. Caney Fork appears to drain east to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Caney Fork would be considered a jurisdictional water of the US.

Caney Fork is crossed once within the proposed project area by I-65 (Bridge No. I65-17-4222D). A QHEI was taken west of I-65 outside of the bridge's influence on the channel. The stream has moderate embeddedness and has moderate channel stability. The stream had sparse in-stream cover, with some root mats, overhanging vegetation, and aquatic macrophytes. The dominant substrate was cobble. The OHWM of Caney Fork at the assessment location was 27.4 feet wide by 1.5 feet deep. Top-of-bank was 30 feet wide by 2 feet deep. Caney Fork would be classified as Riverine, Lower Perennial, Unconsolidated Bottom, Cobble-Gravel (R2UB1) using the Cowardin Classification System.

The overall QHEI score for the 200-foot sampled stream segment was 62. This is a good narrative rating in the manual. Caney Fork scored highest for Riparian Zone/Bank Erosion (8/10). However, the poor riffle/run quality may be a limiting factor to the quality of the stream.

3.2.4 Henry Brook

Henry Brook enters the investigated area approximately 0.81 mile south of SR 160 and flows south along the northbound lanes of I-65 for approximately 800 feet before crossing. The stream flows west for 225 feet before exiting the investigated area at the first crossing. The stream re-enters the investigated area approximately 1.49 miles south of SR 160 and continues flowing south before crossing I-65 again; approximately 1,018 feet of the stream is within the investigated area between the two crossings. The stream flows east for 210 feet before exiting the investigated area at the second crossing. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Henry Brook is approximately 0.35 square mile. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. Henry Brook appears to drain east to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Henry Brook would be considered a jurisdictional water of the US.

Henry Brook is conveyed through CV I65-010-17.70 (southern crossing) and CV I65-010-18.35 (northern crossing) beneath I-65. CV I65-010-17.70 (Henry Brook CV 1) is a high-density polyethylene (HDPE) pipe culvert, which is approximately 173-linear feet in length. CV I65-010-18.35 (Henry Brook CV 2) is a

corrugated metal pipe (CMP) culvert, which is approximately 189-linear feet in length. These portions of the stream (Henry Brook CV 1 and Henry Brook CV 2) are anticipated to be considered artificial drainage features and non-jurisdictional. The portions of Henry Brook within the investigated area upstream and downstream of Henry Brook CV 1 and Henry Brook CV 2 total 1891-linear feet.

A HHEI was taken west of I-65 at the southern crossing outside of the culvert's influence on the channel. The stream is moderately embedded. The stream had moderate in-stream cover, with some overhanging vegetation and woody debris. The dominant substrate was silt. The OHWM of Henry Brook at the assessment location was 7 feet wide by 0.5 feet deep. Top-of-bank was 7 feet wide by 0.55 feet deep. Henry Brook would be classified as Riverine, Intermittent, Streambed, Mud (R4SB5) using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 41. Henry Brook would be considered an average quality stream due to poor stability. Henry Brook scored highest for Pool Depth and Bank Full Width (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.5 UNT to Caney Fork

UNT to Caney Fork enters the investigated area approximately 0.12 mile south of SR 160. The stream flows west for 10 feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT to Caney Fork is approximately 0.06 square mile. UNT to Caney Fork is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT to Caney Fork begins at a maintenance pipe outlet along the southbound lanes of I-65. A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded. The stream had sparse in-stream cover, with some overhanging vegetation. The dominant substrate was silt. The OHWM of UNT to Caney Fork at the assessment location was 3.5 feet wide by 0.33 feet deep. UNT to Caney Fork would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 10-foot sampled stream segment was 32. UNT to Caney Fork would be considered a poor quality stream due to the lack of development and poor stability. UNT to Caney Fork scored highest for Pool Depth (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.6 Ville Run

Ville Run enters the investigated area approximately 0.39 mile north of SR 160. The stream flows east for 268 feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Ville Run is approximately 0.07 square mile. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. Ville Run appears to drain

east to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Ville Run would be considered a jurisdictional water of the US.

Ville Run is conveyed through CV I65-010-19.60 (Ville Run CV) beneath I-65, which is a CMP culvert approximately 307-linear feet in length, 244 linear feet of which lie within the investigated area . This portion of the stream (Ville Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of Ville Run downstream of Ville Run CV within the investigated area is 24-linear feet.

A HHEI was conducted for Ville Run along the northbound lanes of I-65 outside of the culvert's influence on the channel. The stream is moderately embedded. The stream had moderate in-stream cover, with some overhanging vegetation and woody debris. The dominant substrate was artificial. The OHWM of Ville Run at the assessment location was 2.5 feet wide by 0.33 feet deep. Ville Run would be classified as Riverine, Intermittent, Streambed, Sand (R4SB4) using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 43. Ville Run would be considered an average quality stream due to lack of development and high quality substrate. Ville Run scored highest for Pool Depth and Bank Full Width (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.7 Wolf Run

Wolf Run enters the investigated area approximately 0.06 mile south of Winding Road. The stream flows east for 279 feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Wolf Run is approximately 1.57 square miles. The flow regime appears to be perennial as depicted on the USGS topographic map. The stream is not a County Legal Drain. Wolf Run appears to drain east to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wolf Run would be considered a jurisdictional water of the US.

Wolf Run is conveyed through CV I65-010-19.90 (Wolf Run CV) beneath I-65 which is a CMP culvert approximately 270-linear feet in length. This portion of the stream (Wolf Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of Wolf Run upstream and downstream of Wolf Run CV within the investigated area total 9-linear feet.

A QHEI was conducted for Wolf Run along the southbound lanes of I-65 outside of the culvert's influence on the channel. The stream has moderate embeddedness and the banks were moderately stable. The stream had sparse in-stream cover, with some root mats, overhanging vegetation, and aquatic macrophytes. The dominant substrate was silt. The OHWM of Wolf Run at the assessment location was 7.2 feet wide by 1.6 feet deep. Top-of-bank was 9 feet wide by 2 feet deep. An approximately 22 foot wide by 4.5-foot deep scour hole is present at the culvert outlet along the northbound lanes of I-65. Wolf Run would be classified Riverine, Lower Perennial, Unconsolidated Bottom, Mud (R2UB3) using the Cowardin Classification System.

The overall QHEI score for the 200-foot sampled stream segment was 46.5. This is a fair narrative rating in the manual. Wolf Run scored highest for Riparian Zone/Bank Erosion (7.5/10). However, the poor instream cover may be a limiting factor to the quality of the stream.

3.2.8 UNT 1 to Wolf Run

UNT 1 to Wolf Run enters the investigated area approximately 0.42 mile south of Winding Road. The stream flows south for 222 feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Wolf Run is approximately 0.06 square mile. UNT 1 to Wolf Run is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT 1 to Wolf Run begins at a maintenance pipe outlet along the southbound lanes of I-65. A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream has normal embeddedness and the banks were moderately stable. The stream had sparse in-stream cover, with some overhanging vegetation and woody debris. The dominant substrate was silt. The OHWM of UNT 1 to Wolf Run at the assessment location was 2 feet wide by 0.5 feet deep. UNT 1 to Wolf Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 200-foot sampled stream segment was 21. UNT 1 to Wolf Run would be considered a poor quality stream due to lack of instream features and poor development. UNT 1 to Wolf Run scored highest for Substrate (11/40). However, the poor pool depth may be a limiting factor to the quality of the stream.

3.2.9 UNT 2 to Wolf Run

UNT 2 to Wolf Run enters the investigated area approximately 0.15 mile south of Winding Road. The stream flows south for 80 feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 2 to Wolf Run is approximately 0.19 square mile. Based on the watershed size and surrounding landscape, the stream flow is anticipated to be intermittent. The stream is not a County Legal Drain. UNT 2 to Wolf Run appears to drain south to Wolf Run, which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated UNT 2 to Wolf Run would be considered a jurisdictional water of the US.

UNT 2 to Wolf Run begins at a maintenance pipe outlet along the northbound lanes of I-65. A HHEI was taken east of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded with eroding banks. The stream had sparse in-stream cover, with some overhanging vegetation. The dominant substrate was artificial. The OHWM of UNT 2 to Wolf Run at the assessment location was 5.2 feet wide by 2 feet deep. Top-of-bank was 7 feet wide by 3 feet deep. UNT 2 to Wolf Run would be classified as R4SB4 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 48. UNT 2 to Wolf Run would be considered an average quality stream due to poor stability. UNT 2 to Wolf Run scored highest for Bank Full Width (20/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.10 UNT 1 to Miller Fork

UNT 1 to Miller Fork enters the investigated area approximately 0.15 mile north of Winding Road. The stream flows south 50 feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 1 to Miller Fork is 0.27 square mile. Based on the watershed size and surrounding landscape, the stream flow is anticipated to be intermittent. The stream is not a County Legal Drain. UNT 1 to Miller Fork appears to drain east to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated UNT 1 to Miller Fork would be considered a jurisdictional water of the US.

UNT 1 Miller Fork begins at a maintenance pipe outlet along the northbound lanes of I-65. A HHEI was taken east of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded with eroding banks. The stream had moderate in-stream cover, with some overhanging vegetation, woody debris, and root mats. The dominant substrate was sand. The OHWM of UNT 1 to Miller Fork at the assessment location 3.5 feet wide by 2 feet deep. Top-of-bank was 5 feet wide by 3.5 feet deep. UNT 1 to Miller Fork would be classified as R4SB4 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 64. UNT 1 to Miller Fork would be considered an average quality stream due to lack of high quality substrate. UNT 1 to Miller Fork scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.11 UNT 2 to Miller Fork

UNT 2 to Miller Fork enters the investigated area approximately 0.47 mile south of Brownstown Road The stream flows east 30 feet before flowing into UNT 3 to Miller Fork. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 2 to Miller Fork is 0.09 square mile. UNT 2 to Miller Fork is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT 2 to Miller Fork begins at a maintenance pipe outlet along the northbound lanes of I-65. A HHEI was taken east of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded. The stream had sparse in-stream cover, with some overhanging vegetation. The dominant substrate was artificial. The OHWM of UNT 2 to Miller Fork at the assessment location 2 feet wide by 0.5 feet deep. UNT 2 to Miller Fork would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 30-foot sampled stream segment was 28. UNT 2 to Miller Fork would be considered a poor quality stream due to lack of instream features and high quality substrate. UNT 2 to Miller Fork scored highest for Pool Depth (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.12 UNT 3 to Miller Fork

UNT 3 to Miller Fork enters the investigated area approximately 0.41 mile south of Brownstown Road. The stream flows east for 561 feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 3 to Miller Fork is 0.25 square mile. Based on the watershed size and surrounding landscape, the stream flow is anticipated to be intermittent. The stream is not a County Legal Drain. UNT 3 to Miller Fork appears to drain east to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated UNT 3 to Miller Fork would be considered a jurisdictional water of the US.

UNT 3 to Miller Fork is conveyed through CV I65-010-20.85 (UNT 3 to Miller Fork CV) beneath I-65 which is an HDPE culvert approximately 281-linear feet in length. This portion of the stream (UNT 3 to Miller Fork CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT 3 to Miller Fork upstream and downstream of UNT 3 to Miller Fork CV within the investigated area total 280-linear feet.

A HHEI was taken east of I-65 outside of the culvert's influence on the channel. The stream is moderately embedded. The stream had moderate in-stream cover, with some overhanging vegetation and woody debris. The dominant substrate was silt. The OHWM of UNT 3 to Miller Fork at the assessment location 4.5 feet wide by 2 feet deep. Top-of-bank was 5 feet wide by 3 feet deep. UNT 3 to Miller Fork would be classified as R4SB4 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 59. UNT 3 to Miller Fork would be considered an average quality stream due to lack of instream features. UNT 3 to Miller Fork scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.13 Miller Fork

Miller Fork enters the investigated area approximately 0.2 mile south of Brownstown Road. The stream flows east for 327 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Miller Fork is 1.367 square miles. The flow regime appears to be perennial as depicted on the USGS topographic map. The stream is not a County Legal Drain. Miller Fork appears to drain east towards Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Miller Fork would be considered a jurisdictional water of the US.

Miller Fork is conveyed through CV I65-010-21.10 (Miller Fork CV) beneath I-65 which is a CMP culvert approximately 262-linear feet in length. This portion of the stream (Miller Fork CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of Miller Fork upstream and downstream of the Miller Fork CV within the investigated area total 65-linear feet.

A QHEI was taken east of I-65 outside of the culvert's influence on the channel. The stream has low embeddedness and the banks were moderately stable. The stream had sparse in-stream cover, with some woody debris and overhanging vegetation. The dominant substrate was gravel. The OHWM of Miller Fork at the assessment location was 8 feet wide by 0.67 feet deep. Top-of-bank was 12 feet wide by 1.5 feet deep.

An approximately 30 foot wide, 2 feet deep scour hole is present at the culvert outlet along the northbound lanes of I-65. Miller Fork would be classified as Riverine, Lower Perennial, Unconsolidated Bottom, Cobble-Gravel (R2UB1) using the Cowardin Classification System.

The overall QHEI score for the 200-foot sampled stream segment was 52. This is a fair narrative rating in the manual. Miller Fork scored highest for Riparian Zone/Bank Erosion (9/10). However, the poor riffle/run quality may be a limiting factor to the quality of the stream.

3.2.14 UNT 4 to Miller Fork

UNT 4 to Miller Fork enters the investigated area approximately 0.1 mile south of Brownstown Road. The stream flows south for 258 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 4 to Miller Fork is 0.01 square miles. UNT 4 to Miller Fork is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT 4 to Miller Fork is not crossed within the proposed project area and begins along the east side of I-65. A HHEI was conducted for UNT 4 to Miller Fork along the northbound lanes of I-65. A HHEI was taken east of I-65. The stream is poorly developed with unstable banks. The stream had moderate in-stream cover, with some woody debris, overhanging vegetation, and root wads. The dominant substrate was sand. The OHWM of UNT 4 to Miller Fork at the assessment location was 2 feet wide by 0.4 feet deep. Top-of-bank was 3 feet wide by 0.67 feet deep. UNT 4 to Miller Fork would be classified as would be classified as a Riverine, Unconsolidated Bottom, Sand (RUB2) using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes. The overall HHEI score for the 200-foot sampled stream segment was 41. UNT 4 to Miller Fork would be considered a poor quality stream due to the lack of development and poor stability. UNT 4 to Miller Fork scored highest for Pool Depth (25/30). However, the substrate may be a limiting factor to the quality of the stream.

3.2.15 UNT 1 to Meal Run

UNT 1 to Meal Run enters the investigated area approximately 0.5 mile north of Brownstown Road. The stream flows northeast for 280 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 1 to Meal Run is 0.06 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. UNT 1 to Meal Run appears to drain northeast to Meal Run, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated UNT 1 to Meal Run would be considered a jurisdictional water of the US.

UNT 1 to Meal Run is conveyed through a maintenance pipe (UNT 1 to Meal Run CV) beneath I-65 which is a CMP approximately 222-linear feet in length. This portion of the stream (UNT 1 to Meal Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT 1 to Meal Run upstream and downstream of UNT 1 to Meal Run CV within the investigated area total 58-linear feet.

A HHEI was taken east of I-65 outside of the maintenance pipe's influence on channel. The stream is highly embedded with undercut banks. The stream had moderate in-stream cover, with woody debris. The dominant substrate was silt. The OHWM of UNT 1 to Meal Run at the assessment location was 4 feet wide by 0.6 feet deep. Top-of-bank was 6 feet wide by 1 foot deep. UNT 1 to Meal Run would be classified as R4SB5 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 60. UNT 1 to Meal Run would be considered a poor quality stream due to the high embeddedness and poor substrate. UNT 1 to Meal Run scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.16 Meal Run

Meal Run enters the investigated area approximately 0.8 mile north of Brownstown Road. The stream flows east for 316 linear feet before exiting the investigated area. The stream is depicted on USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Meal Run is 0.143 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. Meal Run appears to drain east towards Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Meal Run would be considered a jurisdictional water of the US.

Meal Run is conveyed through CV I65-010-22.10 (Meal Run CV) beneath I-65 which is an HDPE culvert approximately 281-linear feet in length. This portion of the stream (Meal Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of Meal Run upstream and downstream of Meal Run CV within the investigated area total 35-linear feet.

A HHEI was taken east of I-65 outside of the culvert's influence on the channel. The stream is moderately embedded with eroding banks. The stream had moderate in-stream cover, with undercut banks and some woody debris. The dominant substrate was gravel. The OHWM of Meal Run at the assessment location was 6 feet wide by 0.67 feet deep. Top-of-bank was 10 feet wide by 2.5 feet deep. Meal Run would be classified as R4SB4 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 64. Meal Run would be considered a poor quality stream due to the poor substrates and eroding banks. Meal Run scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.17 Wheel Run

Wheel Run enters the investigated area approximately 0.5 mile north of Brownstown Road. The stream flows east for 397 linear feet before entering a culvert under I-65 southbound. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Wheel Run is 0.044 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. Wheel Run appears to drain east to Mill Branch, which drains to Miller Fork, which drains to Grain Run, which drains to Silver Creek, a TNW. Therefore, it is anticipated Wheel Run would be considered a jurisdictional water of the US.

Wheel Run is crossed twice within the proposed project area, once by the I-65 mainlines (Wheel Run CV 2) and once by the rest area exit ramp (Wheel Run CV 1) and conveyed by maintenance pipe. Wheel Run CV 2 is a CMP maintenance pipe approximately 234-linear feet in length and Wheel Run CV 1 is a CMP maintenance pipe approximately 177-linear feet in length, 79-linear feet of which lie within the project area. These portions of the stream (Wheel Run CV 1 and Wheel Run CV 2) are anticipated to be considered artificial drainage features and non-jurisdictional. The portions of Wheel Run upstream of Wheel Run CV 1 and Wheel Run CV 2 within the investigated area total 84-linear feet.

A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is highly embedded with unstable banks. The stream had moderate in-stream cover, with woody debris and overhanging vegetation. The dominant substrate was silt. The OHWM of Wheel Run at the assessment location was 1 foot wide by 0.25 feet deep. Top-of-bank was 3 feet wide by 0.67 feet deep. Wheel Run would be classified as R4SB5 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 32. Wheel Run would be considered a poor quality stream due to the embeddedness and unstable banks. Wheel Run scored highest for Pool Depth (15/30). However, the substrate may be a limiting factor to the quality of the stream.

3.2.18 West Fork Silver Creek

West Fork Silver Creek enters the investigated area approximately 1 mile south of Liberty Knob Road. The stream flows northeast for 555 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of West Fork Silver Creek is 0.264 square miles. The flow regime appears to be intermittent based on watershed size and surrounding landscape. The stream is not a County Legal Drain. West Fork Silver Creek appears to drain east to Silver Creek, a TNW. Therefore, it is anticipated West Fork Silver Creek would be considered a jurisdictional water of the US.

West Fork Silver Creek is conveyed through CV I65-010-22.65 (West Fork Silver Creek CV) beneath I-65 which is a CMP culvert approximately 255-linear feet in length. This portion of the stream (West Fork Silver Creek CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of West Fork Silver Creek upstream and downstream of West Fork Silver Creek CV within the investigated area total 300-linear feet.

A HHEI was taken west of I-65 outside of the culvert's influence on channel. The stream is highly embedded with unstable banks. The stream had moderate in-stream cover, with woody debris and overhanging vegetation. The dominant substrate was gravel. The OHWM of West Fork Silver Creek at the assessment location was 6 feet wide by 0.4 feet deep. Top-of-bank was 9 feet wide by 1 foot deep. West Fork Silver Creek would be classified as Riverine, intermittent, R4SB3 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 60. West Fork Silver Creek would be considered a poor quality stream due to the embeddedness and unstable banks. West Fork Silver Creek scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.19 UNT to West Fork Silver Creek

UNT to West Fork Silver Creek enters the investigated area approximately 0.9 mile south of Liberty Knob Road. The stream flows east for 322 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT to West Fork Silver Creek is 0.535 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. UNT to West Fork Silver Creek appears to drain east to West Fork Silver Creek, which drains to Silver Creek, a TNW. Therefore, it is anticipated UNT to West Fork Silver Creek would be considered a jurisdictional water of the US.

UNT to West Fork Silver Creek is conveyed through CV I65-010-22.27 (UNT to West Fork Silver Creek CV) beneath I-65 which is a CMP culvert approximately 297-linear feet in length, 264–linear feet of which lie within the project area. This portion of the stream (UNT to West Fork Silver Creek CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of UNT to West Fork Silver Creek downstream of UNT West Fork Silver Creek CV within the investigated area is 58-linear feet.

A HHEI was taken east of I-65 outside of the culvert's influence on the channel. The stream is covered with riprap within the investigated area. The banks were stable with a lack of instream features. The dominant substrate was artificial. The OHWM of UNT to West Fork Silver Creek at the assessment location was 4 feet wide by 0.6 feet deep. Top-of-bank was 9 feet wide by 2 feet deep. UNT to West Fork Silver Creek would be classified as Riverine, Intermittent, Streambed, Rubble (R4SB2) using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 53. UNT to West Fork Silver Creek would be considered a poor quality stream due to the prominence of artificial substrate and lack of instream features. UNT to West Fork Silver Creek scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.20 UNT to Pigeon Roost Creek

UNT to Pigeon Roost Creek enters the investigated area approximately 0.7 mile north of Liberty Knob Road. The stream flows northeast for 61 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT to Pigeon Roost Creek is 0.037 square miles. UNT to Pigeon Roost Creek is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT to Pigeon Roost Creek begins at a maintenance pipe outlet along the northbound lanes of I-65. A HHEI was taken east of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded, with moderately stable banks and a lack on instream features. The dominant substrate was silt. The OHWM of UNT to Pigeon Roost Creek at the assessment location was 2 feet wide by 0.5 feet deep. Top-of-bank was 3 feet wide by 0.8 feet deep. UNT to Pigeon Roost Creek would be classified as RUB2 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 200-foot sampled stream segment was 42. UNT to Pigeon Roost Creek would be considered a poor quality stream due to the lack of development and instream features. UNT to Pigeon Roost Creek scored highest for Pool Depth (25/30). However, the poor instream cover may be a limiting factor to the quality of the stream.

3.2.21 Pigeon Roost Creek

Pigeon Roost Creek enters the investigated area approximately 1.1 mile north of Liberty Knob Road. The stream flows northeast for 220 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Pigeon Roost Creek is 8.959 square miles. The flow regime appears to be perennial as depicted on the USGS topographic map. The stream is not a County Legal Drain. Pigeon Roost Creek appears to drain north and east to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated Pigeon Roost Creek would be considered a jurisdictional water of the US.

Pigeon Roost Creek is crossed once within the proposed project area, by northbound I-65 and southbound I-65 (Bridge I65-24-4229A). A QHEI was taken east of I-65 outside of the bridge's influence on the channel. The stream is moderately embedded with stable banks. The stream had sparse in-stream features. The dominant substrate was sand and silt. The OHWM of Pigeon Roost Creek at the assessment location was 13 feet wide by 0.67 feet deep. Top-of-bank was 12 feet wide by 1.5 feet deep. Pigeon Roost Creek would be classified as Riverine, Lower Perennial, Unconsolidated Bottom, Sand (R2UB2) using the Cowardin Classification System.

The overall QHEI score for the 200-foot sampled stream segment was 42. This is a Poor narrative rating in the manual. Pigeon Roost Creek scored highest for Riparian Zone (6/10) and Gradient (6/10). However, the poor substrate and in-stream cover may be a limiting factor to the quality of the stream.

3.2.22 UNT to Underwood Run

UNT to Underwood Run enters the investigated area approximately 1.4 mile north of Liberty Knob Road. The stream flows east for 247 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT to Underwood Run is 0.179 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. UNT to Underwood Run appears to drain east to Underwood Run, which drains to Pigeon Roost Creek, which drains to Stucker Fork, which drains to the Muscatatuck River, a TNW. Therefore, it is anticipated UNT to Underwood Run would be considered a jurisdictional waters of the US.

UNT to Underwood Run is conveyed through CV I65-072-25.05 (UNT to Underwood Run CV) beneath I-65 which is a CMP culvert approximately 188-linear feet in length. This portion of the stream (UNT to Underwood Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT to Underwood Run upstream and downstream of UNT to Underwood Run CV within the investigated area total 59-linear feet

A HHEI was conducted for UNT to Underwood Run along the northbound lanes of I-65. The stream is highly embedded with poor development and moderately stable banks. The dominant substrate was silt. The OHWM of UNT to Underwood Run at the assessment location was 6 feet wide by 0.33 feet deep. Top-of-bank was 9 feet wide by 0.8 feet deep. UNT to Underwood Run would be classified as R4SB5 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 59. UNT to Underwood Run would be considered a poor quality stream due to the embeddedness and lack of instream features. UNT to Underwood Run scored highest for Pool Depth (25/30) and Bankfull Width (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.23 Tree Creek

Tree Creek enters the investigated area approximately 1.9 mile north of Liberty Knob Road. The stream flows northeast for 392 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as a perennial stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Tree Creek is approximately 0.82 square miles. The flow regime appears to be perennial as depicted on the USGS topographic map. The stream is not a County Legal Drain. Tree Creek appears to drain north and east to Pigeon Roost Creek, which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated Tree Creek would be considered a jurisdictional water of the US.

Tree Creek is conveyed through CV I65-072-25.72 (Tree Creek CV) beneath I-65 which is an HDPE culvert approximately 477-linear feet in length, 367-linear feet of which lie within the investigated area. This portion of the stream (Tree Creek CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of Tree Creek downstream of Tree Creek CV within the investigated area is 25-linear feet.

A HHEI was taken east of I-65 outside of the culvert's influence on channel. The stream is moderately embedded with stable banks. The stream had moderate in-stream cover, with woody debris and overhanging vegetation. The dominant substrate was artificial. The OHWM of Tree Creek at the assessment location was 12 feet wide by 1.2 feet deep. Top-of-bank was 15 feet wide by 2 feet deep. Tree Creek would be classified as Riverine, Lower Perennial, Streambed, Rubble (R2SB2) using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 72. Tree Creek would be considered a poor quality stream due to low sinuosity and the dominance of artificial substrate. Tree Creek scored highest for Bankfull Width (30/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.24 UNT to Tree Creek

UNT to Tree Creek enters the investigated area approximately 2 mile north of Liberty Knob Road. The stream flows east for 248 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT to Tree Creek is 0.081 square miles. The flow regime appears to

be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. UNT to Tree Creek appears to drain north and east to Tree Creek, which drains to Pigeon Roost Creek, which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated UNT to Tree Creek would be considered a jurisdictional water of the US.

UNT to Tree Creek is conveyed through CV I65-072-25.83 (UNT to Tree Creek CV) beneath I-65 which is an RCP culvert approximately 171-linear feet in length. This portion of the stream (UNT to Tree Creek CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT to Tree Creek upstream and downstream of UNT to Tree Creek within the investigated area total 77-linear feet

A HHEI was taken east of I-65 outside of the culvert's influence on the channel. The stream is moderately embedded and the banks were stable. The stream had moderate in-stream cover, woody debris and overhanging vegetation. The dominant substrate was sand and silt. The OHWM of UNT to Tree Creek at the assessment location was 7 feet wide by 0.5 feet deep. Top-of-bank was 9 feet wide by 1 foot deep. UNT to Tree Creek would be classified as R4SB4 using the Cowardin Classification System.

The overall HHEI score for the 200-foot sampled stream segment was 58. UNT to Tree Creek would be considered a poor quality stream due to low sinuosity and lack of high quality substrate. UNT to Tree Creek scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.25 Sycamore Run

Sycamore Run enters the investigated area 0.55 mile north of Leota Road. The stream flows east for 308 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Sycamore Run is approximately 0.21 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. Sycamore Run appears to drain east to Tree Creek, which drains to Pigeon Roost Creek, which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated Sycamore Run would be considered a jurisdictional water of the US.

Sycamore Run is conveyed through CV I65-072-26.20 (Sycamore Run CV) beneath I-65 which is a CMP culvert approximately 305-linear feet in length, 278-linear feet of which lies within the project area. This portion of the stream (Sycamore Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of Sycamore Run downstream of the Sycamore Run CV within the investigated area is 30-linear feet.

A HHEI was taken east of I-65 outside of the culvert's influence on the channel. The stream is moderately embedded with moderately stable banks. The stream had moderate in-stream cover, with some detritus substrates, leaf pack and woody debris, and sparse overhanging vegetation. The dominant substrate was artificial. The OHWM of Sycamore Run at the assessment location was 3.5 feet wide by 0.5 feet deep. Top-of-bank was 5 feet wide by 2 foot deep. Sycamore Run would be classified as R4SB2 using the Cowardin Classification System.

The overall HHEI score for the 150-foot sampled stream segment was 38. Sycamore Run would be considered a poor stream quality stream due to the instream features and lack of high quality substrate. Sycamore Run scored highest for Pool Depth (15/30) and Bankfull Width (15/30). However, the poor substrate quality may be a limiting factor to the quality of the stream.

3.2.26 UNT 1 to Sycamore Run

UNT 1 to Sycamore Run enters the investigated area 0.35 mile south of Leota Road. The stream flows east for 217 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 1 to Sycamore Run is approximately 0.01 square miles. UNT 1 to Sycamore is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT 1 to Sycamore Run is conveyed through an RCP maintenance pipe (UNT 1 to Sycamore Run CV) beneath I-65 which is approximately 183-linear feet in length. This portion of the stream (UNT 1 to Sycamore Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT 1 to Sycamore Run upstream and downstream of UNT 1 to Sycamore Run CV within the investigated area total 34-linear feet.

A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is concrete lined with moderate overhanging vegetation. The dominant substrate was artificial. The OHWM of UNT 1 to Sycamore Run at the assessment location was 1.5 feet wide by 0.2 feet deep. Top-of-bank was 2.9 feet wide by 1 feet deep. UNT 1 to Sycamore Run would be classified as RUB2 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 9. UNT 1 to Sycamore Run would be considered a poor stream due to presence of artificial substrate. UNT 1 to Sycamore Run scored highest for Bankfull Width (5/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.27 UNT 2 to Sycamore Run

UNT 2 to Sycamore Run enters the investigated area 0.22 mile south of Leota Road. The stream flows east for 214 linear feet before exiting the investigated area. The stream is depicted as an intermittent stream on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 2 to Sycamore Run is approximately 0.01 square miles. UNT 2 to Sycamore Run is solely fed by runoff from I-65. Based on the watershed size and surrounding landscape, the stream flow is anticipated to be ephemeral. The stream is not a County Legal Drain. The stream is ephemeral; therefore is anticipated to be non-jurisdictional.

UNT 2 to Sycamore Run is conveyed through an RCP maintenance pipe (UNT 2 to Sycamore Run CV) beneath I-65 which is approximately 164-linear feet in length. This portion of the stream (UNT 2 to Sycamore Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT 2 to

Sycamore Run upstream and downstream of UNT 2 to Sycamore Run CV within the investigated area total 50-linear feet.

A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded with unstable banks. The stream had moderate in-stream cover with moderate overhanging vegetation. The dominant substrate was sand. The OHWM of UNT 2 to Sycamore Run at the assessment location was 1.5 feet wide by 0.8 feet deep. Top-of-bank was 5.2 feet wide by 1.5 feet deep. UNT 2 to Sycamore Run would be classified as RUB2 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 17. UNT 2 to Sycamore Run would be considered a poor quality stream due to the lack of riparian surrounding the stream. UNT 2 to Sycamore Run scored highest for Substrate (12/40). However, the poor pool depth may be a limiting factor to the quality of the stream.

3.2.28 UNT 1 to Nest Run

UNT 1 to Nest Run enters the investigated area 0.26 mile north of Leota Road. The stream flows west for 34 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 1 to Nest Run is approximately 0.01 square miles. UNT 1 to Nest Run is solely fed by runoff from I-65. Therefore it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore it is anticipated to be non-jurisdictional.

UNT 1 to Nest Run is not crossed within the proposed project area and beings along the west side of I-65. A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded and sinuous. The banks were unstable with moderate overhanging vegetation and root wads. The dominant substrate was clay. The OHWM of UNT 1 to Nest Run at the assessment location was 7 feet wide by 2 feet deep. Top-of-bank was 16 feet wide by 7 feet deep. UNT 1 to Nest Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 51. UNT 1 to Nest Run would be considered an average quality stream due to moderate sinuosity and riparian buffer. UNT 1 to Nest Run scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.29 UNT 2 to Nest Run

UNT 2 to Nest Run enters the investigated area 0.22 mile north of Leota Road. The stream flows north for 277 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 2 to Nest Run is approximately 0.16 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic map. The stream is not a County Legal Drain. UNT 2 to Nest Run appears to drain north to Nest Run which drains to Tree Creek, which drains to Pigeon Roost Creek,

which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated UNT 2 to Nest Run would be considered a jurisdictional water of the US.

UNT 2 to Nest Run is conveyed through CV I65-072-26.95 (UNT 2 to Nest Run CV) beneath I-65 which is a CMP culvert approximately 277-linear feet in length, 271 linear feet of which lie within the project area. This portion of the stream (UNT 2 to Nest Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of UNT 2 to Nest Run downstream of the UNT 2 to Nest Run CV within the investigated area is 6-linear feet.

A HHEI was taken west of I-65 outside of the culvert's influence on the channel. The stream is highly embedded and sinuous. The banks were unstable. The stream had moderate in-stream cover, with undercut banks, woody debris, and moderate overhanging vegetation. The dominant substrate was sand. The OHWM of UNT 2 to Nest Run at the assessment location was 3 feet wide by 1.2 feet deep. Top-of-bank was 6 feet wide by 3 feet deep. UNT 2 to Nest Run would be classified as R4SB4 using the Cowardin Classification System.

The overall HHEI score for the 150-foot sampled stream segment was 44. UNT 2 to Nest Run would be considered an average quality stream due to moderate in-stream features and eroding banks. UNT 2 to Nest Run scored highest for Bankfull Width (20/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.30 UNT 3 to Nest Run

UNT 3 to Nest Run enters the investigated area 0.24 mile north of Leota Road. The stream flows north for 248 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 3 to Nest Run is approximately 0.01 square miles. UNT 3 to Nest Run is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT 3 to Nest Run is not crossed within the proposed project area and begins along the east side of I-65. A HHEI was taken east of I-65 outside of the maintenance pipe's influence on the channel. The stream is highly embedded and sinuous. The banks were stable. The stream had moderate in-stream cover, some woody debris, and moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 3 to Nest Run at the assessment location was 1.2 feet wide by 0.2 feet deep. Top-of-bank was 2.9 feet wide by 0.4 feet deep. UNT 3 to Nest Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 15. UNT 3 to Nest Run would be considered a poor quality stream due to high embeddedness and lack of high quality substrate. UNT 3 to Nest Run scored highest for Pool Depth (5/30) and Bankfull Width (5/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.31 Nest Run

Nest Run enters the investigated area 0.46 mile north of Leota Road. The stream flows east for 275 linear feet before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Nest Run is approximately 0.73 square miles. The flow regime appears to be intermittent as depicted on the USGS topographic mapping. The stream is not a County Legal Drain. Nest Run appears to drain east to Tree Creek which drains to Pigeon Roost Creek, which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated Nest Run would be considered a jurisdictional water of the US.

Nest Run is conveyed through CV I65-072-27.15 (Nest Run CV) beneath I-65 which is a CMP culvert approximately 225-linear feet in length. This portion of the stream (Nest Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of Nest Run upstream and downstream of Nest Run CV within the investigated area total 50-linear feet.

A HHEI was taken west of I-65 outside of the culvert's influence on the channel. The stream is moderately embedded and the banks are stable. The stream had moderate in-stream cover, some woody debris, and moderate overhanging vegetation. The dominant substrate was clay. The OHWM of Nest Run at the assessment location was 2 feet wide by 0.4 feet deep. Top-of-bank was 6 feet wide by 0.6 feet deep. Nest Run would be classified as R4SB5 using the Cowardin Classification System.

The overall HHEI score for the 150-foot sampled stream segment was 51. Nest Run would be considered an average quality stream due to the instream features and lack of high quality substrate. Nest Run scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.32 UNT 4 to Nest Run

UNT 4 to Nest Run enters the investigated area 0.75 mile north of Leota Road. The stream flows east for 249 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 4 to Nest Run is approximately 0.08 square miles. Based on the surrounding landscape, the stream flow of UNT 4 to Nest Run is anticipated to be intermittent. The stream is not a County Legal Drain. UNT 4 to Nest Run appears to drain east to Nest Run, which drains to Tree Creek, which drains to Pigeon Roost Creek, which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated UNT 4 to Nest Run would be considered a jurisdictional water of the US.

UNT 4 to Nest Run is conveyed through CV I65-072-27.45 (UNT 4 to Nest Run CV) beneath I-65 which is a polyvinyl chloride (PVC) culvert approximately 169-linear feet in length. This portion of the stream (UNT 4 to Nest Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT 4 to Nest Run upstream and downstream of UNT 4 to Nest Run CV within the investigated area total 80-linear feet.

A HHEI was taken west of I-65 outside of the culvert's influence on the channel. The stream is highly embedded with stable banks. The stream had moderate in-stream cover with some woody debris and

moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 4 to Nest Run at the assessment location was 2.5 feet wide by 0.5 feet deep. Top-of-bank was 5 feet wide by 1 feet deep. UNT 4 to Nest Run would be classified as R4SB5 using the Cowardin Classification System.

The overall HHEI score for the 150-foot sampled stream segment was 61. UNT 4 to Nest Run would be considered an average quality due to the moderate instream features and high embeddedness. UNT 4 to Nest Run scored highest for Pool Depth (30/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.33 Elm Branch

Elm Branch enters the investigated area 0.45 mile south of Lake Road. The stream flows east for 267 linear feet before exiting the investigated area. The stream is depicted as an intermittent stream on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Elm Branch is approximately 0.03 square miles. Elm Branch is fed by runoff from a pond west of I-65. Therefore, it is anticipated the stream flow would be intermittent. The stream is not a County Legal Drain. Elm Branch appears to drain east to Maple Run, which drains to Pigeon Roost Creek, which drains to Flat Creek, which drains to Stucker Ditch, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated Elm Branch would be considered a jurisdictional water of the US.

Elm Branch is conveyed through a CMP maintenance pipe (Elm Branch CV) beneath I-65 which is approximately 235-linear feet in length. This portion of the stream (Elm Branch CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of Elm Branch upstream and downstream of Elm Branch CV within the investigated area total 32-linear feet.

A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is highly embedded with stable banks. The stream had moderate in-stream cover with moderate overhanging vegetation. The dominant substrate was clay. The OHWM of Elm Branch at the assessment location was 1 foot wide by 0.5 feet deep. Top-of-bank was 2.6 feet wide by 1.2 feet deep. Elm Branch would be classified R4SB5 using the Cowardin Classification System.

The overall HHEI score for the 150-foot sampled stream segment was 25. Elm Branch would be considered a poor quality stream due to the embeddedness and absence of a riparian corridor. Elm Branch scored highest for Pool Depth (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.34 UNT to Elm Branch

UNT to Elm Branch enters the investigated area 0.25 mile south of Lake Road. The stream flows east for 242 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT to Elm Branch is approximately 0.01 square miles. Based on the watershed size and surrounding landscape, the stream flow of UNT to Elm Branch is anticipated to be ephemeral. The stream is not a County Legal Drain. The stream is ephemeral; therefore it is anticipated to be non-jurisdictional.

UNT to Elm Branch is conveyed through an RCP maintenance pipe (UNT to Elm Branch CV) beneath I-65 which is approximately 167-linear feet in length. This portion of the stream (UNT to Elm Branch CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT to Elm Branch upstream and downstream of UNT to Elm Branch CV within the investigated area total 75-linear feet.

A HHEI was taken west outside of I-65 outside of the maintenance pipe's influence on the channel. The stream is embedded and sinuous. The banks were stable. The stream had moderate in-stream cover, some woody debris, and moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT to Elm Branch at the assessment location was 1.2 feet wide by 0.4 feet deep. Top-of-bank was 2.3 feet wide by 1 foot deep. UNT to Elm Branch would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 21. UNT to Elm Branch would be considered a poor stream due to moderate instream features and high embeddedness. UNT to Elm Branch scored highest for Substrate (11/40). However, the minimal pool depth and bankfull width may be limiting factors to the quality of the stream.

3.2.35 UNT 1 to Honey Run

UNT 1 to Honey Run enters the investigated area 0.47 mile north of Lake Road. The stream flows west for 29 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 1 to Honey Run is approximately 0.01 square miles. UNT 1 to Honey Run is solely fed by runoff from I-65. Based on the watershed size, the stream flow is anticipated to be ephemeral. The stream is not a County Legal Drain. The stream is ephemeral; therefore is anticipated to be non-jurisdictional.

UNT 1 to Honey Run is not crossed within the proposed project area and begins along the west side of I-65. A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded and sinuous. The banks were moderately stable. The stream had sparse overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 1 to Honey Run at the assessment location was 1.8 feet wide by 0.6 feet deep. Top-of-bank was 2.6 feet wide by 1 foot deep. UNT 1 to Honey Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 32. UNT 1 to Honey Run would be considered a poor quality stream due to the embeddedness and absence of a riparian corridor. UNT 1 to Honey Run scored highest for Pool Depth (15/30). However, the poor bankfull width may be a limiting factor to the quality of the stream.

3.2.36 UNT 2 to Honey Run

UNT 2 to Honey Run enters the investigated area 0.25 mile south of the I-65 and SR 56 overpass. The stream flows west for 244 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 2 to Honey Run is approximately 0.05 square miles. UNT 2 to Honey Run appears to be backwatered by Honey Run. Therefore, the stream flow is anticipated to be intermittent. The stream is not

a County Legal Drain. UNT 2 to Honey Run appears to drain west to Honey Run, which drains to Big Ox Creek, which drains to Muscatatuck River, a TNW. Therefore, it is anticipated UNT 2 to Honey Run would be considered a jurisdictional water of the US.

UNT 2 to Honey Run is conveyed through an RCP maintenance pipe (UNT 2 to Honey Run CV) beneath I-65 which is approximately 269-linear feet in length, 224-linear feet of which lie within the project area. This portion of the stream (UNT 2 to Honey Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of UNT 2 to Honey Run downstream of UNT 2 to Honey Run CV within the investigated area is 20-linear feet.

The stream is moderately embedded with unstable banks. The stream had moderate in-stream cover, with undercut banks, and some woody debris. The dominant substrate was clay. The OHWM of UNT 2 to Honey Run at the assessment location was 7.5 feet wide by 2.7 feet deep. Top-of-bank was 8.2 feet wide by 3.3 feet deep. UNT 2 to Honey Run would be classified as R4SB5 using the Cowardin Classification System.

The overall HHEI score for the 40-foot sampled stream segment was 58. UNT 2 to Honey Run would be considered an average stream due to the instream features and lack of high quality substrate. UNT 2 to Honey Run scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.37 UNT 3 to Honey Run

UNT 3 to Honey Run enters the investigated area 0.02 mile south of the I-65 and SR 56 overpass. The stream flows west for 54 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 3 to Honey Run is approximately 0.01 square miles. UNT 3 to Honey Run is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore it is anticipated to be non-jurisdictional.

UNT 3 to Honey Run is not crossed within the proposed project area and begins along the west side of I-65. A HHEI was taken west of I-65. The stream is highly embedded with stable banks. The stream had moderate in-stream cover with some woody debris and moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 3 to Honey Run at the assessment location was 2 feet wide by 0.5 feet deep. Top-of-bank was 3 feet wide by 1.2 feet deep. UNT 3 to Honey Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 120-foot sampled stream segment was 10. UNT 3 to Honey Run would be considered a poor stream due to lack of high quality substrate. UNT 3 to Honey Run scored highest for Bankfull Width (5/30). However, the poor pool depth (no water or moist channel) may be a limiting factor to the quality of the stream.

3.2.38 UNT 4 to Honey Run

UNT 4 to Honey Run enters the investigated area 0.11 mile north of the I-65 and SR 56 overpass. The stream flows southwest for 201 linear feet before exiting the investigated area. The stream is not depicted on the

USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 4 to Honey Run is approximately 0.07 square miles. UNT 4 to Honey Run is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore it is anticipated to be non-jurisdictional.

UNT 4 to Honey Run is not crossed within the proposed project area and begins along the west side of I-65. A HHEI was taken west of I-65. The stream is highly embedded and moderately sinuous. The banks were moderately stable. The stream had moderate in-stream cover with undercut banks, some woody debris, and moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 4 to Honey Run at the assessment location was 3 feet wide by 0.4 feet deep. Top-of-bank was 4 feet wide by 1 foot deep. UNT 4 to Honey Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 45. UNT 4 to Honey Run would be considered an average quality stream due to moderate instream cover and high embeddedness. UNT 4 to Honey Run scored highest for Pool Depth (25/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.39 UNT 5 to Honey Run

UNT 5 to Honey Run enters the investigated area 0.36 mile north of the I-65 and SR 56 overpass. The stream flows west for 19 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 5 to Honey Run is approximately 0.07 square miles. UNT 5 to Honey Run is solely fed by runoff from I-65. Based on the watershed size, the stream flow is anticipated to be ephemeral. The stream is not a County Legal Drain. The stream is ephemeral; therefore is anticipated to be non-jurisdictional.

UNT 5 to Honey Run is not crossed within the proposed project area and beings along the west side of I-65. A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is highly embedded and moderately sinuous. The stream is poorly developed with unstable banks. The stream had moderate in-stream cover with moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 5 to Honey Run at the assessment location was 3 feet wide by 0.6 feet deep. Top-of-bank was 4 feet wide by 1 feet deep. UNT 5 to Honey Run would be classified as RUB3 the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 200-foot sampled stream segment was 51. UNT 5 to Honey Run would be considered an average quality stream due to the lack of development and poor stability. UNT 5 to Honey Run scored highest for Pool Depth (30/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.40 UNT 6 to Honey Run

UNT 6 to Honey Run enters the investigated area 0.61 mile north of the I-65 and SR 56 overpass. The stream flows west for 232 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage

area of UNT 6 to Honey Run is approximately 0.05 square miles. UNT 6 to Honey Run is solely fed by runoff from I-65. Based on the watershed size and surrounding landscape, the stream flow is anticipated to be ephemeral. The stream is not a County Legal Drain. The stream is ephemeral; therefore is anticipated to be non-jurisdictional.

UNT 6 to Honey Run is conveyed through a maintenance pipe (UNT 6 to Honey Run CV) beneath I-65 which is approximately 182-linear feet in length. This portion of the stream (UNT 6 to Honey Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT 6 to Honey Run upstream and downstream of UNT 6 to Honey Run CV within the investigated area total 51-linear feet.

A HHEI was taken east of I-65. The stream is highly embedded and moderately sinuous. The stream is poorly developed with unstable banks. The stream had moderate in-stream cover, some woody debris, and moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 6 to Honey Run at the assessment location was 1.5 feet wide by 0.4 foot deep. Top-of-bank was 3 feet wide by 1 feet deep. UNT 6 to Honey Run would be classified RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 200-foot sampled stream segment was 25. UNT 6 to Honey Run would be considered a poor quality stream due to the lack of development and high quality substrate. UNT 6 to Honey Run scored highest for Pool Depth (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.41 UNT 7 to Honey Run

UNT 7 to Honey Run enters the investigated area 0.70 mile north of the I-65 and SR 56 overpass. The stream flows southwest for 258 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 7 to Honey Run is approximately 0.01 square miles. UNT 7 to Honey Run is solely fed by runoff from I-65. Based on the watershed size, the stream flow is anticipated to be ephemeral. The stream is not a County Legal Drain. The stream is ephemeral; therefore is anticipated to be non-jurisdictional.

UNT 7 to Honey Run is conveyed through an RCP maintenance pipe (UNT 7 to Honey Run CV) beneath I-65 which is approximately 170-linear feet in length. This portion of the stream (UNT 7 to Honey Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portions of UNT 7 to Honey Run upstream and downstream of UNT 7 to Honey Run CV within the investigated area total 88-linear feet.

A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is moderately embedded and sinuous. The banks were stable. The stream had moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 7 to Honey Run at the assessment location was 3 feet wide by 0.4 feet deep. Top-of-bank was 3.6 feet wide by 1.2 feet deep. UNT 7 to Honey Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 42. UNT 7 to Honey Run would be considered an average quality stream due to lack of instream features. UNT 7 to Honey Run scored highest for Pool Depth (15/30) and Bankfull Width (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.42 UNT 8 to Honey Run

UNT 8 to Honey Run enters the investigated area 0.71 mile south of Moonglo Road. The stream flows west for 14 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 8 to Honey Run is approximately 0.01 square miles. UNT 8 to Honey Run is solely fed by runoff from I-65. Therefore, it is anticipated to be an ephemeral stream. The stream is not a County Legal Drain. The stream is ephemeral; therefore, it is anticipated to be non-jurisdictional.

UNT 8 to Honey Run is not crossed within the proposed project area and begins along the west side of I-65. A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is highly embedded and moderately sinuous. The stream is poorly developed with unstable banks. The stream had moderate in-stream cover with moderate overhanging vegetation. The dominant substrate was clay. The OHWM of UNT 8 to Honey Run at the assessment location was 3 feet wide by 0.8 feet deep. Top-of-bank was 4 feet wide by 1 feet deep. UNT 8 to Honey Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 100-foot sampled stream segment was 35. UNT 8 to Honey Run would be considered a poor quality stream due to the lack of development and poor stability. UNT 8 to Honey Run scored highest for Pool Depth (15/30) and Bankfull Width (15/30). However, the poor substrate may be a limiting factor to the quality of the stream.

3.2.43 UNT 9 to Honey Run

UNT 9 to Honey Run enters the investigated area 0.17 mile south of Moonglo Road. The stream flows southwest for 202 linear feet before exiting the investigated area. The stream is not depicted on the USGS topographic map. Stream Stats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of UNT 9 to Honey Run is approximately 0.04 square miles. The flow regime appears to be ephemeral. The stream is not a County Legal Drain. The stream is ephemeral; therefore it is anticipated to be non-jurisdictional.

UNT 9 to Honey Run is conveyed through an RCP maintenance pipe (UNT 9 to Honey Run CV) beneath I-65 which is approximately 183-linear feet in length; 180-linear feet of which lie within the project area. This portion of the stream (UNT 9 to Honey Run CV) is anticipated to be considered an artificial drainage feature and non-jurisdictional. The portion of UNT 9 to Honey Run downstream of UNT 9 to Honey Run CV within the investigated area is 22-linear feet.

A HHEI was taken west of I-65 outside of the maintenance pipe's influence on the channel. The stream is highly embedded and the banks were poorly developed and not well defined. The stream had moderate in-stream cover with some woody debris and moderate overhanging vegetation. The dominant substrate was

clay. The OHWM of UNT 9 to Honey Run at the assessment location was 1.8 feet wide by 0.6 feet deep. Top-of-bank was 2.3 feet wide by 0.9 feet deep. UNT 9 to Honey Run would be classified as RUB3 using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

The overall HHEI score for the 150-foot sampled stream segment was 11. UNT 9 to Honey Run would be considered a poor quality stream due to lack of high quality substrate and no water. UNT 9 to Honey Run scored highest for Bankfull Width (5/30). However, the poor substrate and no water may be a limiting factor to the quality of the stream.

3.3 Other Features (Erosional Feature/Roadside Ditch/Ravine Draw, etc.)

Erosional Feature 1 was noted as a gully at a culvert outlet along the northbound lanes of I-65. The feature is located approximately 0.05 mile south of Liberty Knob Road and extends east within the investigated area for approximately 39 feet before extending east beyond the investigated area and state owned right-of-way. This feature lacked the hydrophytic vegetation to be determined a wetland. This feature lacked a defined bed and bank and lacked a continuous OHWM. This feature is not presumed to be a jurisdictional water of the US.

Surface drainage systems (constructed roadside ditches) are present along both sides of I-65 and within the median throughout the investigated area. Unless otherwise noted the roadside ditches were inspected and were determined to not exhibit defined bed and bank or a continuous OHWM.

3.4 Non-Wetland Data Points

DP 39 was taken to characterize the area around Wheel Run due to the presence of hydrophytic vegetation. DP 39 is located along the southbound lanes of I-65 approximately 1 mile north of Brownstown Road. DP 39 possessed the hydrophytic vegetation and wetland hydrology but lacked the hydric soils to be determined a wetland. For reference to field data collected for DP 39, see Appendix B.

DP 113 was taken due to the presence of hydrophytic vegetation located approximately 0.16 mile north of Liberty Knob Road. DP 113 possessed the hydrophytic vegetation and hydrology but lacked the hydric soil to be determined a wetland. Heavy rains occurred the night prior which contributed to the hydrology indicators. For reference to field data collected for DP 113, see Appendix B.

4.0 Conclusions

A total of 109 wetlands (Wetlands 1, 2, 3.1, 3.2, 4-20, 21.1, 21.2, 22-40, 41.1, 41.2, 42– 106) totaling approximately 7.69 acres and 43 streams (for stream names, see the Aquatic Resources Summary: Streams Table in Appendix A) totaling 11,703 linear feet (1.581 acres) were identified within the investigated area. Wetlands 2, 3.1, 3.2, 9, 12, 21.1, 21.2, 26, 32, 40, 65, 68-69, 74, 76, 78, 86, 89, and 105 as well as 24 of the streams (for jurisdictional information, see the Aquatic Resources Summary: Streams Table in Appendix A) appear to have a hydrologic connection to a Traditional Navigable Waterway (TNW). Therefore, these wetlands and streams are anticipated to be considered jurisdictional waters of the US.

Wetlands 1, 4-8, 10, 11, 13-20, 22-25, 27-31, 33-39, 41.1, 41.2, 42- 64, 66-67, 70-73, 75, 77, 79-85, 87-88, 90-104, and 106 do not abut jurisdictional waters of the US and are not flooded within a typical year. Therefore, these features are anticipated to be considered jurisdictional waters of the State.

Nineteen of the streams were determined to be ephemeral streams. Additionally, culverts and maintenance pipes associated with intermittent and perennial streams within the project area are anticipated to be considered artificial drainage features (for jurisdictional information, see the Aquatic Resources Summary: Streams Table in Appendix A). Therefore, these resources are anticipated to be non-jurisdictional.

All jurisdictional waters of the US are under the regulatory authority of the USACE under Section 404 of the Clean Water Act. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgment based on the guidelines set forth by the USACE.

5.0 Acknowledgement

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience and professional judgement in conformance with the 1987 *Corps of Engineers Wetlands Delineation Manual*, the appropriate regional supplement, the USACE *Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines.

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Appendix A - Aquatic Resource Summary Tables

Table 1 – Data Points Summary

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
1	1-5	38.498392/ -85.771298	Wetland 1	Yes	Yes	Yes	Yes
2	6-9	38.498593/ -85.771192	Upland of Wetland 1	No	Yes	No	No
3	29-32	38.504271/ -85.771291	Wetland 2	Yes	Yes	Yes	Yes
4	25-28	38.504276/ -85.771305	Upland of Wetland 2	Yes	No	No	No
5	58-61	38.515182/ -85.772752	Wetland 3.1	Yes	Yes	Yes	Yes
6	62-65	38.515188/ -85.772821	Upland of Wetland 3.1	No	Yes	No	No
7	68-71	38.517445/ -85.772993	Wetland 3.2	Yes	Yes	Yes	Yes
8	72-75	38.517562/ -85.773012	Upland of Wetland 3.2	No	Yes	No	No
9	80-83	38.518422/ -85.773218	Wetland 4	Yes	Yes	Yes	Yes
10	76-79	38.518357/ -85.773105	Upland of Wetland 4	Yes	Yes	No	No
11	111-114	38.529729/ -85.774781	Wetland 5	Yes	Yes	Yes	Yes
12	107-110	38.529645/ -85.774789	Upland of Wetland 5	No	No	No	No
13	133-136	38.533604/ -85.775981	Wetland 6	Yes	Yes	Yes	Yes
14	129-132	38.533642/ -85.775985	Upland of Wetland 6	Yes	Yes	No	No
15	142-145	38.537332/ -85.777254	Wetland 7	Yes	Yes	Yes	Yes

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
16	146-149	38.537336/ -85.777226	Upland of Wetland 7	No	No	No	No
17	162-165	38.539185/ -85.777766	Wetland 8	Yes	Yes	Yes	Yes
18	158-161	38.539174/ -85.777848	Upland of Wetland 8	Yes	No	No	No
19	211-214	38.553063/ -85.779240	Wetland 9	Yes	Yes	Yes	Yes
20	215-218	38.553039/ -85.779220	Upland of Wetland 9	No	Yes	No	No
21	232-235	38.558055/ -85.779132	Wetland 10	Yes	Yes	Yes	Yes
22	228-231	38.558038/ -85.779156	Upland of Wetland 10	No	No	No	No
23	237-241	38.559363/ -85.779061	Wetland 11	Yes	Yes	Yes	Yes
24	242-245	38.559409/ -85.779136	Upland of Wetland 11	No	No	No	No
25	265-268	38.568026/ -85.779328	Wetland 12	Yes	Yes	Yes	Yes
26	262-264	38.568030/ -85.779368	Upland of Wetland 12	No	No	No	No
27	274-277	38.570235/ -85.779327	Wetland 13	Yes	Yes	Yes	Yes
28	278-281	38.570125/ -85.779211	Upland of Wetland 13	No	No	No	No
29	282-285	38.570336/ -85.779260	Wetland 14	Yes	Yes	Yes	Yes
30	286-289	38.570346/ -85.779320	Upland of Wetland 14	No	No	No	No
31	290-293	38.570200/ -85.778988	Wetland 15	Yes	Yes	Yes	Yes
32	294-297	38.570141/ -85.778826	Upland of Wetland 15	No	No	No	No

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
33	299-302	38.571342/ -85.779111	Wetland 16	Yes	Yes	Yes	Yes
34	303-305, 307	38.571265/ -85.779113	Upland of Wetland 16	Yes	No	No	No
35	311-314	38.578878/ -85.779223	Wetland 17	Yes	Yes	Yes	Yes
36	315-318	38.578846/ -85.779201	Upland of Wetland 17	Yes	Yes	No	No
37	321-324	38.581797/ -85.779132	Wetland 18	Yes	Yes	Yes	Yes
38	325-328	38.581782/ -85.779123	Upland of Wetland 18	Yes	Yes	No	No
39	333-336	38.584093/ -85.779251	N/A	Yes	No	Yes	No
40	339-342	38.586092/ -85.779169	Wetland 19	Yes	Yes	Yes	Yes
41	343-346	38.585984/ -85.779198	Upland of Wetland 19	No	Yes	No	No
42	353-356	38.588405/ -85.779223	Wetland 20	Yes	Yes	Yes	Yes
43	357-360	38.588399/ -85.779216	Upland of Wetland 20	No	Yes	No	No
44	366-369	38.590239/ -85.779262	Wetland 21.2	Yes	Yes	Yes	Yes
45	370-373	38.590278/ -85.779264	Wetland 21.1	Yes	Yes	Yes	Yes
46	374-377	38.590256/ -85.779226	Upland of Wetland 21.1 and 21.2	No	Yes	No	No
47	379-382	38.591848/ -85.779098	Wetland 22	Yes	Yes	Yes	Yes
48	383-386	38.591803/ -85.779106	Upland of Wetland 22	No	Yes	No	No
49	391-394	38.595436/ -85.779430	Wetland 23	Yes	Yes	Yes	Yes

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
50	395-398	38.595761/ -85.779479	Upland of Wetland 23 and Wetland 24	No	No	No	No
51	399-402	38.595994/ -85.779467	Wetland 24	Yes	Yes	Yes	Yes
52	404-407	38.597891/ -85.780009	Wetland 25	Yes	Yes	Yes	Yes
53	408-411	38.597901/ -85.780056	Upland of Wetland 25	No	No	No	No
54	429-432	38.619253/ -85.783025	Wetland 26	Yes	Yes	Yes	Yes
55	433-436	38.619250/ -85.783011	Upland of Wetland 26	No	No	No	No
56	439-442	38.620910/ -85.783647	Wetland 27	Yes	Yes	Yes	Yes
57	443-446	38.620921/ -85.783669	Upland of Wetland 27	No	Yes	No	No
58	455-458	38.632848/ -85.784261	Wetland 28	Yes	Yes	Yes	Yes
59	459-462	38.632842/ -85.784242	Upland of Wetland 28	Yes	No	No	No
60	464-467	38.635077/ -85.784231	Wetland 29	Yes	Yes	Yes	Yes
61	468-471	38.635001/ -85.784210	Upland of Wetland 29	No	Yes	No	No
62	508-511	38.658847/ -85.783421	Wetland 30	Yes	Yes	Yes	Yes
63	512-515	38.658870/ -85.783454	Upland of Wetland 30	No	No	No	No
64	519-522	38.662329/ -85.782779	Wetland 31	Yes	Yes	Yes	Yes
65	523-526	38.662314/ -85.782824	Upland 31	No	Yes	No	No

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
66	533-536	38.664804/ -85.782685	Wetland 32	Yes	Yes	Yes	Yes
67	537-540	38.664825/ -85.782699	Upland 32	Yes	No	No	No
68	561-564	38.676307/ -85.786569	Wetland 33	Yes	Yes	Yes	Yes
69	565-568	38.676341/ -85.786703	Upland 33	No	No	No	No
70	578-581	38.677799/ -85.787207	Wetland 34	Yes	Yes	Yes	Yes
71	574-577	38.677733/ -85.787149	Upland 34	No	No	No	No
72	603-606	38.684182/ -85.788333	Wetland 35	Yes	Yes	Yes	Yes
73	599-602	38.684027/ -85.788386	Upland 35	No	No	No	No
74	612-615	38.684666/ -85.788408	Wetland 36	Yes	Yes	Yes	Yes
75	627-630	38.685004/ -85.788833	Wetland 36	Yes	Yes	Yes	Yes
76	631-634	38.685069/ -85.788897	Upland 36	No	No	No	No
77	658-661	38.686059/ -85.788855	Wetland 37	Yes	Yes	Yes	Yes
78	654-657	38.686026/ -85.788538	Upland 37	No	No	No	No
79	671-674	38.686860/ -85.788545	Wetland 38	Yes	Yes	Yes	Yes
80	666-669	38.686809/ -85.789134	Upland 38	Yes	No	Yes	No
81	685-688	38.687431/ -85.789108	Wetland 39	Yes	Yes	Yes	Yes
82	691-694	38.687715/ -85.788960	Upland 39	No	No	No	No

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
83	701-705	38.688923/ -85.788701	Wetland 40	Yes	Yes	Yes	Yes
84	696-699	38.688878/ -85.788690	Upland 40	No	No	No	No
85	721-724	38.691744/ -85.788914	Wetland 41.1	Yes	Yes	Yes	Yes
86	718-720	38.691743/ -85.788929	Upland 41.1	No	Yes	No	No
87	731-734	38.694180/ -85.789188	Upland 41.1	No	Yes	No	No
88	737-741	38.695503/ -85.789448	Wetland 41.2	Yes	Yes	Yes	Yes
89	742-745	38.695520/ -85.789436	Upland 41.2	No	No	No	No
90	753-757	38.695939/ -85.789570	Wetland 42	Yes	Yes	Yes	Yes
91	749-752	38.695927/ -85.789536	Upland 42	No	Yes	No	No
92	758-762	38.696090/ -85.789590	Upland 42	Yes	No	Yes	No
93	764-768	38.696502/ -85.789692	Wetland 42	Yes	Yes	Yes	Yes
94	773-776	38.697590/ -85.790018	Wetland 43	Yes	Yes	Yes	Yes
95	778-781	38.698213/ -85.790200	Upland 43	Yes	Yes	No	No
96	783-786	38.698713/ -85.790330	Wetland 43	Yes	Yes	Yes	Yes
97	795-798	38.699720/ -85.790795	Wetland 44	Yes	Yes	Yes	Yes
98	790-793	38.699666/ -85.790726	Upland 44	Yes	No	No	No
99	818-821	38.710021/ -85.796183	Wetland 45	Yes	Yes	Yes	Yes

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
100	822-825	38.710009/ -85.796158	Upland of Wetland 45	No	No	No	No
101	840-843	38.695290/ -85.789100	Wetland 46	Yes	Yes	Yes	Yes
102	844-847	38.695263/ -85.789103	Upland of Wetland 46	No	No	No	No
103	857-860	38.678009/ -85.786984	Wetland 47	Yes	Yes	Yes	Yes
104	861-864	38.678065/ -85.786989	Upland of Wetland 47	No	No	No	No
105	871-874	38.672846/ -85.784387	Wetland 48	Yes	Yes	Yes	Yes
106	875-878	38.672856/ -85.784436	Upland of Wetland 48	No	No	No	No
107	895-898	38.646514/ -85.783711	Wetland 49	Yes	Yes	Yes	Yes
108	899-902	38.646481/ -85.783721	Upland of Wetland 49	No	Yes	No	No
109	908-911	38.640970/ -85.783795	Wetland 50	Yes	Yes	Yes	Yes
110	912-915	38.640964/ -85.783770	Upland of Wetland 50	No	No	No	No
111	919-922	38.634106/ -85.783910	Wetland 51	Yes	Yes	Yes	Yes
112	923-926	38.634107/ -85.783882	Upland of Wetland 51	No	No	No	No
113	938-941	38.607363/ -85.781468	N/A	Yes	No	Yes	No
114	954-957	38.590497/ -85.778843	Wetland 52	Yes	Yes	Yes	Yes
115	958-961	38.590552/ -85.778835	Upland of Wetland 52	No	No	No	No
116	962-965	38.588446/ -85.778819	Wetland 53	Yes	Yes	Yes	Yes

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
117	966-969	38.588402/ -85.778850	Upland of Wetland 53	No	Yes	No	No
118	970-973	38.584979/ -85.778796	Wetland 54	Yes	Yes	Yes	Yes
119	974-977	38.584973/ -85.778774	Upland of Wetland 54	No	No	No	No
120	978-981	38.583897/ -85.778808	Wetland 55	Yes	Yes	Yes	Yes
121	982-985	38.583893/ -85.778793	Upland of Wetland 55	No	No	No	No
122	992-995	38.578010/ -85.778818	Wetland 56	Yes	Yes	Yes	Yes
123	988-991	38.578107/ -85.778858	Upland of Wetland 56	No	Yes	No	No
124	999-1003	38.574300/ -85.778825	Wetland 57	Yes	Yes	Yes	Yes
125	1004-1007	38.574401/ -85.778746	Upland of Wetland 57	No	No	No	No
126	1021-1024	38.561301/ -85.778811	Wetland 58	Yes	Yes	Yes	Yes
127	1017-1020	38.561341/ -85.778830	Upland of Wetland 58	No	No	No	No
128	1025-1028	38.559511/ -85.778815	Wetland 59	Yes	Yes	Yes	Yes
129	1029-1032	38.559484/ -85.778834	Upland of Wetland 59	Yes	Yes	No	No
130	1037-1040	38.550145/ -85.778842	Wetland 60	Yes	Yes	Yes	Yes
131	1042-1045	38.550080/ -85.778800	Upland 60	No	No	No	No
132	1053-1056	38.542771/ -85.778094	Wetland 61	Yes	Yes	Yes	Yes
133	1057-1060	38.542645/ -85.778064	Upland 61	No	Yes	No	No

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
134	1063-1066	38.535331/ -85.776244	Wetland 62	Yes	Yes	Yes	Yes
135	1067-1070	38.535320/ -85.776273	Upland of Wetland 62	No	Yes	No	No
136	1097-1100	38.498291/ -85.770708	Wetland 63	Yes	Yes	Yes	Yes
137	1093-1096	38.498194/ -85.770643	Upland of Wetland 63	No	Yes	No	No
138	1120-1123	38.512349/ -85.771733	Wetland 64	Yes	Yes	Yes	Yes
139	1124-1127	38.512413/ -85.771740	Upland of Wetland 64	No	No	No	No
140	1135-1138	38.514395/ -85.771920	Wetland 65	Yes	Yes	Yes	Yes
141	1131-1134	38.514314/ -85.771854	Upland of Wetland 65	No	No	No	No
142	1143-1146	38.515858/ -85.772204	Wetland 66	Yes	Yes	Yes	Yes
143	1147-1150	38.515832/ -85.772120	Upland of Wetland 66	Yes	No	No	No
144	1158-1161	38.519114/ -85.772651	Wetland 67	Yes	Yes	Yes	Yes
145	1162-1165	38.519272/ -85.772639	Upland of Wetland 67	No	No	No	No
146	1177-1180	38.524444/ -85.773362	Wetland 68	Yes	Yes	Yes	Yes
147	1173-1176	38.524446/ -85.773333	Upland of Wetland 68	No	Yes	No	No
148	1196-1199	38.512349/ -85.771733	Wetland 69	Yes	Yes	Yes	Yes
149	1192-1195	38.529554/ -85.774080	Upland of Wetland 69	No	No	No	No
150	1211-1214	38.533129/ -85.775213	Wetland 70	Yes	Yes	Yes	Yes

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
151	1215-1218	38.533140/ -85.775233	Upland of Wetland 70	No	No	No	No
152	1233-1236	38.539715/ -85.777204	Wetland 71	Yes	Yes	Yes	Yes
153	1237-1240	38.539742/ -85.777067	Upland of Wetland 71	No	No	No	No
154	1251-1254	38.543700/ -85.777887	Wetland 72	Yes	Yes	Yes	Yes
155	1255-1258	38.543771/ -85.777844	Upland of Wetland 72	Yes	No	No	No
156	1267-1270	38.546757/ -85.778369	Wetland 73	Yes	Yes	Yes	Yes
157	1271-1274	38.546775/ -85.778401	Upland of Wetland 73	No	No	No	No
158	1318-1321	38.563630/ -85.778359	Wetland 74	Yes	Yes	Yes	Yes
159	1314-1317	38.563629/ -85.778284	Upland of Wetland 74	No	No	No	No
160	1328-1331	38.566841/ -85.778580	Wetland 75	Yes	Yes	Yes	Yes
161	1332-1335	38.567018/ -85.778578	Upland of Wetland 75	No	No	No	No
162	1339-1342	38.567920/ -85.778294	Wetland 76	Yes	Yes	Yes	Yes
163	1343-1346	38.568051/ -85.778320	Upland of Wetland 76	No	Yes	No	No
164	1353-1356	38.569832/ -85.778236	Wetland 77	Yes	Yes	Yes	Yes
165	1357-1360	38.569806/ -85.778186	Upland of Wetland 77	No	Yes	No	No
166	1373-1376	38.583775/ -85.778373	Wetland 78	Yes	Yes	Yes	Yes
167	1377-1380	38.583792/ -85.778317	Upland of Wetland 78	No	No	No	No

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
168	1386-1389	38.587513/ -85.778515	Wetland 79	Yes	Yes	Yes	Yes
169	1390-1393	38.587578/ -85.778512	Upland of Wetland 79	No	No	No	No
170	1397-1400	38.590209/ -85.778419	Wetland 80	Yes	Yes	Yes	Yes
171	1401-1404	38.590257/ -85.778399	Upland of Wetland 80	Yes	No	No	No
172	1407-1410	38.592589/ -85.778530	Wetland 81	Yes	Yes	Yes	Yes
173	1411-1414	38.592633/ -85.778532	Upland of Wetland 81	No	Yes	No	No
174	1420-1423	38.603902/ -85.781065	Wetland 82	Yes	Yes	Yes	Yes
175	1424-1427	38.604094/ -85.781089	Upland of Wetland 82	No	Yes	No	No
176	1429-1432	38.604446/ -85.781118	Wetland 83	Yes	Yes	Yes	Yes
177	1433-1436	38.604392/ -85.781114	Upland of Wetland 83	No	Yes	No	No
178	1441-1444	38.605519/ -85.781237	Wetland 84	Yes	Yes	Yes	Yes
179	1445-1448	38.605776/ -85.781234	Upland of Wetland 84	No	Yes	No	No
180	1450-1453	38.608615/ -85.781168	Wetland 85	Yes	Yes	Yes	Yes
181	1454-1457	38.608516/ -85.781172	Upland of Wetland 85	No	Yes	No	No
182	1459-1462	38.609968/ -85.781085	Wetland 86	Yes	Yes	Yes	Yes
183	1463-1466	38.610116/ -85.781117	Upland of Wetland 86	No	No	No	No
184	1467-1470	38.610847/ -85.781176	Wetland 87	Yes	Yes	Yes	Yes
185	1471-1474	38.610885/ -85.781182	Upland of Wetland 87	Yes	No	No	No

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
186	1476-1480	38.615330/ -85.781301	Wetland 88	Yes	Yes	Yes	Yes
187	1481-1484	38.615332/ -85.781282	Upland of Wetland 88	Yes	No	No	No
188	1491-1494	38.618001/ -85.781924	Wetland 89	Yes	Yes	Yes	Yes
189	1495-1498	38.618000/ -85.781959	Upland of Wetland 89	No	No	No	No
190	1508-1511	38.620837/ -85.782956	Wetland 90	Yes	Yes	Yes	Yes
191	1504-1507	38.620661/ -85.782895	Upland of Wetland 90	No	Yes	No	No
192	1516-1519	38.622548/ -85.783524	Wetland 91	Yes	Yes	Yes	Yes
193	1512-1515	38.622400/ -85.783494	Upland of Wetland 91	No	Yes	No	No
194	1550-1553	38.646998/ -85.783436	Wetland 92	Yes	Yes	Yes	Yes
195	1554-1557	38.647017/ -85.783372	Upland 92	No	No	No	No
196	1562-1565	38.650177/ -85.783395	Wetland 93	Yes	Yes	Yes	Yes
197	1566-1569	38.650163/ -85.783360	Upland 93	No	No	No	No
198	1588-1591	38.656683/ -85.783158	Wetland 94	Yes	Yes	Yes	Yes
199	1592-1595	38.656682/ -85.783129	Upland 94	No	No	No	No
200	1601-1604	38.660811/ -85.782422	Wetland 95	Yes	Yes	Yes	Yes
201	1605-1608	38.660805/ -85.782445	Upland 95	No	No	No	No
202	1610-1613	38.661648/ -85.782276	Wetland 95	Yes	Yes	Yes	Yes

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
203	1614-1617	38.661848/ -85.782244	Upland 95	No	No	No	No
204	1621-1624	38.664776/ -85.782002	Wetland 96	Yes	Yes	Yes	Yes
205	1625-1628	38.664823/ -85.782054	Upland 96	No	No	No	No
206	1630-1632	38.665375/ -85.782036	Wetland 97	Yes	Yes	Yes	Yes
207	1633-1636	38.665476/ -85.782115	Upland 97	No	No	No	No
208	1650-1653	38.671645/ -85.783567	Wetland 98	Yes	Yes	Yes	Yes
209	1654-1657	38.671633/ -85.783537	Upland 98	No	No	No	No
210	1665-1668	38.679604/ -85.787109	Wetland 99	Yes	Yes	Yes	Yes
211	1669-1672	38.679615/ -85.787064	Upland 99	No	No	No	No
212	1678-1681	38.682284/ -85.787433	Wetland 100	Yes	Yes	Yes	Yes
213	1683-1686	38.682529/ -85.787463	Upland 100	Yes	Yes	No	No
214	1690-1693	38.683987/ -85.787102	Wetland 100	Yes	Yes	Yes	Yes
215	1694-1697	38.683961/ -85.787018	Upland 100	No	No	No	No
216	1707-1710	38.683453/ -85.787599	Wetland 101	Yes	Yes	Yes	Yes
217	1711-1714	38.683618/ -85.787628	Upland 101	Yes	No	No	No
218	1744-1747	38.686133/ -85.787698	Wetland 102	Yes	Yes	Yes	Yes
219	1740-1743	38.686062/ -85.787552	Upland 102	Yes	No	No	No

Data Points Summary							
Data Point	**Photos**	**Lat/ Long**	**Water Resource**	**Hydrophytic Vegetation**	**Hydric Soils**	**Wetland Hydrology**	**Within a Wetland**
220	1728-1730	38.686817/ -85.787408	Wetland 103	Yes	Yes	Yes	Yes
221	1731-1734	38.686812/ -85.787430	Upland 103	No	No	No	No
222	1758-1761	38.691721/ -85.788358	Wetland 104	Yes	Yes	Yes	Yes
223	1754-1757	38.691675/ -85.788317	Upland 104	Yes	No	No	No
224	1771-1774	38.695136/ -85.788763	Wetland 105	Yes	Yes	Yes	Yes
225	1766-1769	38.694504/ -85.788624	Upland 105	No	No	No	No
226	1781-1784	38.703258/ -85.791822	Wetland 106	Yes	Yes	Yes	Yes
227	1785-1788	38.703260/ -85.791880	Upland 106	No	No	No	No

Table 2 – Aquatic Resources Summary

Aquatic Resources Summary: Wetlands							
Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage	
						Acres	Linear Feet
Wetland 1	2-5, 10-12	38.498392/ -85.771298	PEME	Poor	water of the State	0.107	280
Wetland 2	23, 29-32	38.504271/ -85.771291	PFO1A	Poor	water of the US	0.098	585
Wetland 3.1	56-61	38.515182/ -85.772752	PFO1E	Poor	water of the US	0.117	345
Wetland 3.2	68-71	38.517445/ -85.772993	PEME	Poor	water of the US	0.116	745
Wetland 4	80-83	38.518422/ -85.773218	PFO1E	Poor	water of the State	0.029	126
Wetland 5	107-111, 115-120	38.529729/ -85.774781	PEME	Poor	water of the State	0.125	875
Wetland 6	133-137	38.533604/ -85.775981	PEME	Poor	water of the State	0.132	782
Wetland 7	142-145	38.537332/ -85.777254	PEME	Poor	water of the State	0.003	20
Wetland 8	162-165	38.539185/ -85.777766	PEME	Poor	water of the State	0.099	485
Wetland 9	211-214	38.553063/ -85.779240	PEME	Poor	water of the US	0.054	345
Wetland 10	232-235	38.558055/ -85.779132	PEME	Poor	water of the State	0.019	N/A
Wetland 11	237-241	38.559363/ -85.779061	PEME	Poor	water of the State	0.017	120
Wetland 12	261-264	38.568026/ -85.779328	PFO1E	Average	water of the US	0.118	430
Wetland 13	274-277	38.570235/ -85.779327	PEME	Poor	water of the State	0.011	88
Wetland 14	282-285	38.570336/ -85.779260	PEME	Poor	water of the State	0.009	N/A
Wetland 15	290-293	38.570200/ -85.778988	PEME	Poor	water of the State	0.003	50
Wetland 16	299-302	38.571342/ -85.779111	PEME	Poor	water of the State	0.004	48
Wetland 17	311-314, 319	38.578878/ -85.779223	PEME	Poor	water of the State	0.022	196

Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage	
						Acres	Linear Feet
Wetland 18	321-324	38.581797/ -85.779132	PEME	Poor	water of the State	0.015	N/A
Wetland 19	338-342	38.586092/ -85.779169	PEME	Poor	water of the State	0.095	673
Wetland 20	352-356	38.588405/ -85.779223	PEME	Poor	water of the State	0.027	265
Wetland 21.1	364-365, 370-373	38.590278/ -85.779264	PFO1E	Poor	water of the US	0.072	358
Wetland 21.2	366-369	38.590239/ -85.779262	PEME	Poor	water of the US	0.007	N/A
Wetland 22	379-382, 387	38.591848/ -85.779098	PEME	Poor	water of the State	0.023	153
Wetland 23	389-394	38.595436/ -85.779430	PEME	Poor	water of the State	0.064	402
Wetland 24	399-402	38.595994/ -85.779467	PEME	Poor	water of the State	0.008	N/A
Wetland 25	404-407	38.597891/ -85.780009	PEME	Poor	water of the State	0.037	364
Wetland 26	427-432	38.619253/ -85.783025	PEME	Poor	water of the US	0.122	1,121
Wetland 27	439-442	38.620910/ -85.783647	PEME	Poor	water of the state	0.004	N/A
Wetland 28	455-458	38.632848/ -85.784261	PEME	Poor	water of the State	0.012	101
Wetland 29	464-467	38.635077/ -85.784231	PEME	Poor	water of the State	0.006	86
Wetland 30	508-511	38.658847/ -85.783421	PEME	Poor	water of the State	0.085	876
Wetland 31	518-522, 527	38.662329/ -85.782779	PEME	Poor	water of the State	0.091	771
Wetland 32	530, 533-536	38.664804/ -85.782685	PEME	Poor	water of the US	0.054	769
Wetland 33	561-564	38.676307/ -85.786569	PEME	Poor	water of the State	0.013	47
Wetland 34	578-584	38.677799/ -85.787207	PEME	Poor	water of the State	0.024	N/A
Wetland 35	596-597, 603-606, 608-609	38.684182/ -85.788333	PEME	Poor	water of the State	0.130	N/A

Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage	
						Acres	Linear Feet
Wetland 36	611-615, 618-619 621-622, 624-630	38.684666/ -85.788408	PEME	Poor	water of the State	0.431	N/A
Wetland 37	652-653, 658-663	38.686059/ -85.788855	PEME	Poor	water of the State	0.128	N/A
Wetland 38	671-677	38.686860/ -85.788545	PEME	Poor	water of the State	0.189	351
Wetland 39	685-690	38.687431/ -85.789108	PEME	Poor	water of the State	0.060	280
Wetland 40	700-705	38.688923/ -85.788701	PEME	Poor	water of the US	0.002	N/A
Wetland 41.1	716, 721-727, 735	38.691744/ -85.788914	PEME	Poor	water of the State	0.163	1,511
Wetland 41.2	730, 737-741,	38.695503/ -85.789448	PFO1A	Average	water of the State	0.280	N/A
Wetland 42	753-757, 763-768	38.695939/ -85.789570	PFO1A	Poor	water of the State	0.051	N/A
Wetland 43	773-777, 782-786	38.697590/ -85.790018	PEME	Poor	water of the State	0.037	444
Wetland 44	794-798	38.699720/ -85.790795	PEME	Poor	water of the State	0.011	N/A
Wetland 45	818-821	38.710021/ -85.796183	PEME	Poor	water of the State	0.005	371
Wetland 46	840-843	38.695290/ -85.789100	PEME	Poor	water of the State	0.014	115
Wetland 47	857-860	38.678009/ -85.786984	PEME	Poor	water of the State	0.024	189
Wetland 48	871-874	38.672846/ -85.784387	PEME	Poor	water of the State	0.021	140
Wetland 49	895-898	38.646514/ -85.783711	PEME	Poor	water of the State	0.018	60
Wetland 50	908-911	38.640970/ -85.783795	PEME	Poor	water of the State	0.019	213
Wetland 51	919-922	38.634106/ -85.783910	PEME	Poor	water of the State	0.012	112
Wetland 52	957-960	38.590497/ -85.778843	PEME	Poor	water of the State	0.030	145
Wetland 53	962-965	38.588446/ -85.778819	PEME	Poor	water of the State	0.020	150

Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage	
						Acres	Linear Feet
Wetland 54	970-973	38.584979/ -85.778796	PEME	Poor	water of the State	0.034	120
Wetland 55	978-981	38.583880/ -85.778808	PEME	Poor	water of the State	0.042	135
Wetland 56	992-995	38.578010/ -85.778818	PEME	Poor	water of the State	0.042	350
Wetland 57	999-1002	38.574300/ -85.778825	PEME	Poor	water of the State	0.044	110
Wetland 58	1021-1024	38.561301/ -85.778811	PEME	Poor	water of the State	0.020	105
Wetland 59	1025-1028	38.559511/ -85.778815	PEME	Poor	water of the State	0.020	145
Wetland 60	1036-1041	38.550145/ -85.778842	PEME	Poor	water of the State	0.041	188
Wetland 61	1052-1056, 1061	38.542771/ -85.778094	PEME	Poor	water of the State	0.033	126
Wetland 62	1063-1066	38.535331/ -85.776244	PEME	Poor	water of the State	0.030	155
Wetland 63	1091-1094, 1101-1102	38.498291/ -85.770708	PEME	Poor	water of the State	0.218	180
Wetland 64	1119-1121	38.512349/ -85.771733	PEME	Poor	water of the State	0.012	45
Wetland 65	1135-1139	38.514395/ -85.771920	PFO1E	Poor	water of the US	0.033	N/A
Wetland 66	1142-146	38.515858/ -85.772204	PEME	Poor	water of the State	0.136	770
Wetland 67	1158-1161, 1166-1169	38.519114/ -85.772651	PEME	Poor	water of the State	0.099	950
Wetland 68	1172, 1177-1189	38.524444/ -85.773362	PEME	Poor	water of the US	0.322	1,640
Wetland 69	1196-1201	38.512349/ -85.771733	PEME	Poor	water of the US	0.048	110
Wetland 70	1211-1214	38.533129/ -85.775213	PEME	Poor	water of the State	0.023	178
Wetland 71	1231-1236	38.539715/ -85.777204	PEME	Poor	water of the State	0.114	488
Wetland 72	1251-1254	38.543700/ -85.777887	PEME	Poor	water of the State	0.013	80

Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage	
						Acres	Linear Feet
Wetland 73	1267-1270	38.546757/ -85.778369	PEME	Poor	water of the State	0.015	132
Wetland 74	1318-1321	38.563630/ -85.778359	PEME	Poor	water of the US	0.029	N/A
Wetland 75	1328-1331	38.566841/ -85.778580	PEME	Poor	water of the State	0.022	259
Wetland 76	1339-1342, 1346-1347	38.567920/ -85.778294	PFO1E	Poor	Water of the US	0.023	N/A
Wetland 77	1353-1355, 1359	38.569832/ -85.778236	PEME	Poor	Water of the state	0.003	N/A
Wetland 78	1373-1376	38.583775/ -85.778373	PEME	Poor	water of the US	0.009	N/A
Wetland 79	1386-1389, 1392-1393	38.587513/ -85.778515	PEME	Poor	water of the State	0.009	97
Wetland 80	1397-1400	38.590209/ -85.778419	PEME	Poor	water of the State	0.004	N/A
Wetland 81	1407-1410, 1413	38.592589/ -85.778530	PEME	Poor	water of the State	0.005	N/A
Wetland 82	1419-1423	38.603902/ -85.781065	PEME	Poor	water of the State	0.039	422
Wetland 83	1429-1431, 1435-1437	38.604446/ -85.781118	PEME	Poor	water of the State	0.015	182
Wetland 84	1441-1444, 1448	38.605519/ -85.781237	PEME	Poor	water of the State	0.020	201
Wetland 85	1450-1453	38.608615/ -85.781168	PEME	Poor	water of the State	0.024	217
Wetland 86	1459-1462	38.609968/ -85.781085	PSS1E	Poor	water of the US	0.010	N/A
Wetland 87	1467-1470, 1474	38.610847/ -85.781176	PEME	Poor	water of the State	0.027	69
Wetland 88	1476-1480	38.615330/ -85.781301	PEME	Poor	water of the State	0.022	287
Wetland 89	1490-1494, 1499-1500	38.618001/ -85.781924	PEME	Poor	water of the US	0.089	952
Wetland 90	1508-1511	38.620837/ -85.782956	PEME	Poor	water of the state	0.016	93
Wetland 91	1516-1521	38.622548/ -85.783524	PEME	Poor	water of the state	0.031	346

Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage	
						Acres	Linear Feet
Wetland 92	1550-1553, 1558	38.646998/ -85.783436	PEME	Poor	water of the State	0.036	342
Wetland 93	1562-1565, 1570	38.650177/ -85.783395	PEME	Poor	water of the State	0.019	169
Wetland 94	1587-1591	38.656683/ -85.783158	PEME	Poor	water of the State	0.018	113
Wetland 95	1601-1604, 1609-1613	38.660811/ -85.782422	PEME	Poor	water of the State	0.252	N/A
Wetland 96	1621-1624	38.664776/ -85.782002	PEME	Poor	water of the State	0.050	N/A
Wetland 97	1630-1632	38.665375/ -85.782036	PEME	Poor	water of the State	0.055	N/A
Wetland 98	1648, 1650-1653, 1658-1659	38.671645/ -85.783567	PEME	Poor	water of the State	0.123	799
Wetland 99	1665-1668	38.679604/ -85.787109	PEME	Poor	water of the State	0.232	876
Wetland 100	1677-1682, 1687-1693, 1698-1700, 1702-1703	38.682284/ -85.787433	PEME	Poor	water of the State	0.800	1228
Wetland 101	1707-1710, 1716-1717, 1719, 1721	38.683453/ -85.787599	PEME	Poor	water of the State	0.236	628
Wetland 102	1744-1747, 1749	38.686133/ -85.787698	PEME	Poor	water of the State	0.241	480
Wetland 103	1727-1730, 1735-1736	38.686817/ -85.787408	PEME	Poor	water of the State	0.144	471
Wetland 104	1758-1762	38.691721/ -85.788358	PEME	Poor	water of the State	0.017	352
Wetland 105	1770-1774	38.695136/ -85.788763	PEME	Poor	water of the State	0.218	698
Wetland 106	1781-1784	38.703258/ -85.791822	PEME	Poor	water of the State	0.026	N/A
Total						**7.690 Acre**	**30,789 Linear Feet**

Aquatic Resources Summary: Streams											
Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime/ Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
Blue Lick Creek	18-20	38.501510/ -85.771383	Yes; PER	30.5 feet	1.6 feet	PER/ Good	90% glide, 10% riffle	Bedrock, Gravel	water of the US	216	0.151
UNT to Blue Lick Creek	24, 33	38.504271/ -85.771534	No	3.0 feet	0.45 feet	EPH/ Poor	40% run, 40% glide, 10% run, 10% pool	Silt, Sand	N/A	88	0.006
UNT to Blue Lick Creek CV									N/A	161	0.004
Caney Fork	51-55, 1129-1130, 1140-1141	38.514394/ -85.771686	Yes; PER	27.4 feet	1.5 feet	PER/ Good	60% glide, 20% run, 20% riffle	Cobble, Gravel, Sand, Boulder	water of the US	277	0.174
Henry Brook	92-93 102-104, 1155-1156, 1191, 1202-1208	38.518895/ -85.773162	Yes; INT	7.0 feet	0.50 feet	INT/ Average	80% glide10% run, 10% pool	Silt, Sand	water of the US	1891	0.304
Henry Brook CV 1									N/A	173	0.023
Henry Brook CV 2									N/A	189	0.024
UNT to Caney Fork	152	38.538660/ -85.777982	No	3.5 feet	0.33 feet	EPH/ Poor	100% glide	Silt, Sand	N/A	10	0.001

Aquatic Resources Summary: Streams											
Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime/ Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
Ville Run	1262-1264	38.545695/ -85.778121	Yes; INT	2.5 feet	0.33 feet	INT/ Average	65% glide, 15% riffle, 10% run, 10% pool	Sand, Artificial, Silt, Gravel	water of the US	24	0.001
Ville Run CV									N/A	244	0.025
Wolf Run	201, 1282	38.550404/ -85.779302	Yes; PER	7.2 feet	1.6 feet	PER/ Average	90% glide, 10% Riffle	Silt, Sand, Gravel	water of the US	9	0.001
Wolf Run CV									N/A	270	0.053
UNT 1 to Wolf Run	207-210	38.552299/ -85.779357	No	2.0 feet	0.50 feet	EPH/ Poor	100% glide	Silt, Sand	N/A	222	0.010
UNT 2 to Wolf Run	1296-1297	38.557645/ -85.778388	No	5.2 feet	2.0 feet	INT/ Average	80% riffle, 10% run, 10% glide	Sand, Artificial, Silt, Gravel	water of the US	80	0.010
UNT 1 to Miller Fork	1303	38.563032/ -85.778210	No	3.5 feet	2.0 feet	INT/ Average	80% riffle, 20% run	Sand, Gravel, Clay	water of the US	50	0.004
UNT 2 to Miller Fork	1310	38.563120/ -85.778322	No	2.0 feet	0.5 feet	EPH/ Poor	100% riffle	Artificial, Silt	N/A	30	0.001
UNT 3 to Miller Fork	1309, 1311-1312	38.563238/ -85.778283	Yes; PER	4.5 feet	2.0 feet	INT/ Average	70% glide, 10% riffle, 10% run, 10% pool	Sand, Gravel, Clay	water of the US	280	0.029
UNT 3 to Miller Fork CV									N/A	281	0.035

Aquatic Resources Summary: Streams

Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime/ Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
Miller Fork	1336-1338	38.567643/ -85.778212	Yes; PER	8.0 feet	0.67 feet	INT/ Average	20% pool, 10% riffle, 70% run	Gravel, Sand, Cobble, Silt	water of the US	65	0.012
Miller Fork CV									N/A	262	0.063
UNT 4 to Miller Fork	1348-1349	38.568620/ -85.778306	No	2 .0 feet	0.4 feet	EPH/ Poor	50% riffle, 50% run	Sand, Silt	N/A	258	0.012
UNT 1 to Meal Run	310, 1366-1367	38.577685/ -85.778323	Yes; INT	4.0 feet	0.6 feet	INT/ Poor	20% riffle, 80% run	Silt, Gravel, Artificial (riprap)	water of the US	58	0.005
UNT 1 to Meal Run CV									N/A	222	0.015
Meal Run	329, 1370-1371	38.581898/ -85.778189	Yes; INT	6.0 feet	0.67 feet	INT/ Poor	25% pool, 75% run	Gravel, Sand, Silt	water of the US	35	0.005
Meal Run CV									N/A	281	0.013
Wheel Run	331-332	38.584111/ -85.779289	Yes; INT	1.0 foot	0.67 feet	INT/ Poor	15% riffle, 85% run	Silt, Sand, Gravel	water of the US	84	0.002
Wheel Run CV 1									N/A	79	0.005
Wheel Run CV 2									N/A	234	0.016
West Fork Silver Creek	362-363, 1395-1396	38.589121/ -85.779337	Yes; PER	6.0 feet	0.4 feet	INT/ Poor	10% riffle, 90% run	Gravel, Silt, Cobble	water of the US	300	0.041
West Fork Silver Creek CV									N/A	255	0.032

Aquatic Resources Summary: Streams											
Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime/ Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
UNT to West Fork Silver Creek	378, 1405	38.590620/ -85.778277	Yes; INT	4.0 feet	0.6 feet	INT/ Poor	100% run	Artificial (riprap), Silt	water of the US	58	0.005
UNT to West Fork Silver Creek CV									N/A	264	0.027
UNT to Pigeon Roost Creek	1485-1487	38.615637/ -85.781326	No	2.0 feet	0.5 feet	EPH/ Poor	15% riffle, 85% run	Silt, Sand, Gravel	N/A	61	0.003
Pigeon Roost Creek	437, 933, 1501-1502	38.620028/ -85.782625	Yes; PER	13 feet	0.67 feet	PER/ Poor	5% riffle, 20% pool, 75% run	Silt, Sand, Gravel, Boulder	water of the US	220	0.066
UNT to Underwood Run	449-450, 1522-1524	38.624344/ -85.783580	Yes; INT	6.0 feet	0.33 feet	INT/ Poor	20% pool, 80% run	Silt, Artificial (riprap), Sand	water of the US	59	0.008
UNT to Underwood Run CV									N/A	188	0.022
Tree Creek	1529-1530	38.633928/ -85.783460	Yes; PER	12 feet	1.2 feet	PER/ Poor	25% pool, 75% run	Artificial (riprap), Bedrock, Silt	water of the US	25	0.007
Tree Creek CV									N/A	367	0.059

Aquatic Resources Summary: Streams											
Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime/ Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
UNT to Tree Creek	472, 1532-1533	38.635340/ -85.783482	Yes; INT	7.0 feet	0.5 feet	INT/ Poor	100% run	Sand, Silt, Artificial (riprap), Gravel	water of the US	77	0.012
UNT to Tree Creek CV									N/A	171	0.004
Sycamore Run	1539-1540	38.640869/ -85.784210	Yes; INT	3.5 feet	0.5 feet	INT/ Poor	90% glide, 10% pool	Detritus, Artificial	water of the US	30	0.002
Sycamore Run CV									N/A	278	0.038
UNT 1 to Sycamore Run	484-485, 1544	38.643730/ -85.783951	No	1.5 feet	0.2 feet	EPH/ Poor	N/A	Artificial, Clay	N/A	34	0.001
UNT 1 to Sycamore Run CV									N/A	183	0.006
UNT 2 to Sycamore Run	487-489, 1546-1547	38.645551/ -85.784023	Yes; INT	1.5 feet	0.8 feet	EPH/ Poor	100% glide	Sand, Artificial, Cobble	water of the US	50	0.002
UNT 2 to Sycamore Run CV									N/A	164	0.008
UNT 1 to Nest Run	494-495	38.650266/ -85.783969	No	7.0 feet	2.0 feet	EPH/ Average	70% glide, 30% pool	Clay, Sand, Gravel, Cobble, Detritus	N/A	34	0.006
UNT 2 to Nest Run	496-497, 1576	38.651849/ -85.783970	Yes; INT	3.0 feet	1.2 feet	INT/ Average	75% glide, 15% riffle, 10% pool	Sand, Clay, Gravel	water of the US	6	0.0004
UNT 2 to Nest Run CV									N/A	271	0.028

Aquatic Resources Summary: Streams											
Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime/ Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
UNT 3 to Nest Run	1572-1575	38.652095/ -85.783255	No	1.2 feet	0.2 feet	EPH/ Poor	95% glide, 5% pool	Clay, Woody Debris	N/A	248	0.007
Nest Run	502-504, 1583-1585	38.655404/ -85.783904	Yes; INT	2.0 feet	0.4 feet	INT/ Average	75% glide, 20% riffle, 5% pool	Clay, Sand, Artificial, Silt, Detritus	water of the US	50	0.002
Nest Run CV									N/A	225	0.041
UNT 4 to Nest Run	517, 1598-1599	38.659706/ -85.783340	No	2.5 feet	0.5 feet	INT/ Average	60% glide, 25% pool, 15% riffle	Clay, Cobble, Detritus, Artificial	water of the US	80	0.005
UNT 4 to Nest Run CV									N/A	169	0.016
Elm Branch	531-532, 1619-1620	38.664473/ -85.782652	Yes; INT	1.0 feet	0.5 feet	INT/ Poor	90% glide, 5% riffle, 5% pool	Clay, Detritus	water of the US	32	0.001
Elm Branch CV									N/A	235	0.013
UNT to Elm Branch	545-547, 1638-1639	38.667402/ -85.782900	No	1.2 feet	0.4 feet	EPH/ Poor	90% glide, 5% riffle, 5% pool	Clay, Gravel	N/A	75	0.002
UNT to Elm Branch CV									N/A	167	0.013
UNT 1 to Honey Run	571-572	38.677170/ -85.786984	No	1.8 feet	0.6 feet	EPH/ Poor	90% glide, 5% pool, 5% riffle	Clay, Gravel, Detritus	N/A	29	0.001

Aquatic Resources Summary: Streams

Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime/ Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
UNT 2 to Honey Run	589-591	38.681886/ -85.788133	No	7.5 feet	2.7 feet	INT/ Average	90% glide, 10% pool	Clay, Gravel, Woody Debris, Cobble	water of the US	20	0.001
UNT 2 to Honey Run CV									N/A	224	0.021
UNT 3 to Honey Run	640-641	38.684913/ -85.790193	No	2.0 feet	0.5 feet	EPH/ Poor	95% glide, 5% riffle	Clay, Woody Debris	N/A	54	0.002
UNT 4 to Honey Run	681-683	38.687168/ -85.789311	No	3.0 feet	0.4 feet	EPH/ Average	90% glide, 5% pool, 5% riffle	Clay, Detritus	N/A	201	0.014
UNT 5 to Honey Run	710-711	38.690579/ -85.788815	No	3.0 feet	0.6 feet	EPH/ Average	85% glide, 10% pool, 5% riffle	Clay, Silt, Detritus	N/A	19	0.001
UNT 6 to Honey Run	1764-1765	38.694301/ -85.788587	No	1.5 feet	0.4 feet	EPH/ Poor	90% glide, 5% pool, 5% riffle	Clay, Detritus	N/A	51	0.002
UNT 6 to Honey Run CV									N/A	182	0.017
UNT 7 to Honey Run	746-747, 1775	38.695562/ -85.789452	No	3.0 feet	0.4 feet	EPH/ Average	70% glide, 30% pool	Clay, Gravel, Cobble	N/A	88	0.006
UNT 7 to Honey Run CV									N/A	170	0.016
UNT 8 to Honey Run	771-772	38.697548/ -85.790029	No	3.0 feet	0.8 feet	EPH/ Poor	75% glide, 20% riffle, 5% pool	Clay, Detritus	N/A	14	0.001

Aquatic Resources Summary: Streams											
Delineated Resource	**Photos**	**Lat/ Long**	**USGS Blue Line & Type**	**OHWM Width**	**OHWM Depth**	**Flow Regime/ Quality**	**Riffle/Pool Presence**	**Substrate**	**Likely Jurisdiction**	**Total Linear Feet**	**Total Acres**
UNT 9 to Honey Run	810-812	38.704907/ -85.793401	No	1.8 feet	0.6 feet	EPH/ Poor	90% glide, 10% riffle	Clay, Detritus, Gravel	N/A	22	0.001
UNT 9 to Honey Run CV									N/A	180	0.017
Total										**11,703 Linear Feet**	**1.581 Acres**

Appendix B - Routine Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Memphis/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 1

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 220

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.498392 Long: -85.771298 Datum: WGS_1984

Soil Map Unit Name: Peoga silt loam, 0 to 1 percent slopes (PhaA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 1 is representative of Wetland 1. DP 1 is located along the southbound lanes of I-65 approximately 0.20 mile south of Blue Lick Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Quercus palustris*	10	Yes	FACW
3. *Diospyros virginiana*	2	No	FAC
4.			
5.			
	22 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Persicaria pensylvanica*	25	Yes	FACW
2. *Echinochloa crus-galli*	15	Yes	FACW
3. *Carex vulpinoidea*	5	No	FACW
4. *Carex frankii*	5	No	OBL
5. *Bidens aristosa*	2	No	FACW
6.			
7.			
8.			
9.			
10.			
	52 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Toxicodendron radicans*	30	Yes	FAC
2.			
	30 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	67	x 2 =	134
FAC species	32	x 3 =	96
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	104 (A)		235 (B)

Prevalence Index = B/A = 2.26

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Memphis/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 2

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 220

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.498593 Long: -85.771192 Datum: WGS_1984

Soil Map Unit Name: Peoga silt loam, 0 to 1 percent slopes (PhaA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 2 is representative of the upland area around Wetland 1. DP 2 is located along the southbound lanes of I-65 approximately 0.20 mile south of Blue Lick Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria faberi*	30	Yes	FACU
2. *Persicaria pensylvanica*	30	Yes	FACW
3. *Digitaria ischaemum*	20	Yes	FACU
4. *Echinochloa crus-galli*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	90 (A)		280 (B)

Prevalence Index = B/A = 3.11

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Loamy/Clayey	
5-18	10YR 7/2	95	10YR 5/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Memphis/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 3

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 25 Township 3 N Rage 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.504271 Long: -85.771291 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 3 is representative of Wetland 2. DP 3 is located along the southbound lanes of I-65 approximately 0.05 mile north of Biggs Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	40	Yes	FAC
2.			
3.			
4.			
5.			
	40	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	20	Yes	FACW
2. *Fraxinus pennsylvanica*	10	Yes	FACW
3. *Platanus occidentalis*	5	No	FACW
4. *Acer rubrum*	5	No	FAC
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Carex muskingumensis*	40	Yes	OBL
2. *Persicaria pensylvanica*	15	Yes	FACW
3. *Impatiens capensis*	10	No	FACW
4. *Leersia virginica*	5	No	FACW
5. *Alisma subcordatum*	2	No	OBL
6. *Persicaria sagittata*	2	No	OBL
7.			
8.			
9.			
10.			
	74	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	44	x 1 =	44
FACW species	65	x 2 =	130
FAC species	45	x 3 =	135
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	154 (A)		309 (B)

Prevalence Index = B/A = 2.01

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	97	10YR 4/6	3	C	M	Loamy/Clayey	Distinct redox concentrations
4-18	10YR 4/1	90	10YR 3/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 5

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Memphis/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 4

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 25, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.504276 Long: -85.771305 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 4 is representative of the upland area around Wetland 2. DP 4 is located along the southbound lanes of I-65 approximately 0.05 mile north of Biggs Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	10	Yes	FAC
2. *Ulmus rubra*	5	Yes	FAC
3.			
4.			
5.			
	15	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	50	Yes	FACW
2. *Ulmus rubra*	30	Yes	FAC
3. *Fraxinus pennsylvanica*	5	No	FACW
4. *Liriodendron tulipifera*	1	No	FACU
5.			
	86	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Carex blanda*	5	Yes	FAC
2. *Elymus virginicus*	2	Yes	FACW
3. *Geum aleppicum*	1	No	FACW
4. *Rubus argutus*	1	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	9	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	10	Yes	FACU
2. *Toxicodendron radicans*	5	Yes	FAC
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 87.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	58	x 2 =	116
FAC species	56	x 3 =	168
FACU species	11	x 4 =	44
UPL species	0	x 5 =	0
Column Totals:	125 (A)		328 (B)

Prevalence Index = B/A = 2.62

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	
4-18	10YR 5/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 5

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.515182 Long: -85.772752 Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam. 0 to 2 percent slopes, occasionally flooded, very brief duaration (HcgAV) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 5 is representative of Wetland 3.1. DP 5 is located along the southbound lanes of I-65 approximately 0.05 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	70	Yes	FACW
2. *Platanus occidentalis*	10	No	FACW
3. *Ulmus rubra*	5	No	FAC
4.			
5.			
	85	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Impatiens capensis*	5	Yes	FACW
2. *Symphyotrichum lateriflorum*	2	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	7	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	97	x 2 =	194
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	102 (A)		209 (B)

Prevalence Index = B/A = 2.05

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	10YR 5/2	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 6

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Flat

Slope (%): 1 Lat: 38.515188 Long: -85.772821 Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam. 0 to 2 percent slopes, occasionally flooded, very brief duaration (HcgAV) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 6 is representative of the upland area around Wetland 3.1. DP 6 is located along the southbound lanes of I-65 approximately 0.02 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Juglans nigra*	15	Yes	FACU
3. *Acer negundo*	10	No	FAC
4. *Liriodendron tulipifera*	10	No	FACU
5.			
	55	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Symphyotrichum lateriflorum*	40	Yes	FACW
2. *Elymus virginicus*	10	No	FACW
3. *Ambrosia trifida*	10	No	FAC
4. *Strophostyles helvola*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	65	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Vitis labrusca*	10	Yes	FACU
2. *Lonicera japonica*	5	Yes	FACU
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	25	x 3 =	75
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	140 (A)		385 (B)

Prevalence Index = B/A = 2.75

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	10YR 5/2	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 7

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.517445 Long: -85.772993 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, rarely flooded (StdAQ) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 7 is representative of Wetland 3.2. DP 7 is located along the southbound lanes of I-65 approximately 0.05 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Paspalum floridanum*	40	Yes	FACW
2. *Echinochloa crus-galli*	30	Yes	FACW
3. *Schedonorus arundinaceus*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	70	x 2 =	140
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	80 (A)		180 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	10YR 5/2	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 8

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 1.5 Lat: 38.517562 Long: -85.773012 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, rarely flooded (StdAQ) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 8 is representative of the upland area around Wetland 3.2. DP 8 is located located along the southbound lanes of I-65 approximately 0.05 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	60	Yes	FAC
2.			
3.			
4.			
5.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2. *Carya ovata*	5	Yes	FACU
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Toxicodendron radicans*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	10	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	70	Yes	FACU
2. *Parthenocissus quinquefolia*	30	Yes	FACU
	100	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	70	x 3 =	210
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	180 (A)		640 (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Loamy/Clayey	
4-18	10YR 6/2	80	10YR 5/4	15	C	M	Loamy/Clayey	
			10YR 5/8	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 9

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.518422 Long: -85.773218 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, rarely flooded (StdAQ) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 9 is representative of Wetland 4. DP 9 is located along the southbound lanes of I-65 approximately 1.35 miles south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Platanus occidentalis*	10	Yes	FACW
3. *Quercus palustris*	10	Yes	FACW
4. *Celtis occidentalis*	5	No	FAC
5. *Ulmus rubra*	5	No	FAC
	55	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	25	Yes	FACW
2. *Celtis occidentalis*	10	Yes	FAC
3. *Carya ovata*	5	No	FACU
4.			
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Carex muskingumensis*	40	Yes	OBL
2. *Carex typhina*	5	No	OBL
3. *Cyperus esculentus*	5	No	FACW
4. *Bidens aristosa*	3	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	53	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Vitis aestivalis*	5	Yes	FACU
2. *Toxicodendron radicans*	3	Yes	FAC
	8	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 87.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	45	x 1 =	45
FACW species	53	x 2 =	106
FAC species	48	x 3 =	144
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	156 (A)		335 (B)

Prevalence Index = B/A = 2.15

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	97	10YR 3/6	3	C	M	Loamy/Clayey	
4-18	10YR 5/2	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 10

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.518357 Long: -85.773105 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, rarely flooded (StdAQ) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 10 is representative of the upland area around Wetland 4. DP 10 is located along the southbound lanes of I-65 approximately 1.35 miles south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Diospyros virginiana*	10	Yes	FAC
2. *Ulmus americana*	10	Yes	FACW
3. *Ulmus rubra*	10	Yes	FAC
4. *Fraxinus pennsylvanica*	5	No	FACW
5.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Paspalum floridanum*	40	Yes	FACW
2. *Festuca rubra*	40	Yes	FACU
3. *Schedonorus arundinaceus*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	20	x 3 =	60
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	125 (A)		370 (B)

Prevalence Index = B/A = 2.96

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Loamy/Clayey	
4-9	10YR 5/4	100					Loamy/Clayey	
9-18	10YR 5/2	95	10YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 11

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 26, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.529729 Long: -85.774781 Datum: WGS_1984

Soil Map Unit Name: Deputy-Trappist silt loams, 6 to 12 percent slopes, eroded (DtvC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 11 is representative of Wetland 5. DP 11 is located along the southbound lanes of I-65 approximately 0.68 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	30	Yes	FACW
2. *Paspalum floridanum*	15	Yes	FACW
3. *Cyperus esculentus*	10	No	FACW
4. *Festuca arundinacea*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	65	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	65 (A)		150 (B)

Prevalence Index = B/A = 2.31

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	93	10YR 3/4	7	C	M	Loamy/Clayey	Distinct redox concentrations
6-18	10YR 6/2	60	10YR 5/6	40	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 12

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 26, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.529645 Long: -85.774789 Datum: WGS_1984

Soil Map Unit Name: Deputy-Trappist silt loams, 6 to 12 percent slopes, eroded (DtvC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 12 is representative of the upland area around Wetland 5. DP 12 is located along the southbound lanes of I-65 approximately 0.68 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus alba*	25	Yes	FACU
2. *Pyrus calleryana*	10	Yes	UPL
3. *Celtis occidentalis*	8	No	FAC
4.			
5.			
	43	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Lonicera maackii*	10	Yes	UPL
3. *Juniperus virginiana*	5	No	FACU
4. *Celtis occidentalis*	3	No	FAC
5.			
	28	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Ambrosia artemisiifolia*	50	Yes	FACU
2. *Festuca rubra*	30	Yes	FACU
3. *Schedonorus arundinaceus*	10	No	FACU
4. *Verbena urticifolia*	1	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	91	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	12	x 3 =	36
FACU species	120	x 4 =	480
UPL species	20	x 5 =	100
Column Totals:	162 (A)		636 (B)

Prevalence Index = B/A = 3.93

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy/Clayey	
3-18	10YR 4/3	95	10YR 4/6	5	C	M	Loamy/Clayey	Fill Material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 13

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 27, Township 4 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.533604 Long: -85.775981 Datum: WGS_1984

Soil Map Unit Name: Blocher-Cincinnati silt loam, 2 to 6 percent slopes, eroded (CldC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 13 is representative of Wetland 6. DP 13 is located along the southbound lanes of I-65 approximately 0.39 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Agrostis stolonifera*	80	Yes	FACW
2. *Festuca arundinacea*	10	No	FACU
3. *Juncus interior*	10	No	FAC
4. *Leersia oryzoides*	5	No	OBL
5. *Echinochloa crus-galli*	5	No	FACW
6. *Juncus torreyi*	2	No	FACW
7.			
8.			
9.			
10.			
	112	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	87	x 2 =	174
FAC species	10	x 3 =	30
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	112 (A)		249 (B)

Prevalence Index = B/A = 2.22

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	97	10YR 4/4	3	C	M	Loamy/Clayey	Distinct redox concentrations
5-12	10YR 3/1	90	10YR 5/4	10	C	M	Loamy/Clayey	
12-18	10YR 6/2	85	10YR 5/4	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 4

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 14

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 27, Township 4 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 3 Lat: 38.533642 Long: -85.775985 Datum: WGS_1984

Soil Map Unit Name: Blocher-Cincinnati silt loam, 2 to 6 percent slopes, eroded (CldC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 14 is representative of the upland area around Wetland 6. DP 14 is located along the southbound lanes of I-65 approximately 0.39 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juglans nigra*	8	Yes	FACU
2. *Juniperus virginiana*	5	Yes	FACU
3. *Liriodendron tulipifera*	4	Yes	FACU
4. *Acer saccharinum*	1	No	FACW
5.			
	18	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2. *Platanus occidentalis*	2	Yes	FACW
3.			
4.			
5.			
	7	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Paspalum floridanum*	30	Yes	FACW
2. *Setaria pumila*	30	Yes	FAC
3. *Tridens flavus*	15	No	UPL
4. *Juncus torreyi*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	43	x 2 =	86
FAC species	30	x 3 =	90
FACU species	17	x 4 =	68
UPL species	15	x 5 =	75
Column Totals:	105 (A)		319 (B)
Prevalence Index = B/A =			3.04

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	95	10YR 3/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
2-18	10YR 6/2	90	10YR 5/8	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 15

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.837332 Long: -85.777254 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 15 is representative of Wetland 7. DP 15 is located along the southbound lanes of I-65 approximately 0.21 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	30	Yes	OBL
2. *Dipsacus laciniatus*	30	Yes	UPL
3. *Leersia oryzoides*	10	No	OBL
4. *Carex vulpinoidea*	10	No	FACW
5. *Lonicera japonica*	10	No	FACU
6. *Juncus effusus*	3	No	OBL
7. *Persicaria pensylvanica*	1	No	FACW
8.			
9.			
10.			
	94 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	43	x 1 =	43
FACW species	21	x 2 =	42
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	30	x 5 =	150
Column Totals:	104 (A)		275 (B)

Prevalence Index = B/A = 2.64

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	90	10YR 4/6	10	C	M	Sandy	Prominent redox concentrations
6-18	10YR 4/1	60					Mucky Sand	Dual matrix color
	10YR 2/1	40						Dual matrix color

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 4

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 16

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.537336 Long: -85.777226 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 16 is representative of the upland area around Wetland 7. DP 16 is located along the southbound lanes of I-65 approximately 0.21 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	5	Yes	FACU
2. *Fraxinus pennsylvanica*	3	Yes	FACW
3.			
4.			
5.			
	8	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Dipsacus laciniatus*	70	Yes	UPL
2. *Bothriochloa laguroides*	10	No	UPL
3. *Festuca arundinacea*	10	No	FACU
4. *Setaria pumila*	5	No	FAC
5. *Cirsium discolor*	5	No	FACU
6. *Paspalum floridanum*	2	No	FACW
7. *Eupatorium serotinum*	2	No	FAC
8.			
9.			
10.			
	104	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	2	No	FACU
2.			
	2	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	7	x 3 =	21
FACU species	22	x 4 =	88
UPL species	80	x 5 =	400
Column Totals:	119 (A)		529 (B)

Prevalence Index = B/A = 4.45

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Loamy/Clayey	
5-18	10YR 5/4	97	10YR 5/8	3	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 17

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.539185 Long: -85.777766 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 17 is representative of Wetland 8. DP 17 is located in the southwest quadrant of the I-65 and SR 160 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	60	Yes	OBL
2. *Leersia oryzoides*	10	No	OBL
3. *Juncus effusus*	5	No	OBL
4. *Carex lurida*	3	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	78 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	78	x 1 =	78
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	78 (A)		78 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/1	97	10YR 4/4	3	C	M	Loamy/Clayey	Distinct redox concentrations
8-18	10YR 5/2	90	10YR 5/4	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- X Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.5
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 18

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 4 Lat: 38.539174 Long: -85.777848 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 18 is representative of the upland area around Wetland 8. DP 18 is located in the southwest quadrant of the I-65 and SR 160 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	40	Yes	FAC
2. *Plantago lanceolata*	30	Yes	FACU
3. *Securigera varia*	20	Yes	UPL
4. *Cirsium discolor*	5	No	FACU
5. *Solanum carolinense*	3	No	FACU
6. *Eragrostis spectabilis*	2	No	UPL
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	38	x 4 =	152
UPL species	22	x 5 =	110
Column Totals:	100 (A)		382 (B)
Prevalence Index = B/A =			3.82

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/4	100					Loamy/Clayey	
4-18	10YR 5/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 19

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.553063 Long: -85.779240 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 19 is representative of Wetland 9. DP 19 is located along the southbound lanes of I-65 approximately 0.30 mile south of Frontage Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	50	Yes	OBL
2. *Juncus effusus*	15	Yes	OBL
3. *Scirpus atrovirens*	15	Yes	OBL
4. *Cirsium discolor*	7	No	FACU
5. *Setaria pumila*	5	No	FAC
6. *Echinochloa crus-galli*	5	No	FACW
7. *Bidens aristosa*	5	No	FACW
8. *Eupatorium serotinum*	2	No	FAC
9. *Cyperus esculentus*	2	No	FACW
10.			
	106 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	12	x 2 =	24
FAC species	7	x 3 =	21
FACU species	7	x 4 =	28
UPL species	0	x 5 =	0
Column Totals:	106 (A)		153 (B)

Prevalence Index = B/A = 1.44

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/2	95	10YR 5/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 20

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 3 Lat: 38.553039 Long: -85.779220 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 20 is representative of the upland area around Wetland 9. DP 20 is located along the southbound lanes of I-65 approximately 0.30 mile south of Frontage Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca arundinacea*	60	Yes	FACU
2. *Cirsium discolor*	20	Yes	FACU
3. *Daucus carota*	5	No	UPL
4. *Paspalum floridanum*	5	No	FACW
5. *Apocynum cannabinum*	2	No	FAC
6. *Eupatorium serotinum*	2	No	FAC
7. *Iva annua*	2	No	FAC
8. *Solidago gigantea*	1	No	FACW
9.			
10.			
	97	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	6	x 2 =	12
FAC species	6	x 3 =	18
FACU species	80	x 4 =	320
UPL species	5	x 5 =	25
Column Totals:	97 (A)		375 (B)

Prevalence Index = B/A = 3.87

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	100					Loamy/Clayey	
5-18	10YR 5/2	95	10YR 5/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 21

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.558055 Long: -85.779132 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 21 is representative of Wetland 10. DP 21 is located along the southbound lanes of I-65 approximately 0.06 mile south of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Impatiens capensis*	30	Yes	FACW
2. *Leersia virginica*	30	Yes	FACW
3. *Persicaria pensylvanica*	10	No	FACW
4. *Carex typhina*	10	No	OBL
5. *Schedonorus arundinaceus*	5	No	FACU
6. *Scirpus atrovirens*	5	No	OBL
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	70	x 2 =	140
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	90 (A)		175 (B)

Prevalence Index = B/A = 1.94

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 5/2	97	10YR 4/6	3	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 11
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 8

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 22

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.558038 Long: -85.779156 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 22 is representative of the upland area around Wetland 10. DP 22 is located along the southbound lanes of I-65 approximately 0.06 mile south of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	50	Yes	FACU
2. *Fagus grandifolia*	15	No	FACU
3. *Quercus alba*	10	No	FACU
4. *Carya laciniosa*	5	No	FACW
5. *Ulmus rubra*	5	No	FAC
	85	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Acer saccharum*	15	Yes	FACU
2. *Fagus grandifolia*	15	Yes	FACU
3. *Juglans nigra*	5	No	FACU
4. *Quercus alba*	5	No	FACU
5. *Ulmus rubra*	3	No	FAC
	43	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Impatiens capensis*	10	Yes	FACW
2. *Geum aleppicum*	2	No	FACW
3. *Elymus elymoides*	2	No	FACU
4. *Microstegium vimineum*	2	No	FAC
5. *Actaea racemosa*	1	No	UPL
6.			
7.			
8.			
9.			
10.			
	17	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	17	x 2 =	34
FAC species	10	x 3 =	30
FACU species	117	x 4 =	468
UPL species	1	x 5 =	5
Column Totals:	145 (A)		537 (B)

Prevalence Index = B/A = 3.70

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 23

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.559363 Long: -85.779061 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 23 is representative of Wetland 11. DP 23 is located along the southbound lanes of I-65 approximately 0.03 mile north of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Agrostis gigantea*	30	Yes	FACW
2. *Cyperus esculentus*	5	No	FACW
3. *Echinochloa crus-galli*	5	No	FACW
4. *Carex frankii*	3	No	OBL
5. *Juncus interior*	2	No	FAC
6. *Eleocharis palustris*	2	No	OBL
7.			
8.			
9.			
10.			
	47	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	40	x 2 =	80
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	47 (A)		91 (B)

Prevalence Index = B/A = 1.94

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 5/2	97	10YR 5/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	10YR 5/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 3		
Water Table Present?	Yes ___	No X	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 24

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.559409 Long: -85.779136 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 24 is representative of the upland area around Wetland 11. DP 24 is located along the southbound lanes of I-65 approximately 0.03 mile north of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	50	Yes	FACU
2. *Cercis canadensis*	10	No	FACU
3.			
4.			
5.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cercis canadensis*	15	Yes	FACU
2. *Morus alba*	2	No	FAC
3.			
4.			
5.			
	17	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	50	Yes	FACU
2. *Schedonorus arundinaceus*	30	Yes	FACU
3. *Echinochloa crus-galli*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	15	Yes	FACU
2. *Parthenocissus quinquefolia*	5	Yes	FACU
	20	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	2	x 3 =	6
FACU species	175	x 4 =	700
UPL species	0	x 5 =	0
Column Totals:	187 (A)		726 (B)

Prevalence Index = B/A = 3.88

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	
4-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 25

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Alluvial fan Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.568026 Long: -85.779328 Datum: WGS_1984

Soil Map Unit Name: Beanblossom silt loam, 1 to 3 percent slopes, occasionally flooded, very bried duration (BcrAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 25 is representative of Wetland 12. DP 25 is located along the southbound lanes of I-65 approximately 0.14 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	90	Yes	FAC
2.			
3.			
4.			
5.			
	90	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lindera benzoin*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Lycopus americanus*	60	Yes	OBL
2. *Cinna latifolia*	3	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	63	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	8	x 2 =	16
FAC species	90	x 3 =	270
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	158 (A)		346 (B)

Prevalence Index = B/A = 2.19

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	90	10YR 4/4	10	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 2
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 26

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Alluvial fan Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.568030 Long: --85.779368 Datum: WGS_1984

Soil Map Unit Name: Beanblossom silt loam, 1 to 3 percent slopes, occasionally flooded, very bried duration (BcrAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 26 is representative of the upland area around Wetland 12. DP 26 is located along the southbound lanes of I-65 approximately 0.14 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	30	Yes	FACU
2. *Liquidambar styraciflua*	10	No	FACW
3. *Liriodendron tulipifera*	10	No	FACU
4. *Acer rubrum*	5	No	FAC
5.			
	55	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fagus grandifolia*	5	Yes	FACU
2. *Lindera benzoin*	5	Yes	FACW
3. *Prunus serotina*	3	Yes	FACU
4. *Fraxinus pennsylvanica*	2	No	FACW
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Microstegium vimineum*	80	Yes	FAC
2. *Ageratina altissima*	10	No	FACU
3. *Boehmeria cylindrica*	10	No	OBL
4. *Persicaria virginiana*	1	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	101	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Celastrus orbiculatus*	5	Yes	UPL
2.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	17	x 2 =	34
FAC species	86	x 3 =	258
FACU species	58	x 4 =	232
UPL species	5	x 5 =	25
Column Totals:	176 (A)		559 (B)
Prevalence Index = B/A =			3.18

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 27

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.570235 Long: -85.779327 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 27 is representative of Wetland 13. DP 27 is located in the southwest quadrant of the I-65 and Brownstown Road overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	1	No	FACW
2.			
3.			
4.			
5.			
	1 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	30	Yes	OBL
2. *Echinochloa crus-galli*	15	Yes	FACW
3. *Glechoma hederacea*	15	Yes	FACU
4. *Dichanthelium acuminatum*	10	No	FAC
5. *Impatiens capensis*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	75 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	21	x 2 =	42
FAC species	10	x 3 =	30
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	76 (A)		162 (B)

Prevalence Index = B/A = 2.13

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100					Loamy/Clayey	
8-18	10YR 3/1	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 28

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 38.570125 Long: -85.779211 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 28 is representative of the upland area around Wetland 13. DP 28 is located in the southwest quadrant of the I-65 and Brownstown Road overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	20	Yes	FACW
2. *Liriodendron tulipifera*	20	Yes	FACU
3.			
4.			
5.			
	40	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Pinus strobus*	50	Yes	FACU
2. *Carya glabra*	5	No	FACU
3. *Cercis canadensis*	3	No	FACU
4. *Cornus amomum*	2	No	FACW
5.			
	60	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Glechoma hederacea*	25	Yes	FACU
2. *Schedonorus arundinaceus*	10	Yes	FACU
3. *Digitaria sanguinalis*	10	Yes	FACU
4. *Ambrosia artemisiifolia*	5	No	FACU
5. *Poa pratensis*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	55	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	22	x 2 =	44
FAC species	5	x 3 =	15
FACU species	128	x 4 =	512
UPL species	0	x 5 =	0
Column Totals:	155 (A)		571 (B)

Prevalence Index = B/A = 3.68

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/4	95	10YR 7/8	5	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	2.5YR 7/4	65	10YR 7/8	35	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 29

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): None

Slope (%): 2 Lat: 38.570336 Long: -85.779260 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 29 is representative of Wetland 14. DP 29 is located in the northwest quadrant of the I-65 and Brownstown Road overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	2	Yes	OBL
2. *Fraxinus pennsylvanica*	2	Yes	FACW
3. *Platanus occidentalis*	1	Yes	FACW
4.			
5.			
	5	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Carex hystericina*	35	Yes	OBL
2. *Echinochloa crus-galli*	30	Yes	FACW
3. *Persicaria longiseta*	20	No	FAC
4. *Alliaria petiolata*	10	No	FAC
5. *Bidens frondosa*	7	No	FACW
6.			
7.			
8.			
9.			
10.			
	102	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	37	x 1 =	37
FACW species	40	x 2 =	80
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	107 (A)		207 (B)

Prevalence Index = B/A = 1.93

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/1	100					Loamy/Clayey	
4-18	10YR 4/1	80	10YR 4/6	20	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___		
Water Table Present?	Yes ___	No X	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 10	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 30

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): None

Slope (%): 2 Lat: 38.570346 Long: -85.77932 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 30 is representative of the upland area around Wetland 14. DP 2 is located in the northwest quadrant of the I-65 and Brownstown Road overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2. *Quercus alba*	5	Yes	FACU
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Digitaria sanguinalis*	20	Yes	FACU
2. *Elymus virginicus*	15	Yes	FACW
3. *Solidago gigantea*	5	No	FACW
4. *Ambrosia artemisiifolia*	5	No	FACU
5. *Carex davisii*	5	No	FAC
6. *Glechoma hederacea*	5	No	FACU
7. *Persicaria longiseta*	5	No	FAC
8.			
9.			
10.			
	60 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	10	x 3 =	30
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	70 (A)		220 (B)

Prevalence Index = B/A = 3.14

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	80	10YR 4/6	20	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 12

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to collect upland soil beyond 12" but the area was underlaid with gravel.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 31

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.5702 Long: -85.778988 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 31 is representative of Wetland 15. DP 31 is located along Brownstown Road under I-65 southbound lanes.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bidens frondosa*	25	Yes	FACW
2. *Bidens aristosa*	25	Yes	FACW
3. *Schedonorus arundinaceus*	15	Yes	FACU
4. *Elymus virginicus*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	70	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	70 (A)		170 (B)

Prevalence Index = B/A = 2.43

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Loamy/Clayey	
2-6	10YR 4/2	65	10YR 4/6	35	C	M	Loamy/Clayey	Prominent redox concentrations
6-8	10YR 5/2	95	10YR 5/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 8

Hydric Soil Present? **Yes** ___ **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to collect upland soil beyond 8" but the area was underlaid with gravel.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 32

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.570141 Long: -85.778826 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 32 is representative of the upland area around Wetland 15. DP 32 is located along Brownstown Road under I-65 southbound lanes.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Poa pratensis*	50	Yes	FAC
2. *Schedonorus arundinaceus*	40	Yes	FACU
3. *Echinochloa crus-galli*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	50	x 3 =	150
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	100 (A)		330 (B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-11	10YR 4/6	90	10YR 6/1	10	D	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 11

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to collect upland soil beyond 11" but the area was underlaid with gravel.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 33

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): None

Slope (%): 5 Lat: 38.571342 Long: -85.779111 Datum: WGS_1984

Soil Map Unit Name: Weddel silt loam, 2 to 6 percent slopes, eroded (WedB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 33 is representative of Wetland 16. DP 33 is located along the southbound lanes of I-65 approximately 0.08 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	20	Yes	FACW
2. *Juncus effusus*	15	Yes	OBL
3. *Carex frankii*	10	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	45 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	45 (A)		65 (B)

Prevalence Index = B/A = 1.44

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 5/2	90	10YR 5/8	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 34

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): None

Slope (%): 5 Lat: 38.571265 Long: -85.779113 Datum: WGS_1984

Soil Map Unit Name: Weddel silt loam, 2 to 6 percent slopes, eroded (WedB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 34 is representative of the upland area around Wetland 16. DP 34 is located along the southbound lanes of I-65 approximately 0.08 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	70	Yes	FACU
2. *Platanus occidentalis*	15	No	FACW
3. *Juglans nigra*	15	No	FACU
4.			
5.			
	100	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Agrostis gigantea*	70	Yes	FACW
2. *Persicaria punctata*	25	Yes	OBL
3. *Impatiens capensis*	10	No	FACW
4. *Asclepias syriaca*	7	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	112	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	92	x 4 =	368
UPL species	0	x 5 =	0
Column Totals:	212 (A)		583 (B)

Prevalence Index = B/A = 2.75

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 34

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Loamy/Clayey	
7-18	10YR 4/3	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 35

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.578878 Long: -85.779223 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 35 is representative of Wetland 17. DP 35 is located along the southbound lanes of I-65 approximately 0.6 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus effusus*	60	Yes	OBL
2. *Poa pratensis*	30	Yes	FAC
3. *Typha latifolia*	15	No	OBL
4. *Impatiens capensis*	15	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	15	x 2 =	30
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		195 (B)

Prevalence Index = B/A = 1.63

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					Loamy/Clayey	
5-18	10YR 6/2	85	10YR 5/8	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 7
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 5

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 36

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.578846 Long: -85.779201 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 36 is representative of the upland area around Wetland 17. DP 36 is locatedl along the southbound lanes of I-65 approximately 0.6 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Poa pratensis*	60	Yes	FAC
2. *Festuca rubra*	40	Yes	FACU
3. *Dipsacus fullonum*	20	No	FACU
4. *Agrostis gigantea*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	130 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	60	x 3 =	180
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	135 (A)		450 (B)

Prevalence Index = B/A = 3.33

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 4/2	65	10YR 5/8	20	C	M	Loamy/Clayey	
			10YR 4/4	15	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 37

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.581797 Long: -85.779132 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 37 is representative of Wetland 18. DP 37 is located along the southbound lanes of I-65 approximately 0.8 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	95	Yes	OBL
2. *Agrostis gigantea*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		115 (B)

Prevalence Index = B/A = 1.10

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	80	10YR 5/4	20	C	M	Loamy/Clayey	Faint redox concentrations
5-18	10YR 6/2	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 10

Saturation Present? Yes X No ___ Depth (inches): 8

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 38

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.581782 Long: -85.779123 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 38 is representative of the upland area around Wetland 18. DP 38 is located along the southbound lanes of I-65 approximately 0.8 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Andropogon gerardii*	65	Yes	FAC
2. *Paspalum floridanum*	20	No	FACW
3. *Setaria faberi*	20	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	65	x 3 =	195
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	105 (A)		315 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 5/2	100					Loamy/Clayey	
5-18	10YR 6/2	80	10YR 5/6	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 39

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): None

Slope (%): 1 Lat: 38.584093 Long: -85.779251 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 39 is representative of upland area around Wheel Run located along the southbound lanes of I-65 approximately 1 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Platanus occidentalis*	40	Yes	FACW
2. *Quercus alba*	30	Yes	FACU
3.			
4.			
5.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	25	Yes	FACW
2.			
3.			
4.			
5.			
	25	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Agrostis gigantea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	165	x 2 =	330
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	195 (A)		450 (B)

Prevalence Index = B/A = 2.31

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 39

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	100					Loamy/Clayey	
8-18	10YR 4/3	85	10YR 5/6	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 40

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.586092 Long: -85.779169 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 40 is representative of Wetland 19. DP 40 is located along the southbound lanes of I-65 along the rest area on-ramp.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Poa pratensis*	60	Yes	FAC
2. *Carex frankii*	60	Yes	OBL
3. *Typha latifolia*	20	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	140 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	140 (A)		260 (B)

Prevalence Index = B/A = 1.86

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 40

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	95	10YR 5/8	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 4

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 41

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 6 Lat: 38.585984 Long: -85.779198 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 41 is representative of the upland area around Wetland 19. DP 41 is located along the southbound lanes of I-65 along the rest area on-ramp.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Pinus strobus*	5	Yes	FACU
2. *Liquidambar styraciflua*	3	Yes	FACW
3.			
4.			
5.			
	8 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	70	Yes	FACU
2. *Paspalum floridanum*	20	No	FACW
3. *Plantago lanceolata*	7	No	FACU
4. *Solidago gigantea*	7	No	FACW
5. *Quercus alba*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	109 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	87	x 4 =	348
UPL species	0	x 5 =	0
Column Totals:	117 (A)		408 (B)

Prevalence Index = B/A = 3.49

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 41

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					Loamy/Clayey	
5-18	10YR 5/2	85	10YR 5/6	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 42

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.588405 Long: -85.779223 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 6 to 12 percent slopes, severely eroded (ConC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 42 is representative of Wetland 20. DP 42 is located along the southbound lanes of I-65 rest area off-ramp.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	75	Yes	OBL
2. *Carex hystericina*	20	No	OBL
3. *Typha latifolia*	15	No	OBL
4. *Bidens frondosa*	10	No	FACW
5. *Cyperus esculentus*	10	No	FACW
6.			
7.			
8.			
9.			
10.			
	130 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	110	x 1 =	110
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		150 (B)

Prevalence Index = B/A = 1.15

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 42

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 6/1	60	10YR 5/8	40	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 43

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Convex

Slope (%): 10 Lat: 38.588399 Long: -85.779216 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 6 to 12 percent slopes, severely eroded (ConC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP43 is representative of the upland area around Wetland 20. DP 43 is located along the southbound lanes of I-65 rest area off-ramp.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	50	Yes	UPL
2. *Schedonorus arundinaceus*	50	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	2	No	FACU
2.			
	2 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	52	x 4 =	208
UPL species	50	x 5 =	250
Column Totals:	102 (A)		458 (B)

Prevalence Index = B/A = 4.49

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 43

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 5/2	85	10YR 7/4	15	C	M	Loamy/Clayey	Distinct redox concentrations
4-18	10YR 5/3	80	10YR 5/8	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 44

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.590239 Long: -85.779262 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 44 is representative of Wetland 21.2. DP 44 is located along the southbound lanes of I-65 approximately 1 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Scirpus atrovirens*	50	Yes	OBL
2. *Leersia oryzoides*	40	Yes	OBL
3. *Juncus effusus*	5	No	OBL
4. *Dipsacus fullonum*	2	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	97 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	97 (A)		103 (B)

Prevalence Index = B/A = 1.06

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 44

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	80	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations
	10YR 2/1	10						Organic material
4-18	10YR 5/1	20					Loamy/Clayey	
	10YR 2/1	10						Organic material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	0.5
Water Table Present?	Yes X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09//02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 45

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.590278 Long: -85.779264 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
DP 45 is representative of Wetland 21.1. DP 45 is located along the southbound lanes of I-65 approximately 1 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	25	Yes	FACW
2. *Platanus occidentalis*	15	Yes	FACW
3. *Taxodium distichum*	15	Yes	OBL
4.			
5.			
	55	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cephalanthus occidentalis*	50	Yes	OBL
2. *Liquidambar styraciflua*	10	No	FACW
3. *Liriodendron tulipifera*	5	No	FACU
4.			
5.			
	65	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	70	Yes	OBL
2. *Scirpus atrovirens*	10	No	OBL
3. *Persicaria maculosa*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	145	x 1 =	145
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	210 (A)		285 (B)

Prevalence Index = B/A = 1.36

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 45

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	80					Loamy/Clayey	
	10YR 2/1	20						Organic material
4-18	10YR 5/1	80	10YR 4/6	10	C	M	Loamy/Clayey	
	10YR 2/1	10						Organic material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1		
Water Table Present?	Yes X	No ___	Depth (inches): 0		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 46

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.590256 Long: -85.779226 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 46 is representative of the upland area around Wetland 21.1 and Wetland 21.2. DP 46 is located along the southbound lanes of I-65 approximately 1 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	50	Yes	FACW
2.			
3.			
4.			
5.			
	50 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	30	Yes	UPL
2. *Poa pratensis*	30	Yes	FAC
3. *Festuca rubra*	30	Yes	FACU
4. *Spartina pectinata*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	30	x 3 =	90
FACU species	30	x 4 =	120
UPL species	30	x 5 =	150
Column Totals:	150 (A)		480 (B)

Prevalence Index = B/A = 3.20

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 46

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 6/1	90	10YR 5/8	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 47

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.591848 Long: -85.779098 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 47 is representative of Wetland 22. DP 47 is located along the southbound lanes of I-65 approximately 0.9 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Poa pratensis*	30	Yes	FAC
2. *Echinochloa crus-galli*	15	Yes	FACW
3. *Typha latifolia*	10	No	OBL
4. *Cyperus esculentus*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	65 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	25	x 2 =	50
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	65 (A)		150 (B)

Prevalence Index = B/A = 2.31

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 47

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/1	100					Loamy/Clayey	
5-18	10YR 6/1	70	10YR 5/8	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	1
Water Table Present?	Yes X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 48

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Conves

Slope (%): 15 Lat: 38.591803 Long: -85.779106 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 48 is representative of the upland area around Wetland 22. DP 48 is located along the southbound lanes of I-65 approximately 0.9 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	50	Yes	FACU
2. *Bothriochloa laguroides*	50	Yes	UPL
3. *Setaria pumila*	10	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	10	x 3 =	30
FACU species	50	x 4 =	200
UPL species	50	x 5 =	250
Column Totals:	115 (A)		490 (B)
Prevalence Index = B/A =			4.26

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 48

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 5/4	90	10YR 4/6	10	C	M	Loamy/Clayey	Distinct redox concentrations
5-18	10YR 6/1	90	10YR 5/8	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 49

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.595436 Long: -85.77943 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded (BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 49 is representative of Wetland 23. DP 49 is located along the southbound lanes of I-65 approximately 0.7 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	70	Yes	OBL
2. *Scirpus atrovirens*	10	No	OBL
3. *Echinochloa crus-galli*	10	No	FACW
4. *Juncus effusus*	10	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		110 (B)

Prevalence Index = B/A = 1.10

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 49

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					Loamy/Clayey	
5-18	10YR 6/1	85	10YR 6/6	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	1
Water Table Present?	Yes X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 50

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.595761 Long: -85.779479 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded (BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 50 is representative of the upland area around Wetland 23 and 24. DP 50 is located along the southbound lanes of I-65 approximately 0.7 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Pyrus calleryana*	3	Yes	UPL
2. *Fraxinus pennsylvanica*	2	Yes	FACW
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	90	Yes	UPL
2. *Dipsacus fullonum*	10	No	FACU
3. *Melilotus officinalis*	5	No	FACU
4. *Spartina pectinata*	1	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	106 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	10	Yes	FACU
2.			
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	0	x 3 =	0
FACU species	26	x 4 =	104
UPL species	93	x 5 =	465
Column Totals:	121 (A)		573 (B)

Prevalence Index = B/A = 4.74

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 50

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/3	100					Loamy/Clayey	
6-18	10YR 5/4	80	10YR 6/8	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 51

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 15 Lat: 38.595994 Long: -85.779467 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded (BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 51 is representative of Wetland 24. DP 51 is located along the southbound lanes of I-65 approximately 0.6 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Scirpus atrovirens*	80	Yes	OBL
2. *Cyperus esculentus*	25	No	FACW
3. *Poa pratensis*	20	No	FAC
4. *Juncus torreyi*	5	No	FACW
5. *Paspalum floridanum*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	135	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	35	x 2 =	70
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	135 (A)		210 (B)

Prevalence Index = B/A = 1.56

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 51

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 5/2	83	10YR 5/6	10	C	M	Loamy/Clayey	
	10YR 2/1	7						Organic material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 52

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.597891 Long: -85.780009 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded(BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 52 is representative of Wetland 25. DP 52 is located along the southbound lanes of I-65 approximately 0.5 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	60	Yes	OBL
2. *Juncus effusus*	15	No	OBL
3. *Cyperus esculentus*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		95 (B)

Prevalence Index = B/A = 1.12

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 52

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/1	100					Muck	
2-18	10YR 5/1	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 53

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.597901 Long: -85.780056 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded(BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 53 is representative of the upland area around Wetland 25. DP 53 is located along the southbound lanes of I-65 approximately 0.5 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	50	Yes	FACU
2. *Alopecurus pratensis*	50	Yes	FACW
3. *Asclepias syriaca*	7	No	FACU
4. *Plantago lanceolata*	7	No	FACU
5. *Solidago gigantea*	3	No	FACW
6. *Daucus carota*	3	No	UPL
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	53	x 2 =	106
FAC species	0	x 3 =	0
FACU species	64	x 4 =	256
UPL species	3	x 5 =	15
Column Totals:	120 (A)		377 (B)

Prevalence Index = B/A = 3.14

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 53

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 5/3	100					Loamy/Clayey	
6-18	10YR 6/3	50	10YR 6/8	50	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 54

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.619253 Long: -85.783025 Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (HcgAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 54 is representative of Wetland 26. DP 54 is located along the southbound lanes of I-65 approximately 1 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Carex hystericina*	95	Yes	OBL
2. *Bidens frondosa*	5	No	FACW
3. *Echinochloa crus-galli*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		115 (B)

Prevalence Index = B/A = 1.10

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 54

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	90	10YR 5/8	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 3		
Water Table Present?	Yes ___	No X	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 55

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.619250 Long: -85.783011 Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (HcgAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 55 is representative of the upland area around Wetland 26. DP 55 is located along the southbound lanes of I-65 approximately 1 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	70	Yes	UPL
2. *Schedonorus arundinaceus*	30	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	50	Yes	FACU
2.			
	50 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	70	x 5 =	350
Column Totals:	150 (A)		670 (B)

Prevalence Index = B/A = 4.47

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 55

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 5/6	90	10YR 4/2	10	D	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 56

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.620910 Long: -85.783647 Datum: WGS_1984

Soil Map Unit Name: Pekin silt loam, 2 to 6 percent slopes, eroded (PcrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 56 is representative of Wetland 27. DP 56 is located along the southbound lanes of I-65 approximately 1.1 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus effusus*	70	Yes	OBL
2. *Schedonorus arundinaceus*	35	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	105 (A)		210 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 56

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: riprap

Depth (inches): 6

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to collect upland soil beyond 6" but the area was underlaid with riprap.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 57

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.620921 Long: -85.783669 Datum: WGS_1984

Soil Map Unit Name: Pekin silt loam, 2 to 6 percent slopes, eroded (PcrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 57 is representative of the upland area around Wetland 27. DP 57 is located along the southbound lanes of I-65 approximately 1.1 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	60	Yes	FACU
2. *Setaria viridis*	30	Yes	UPL
3. *Poa pratensis*	25	Yes	FAC
4. *Eupatorium perfoliatum*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	60	x 4 =	240
UPL species	30	x 5 =	150
Column Totals:	120 (A)		470 (B)

Prevalence Index = B/A = 3.92

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 57

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 5/4	100					Loamy/Clayey	
5-18	10YR 6/2	90	10YR 6/8	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 58

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.632848 Long: -85.784261 Datum: WGS_1984

Soil Map Unit Name: Oldenburg loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (OfbAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 58 is representative of Wetland 28. DP 58 is located along the southbound lanes of I-65 approximately 1.9 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Poa pratensis*	70	Yes	FAC
2. *Bidens frondosa*	35	Yes	FACW
3. *Leersia oryzoides*	15	No	OBL
4. *Cyperus esculentus*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	130 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	45	x 2 =	90
FAC species	70	x 3 =	210
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		315 (B)

Prevalence Index = B/A = 2.42

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 58

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	50					Mucky Loam/Clay	
	10YR 2/1	50						Organic material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: riprap

Depth (inches): 5

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to collect upland soil beyond 5" but the area was underlaid with riprap.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	1
Water Table Present?	Yes X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 59

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.632842 Long: -85.784242 Datum: WGS_1984

Soil Map Unit Name: Oldenburg loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (OfbAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 59 is representative of the upland area around Wetland 28. DP 59 is located along the southbound lanes of I-65 approximately 1.9 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	30	Yes	FAC
2. *Festuca rubra*	30	Yes	FACU
3. *Poa pratensis*	30	Yes	FAC
4. *Cirsium discolor*	10	No	FACU
5. *Ambrosia artemisiifolia*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	105	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	105 (A)		360 (B)

Prevalence Index = B/A = 3.43

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 59

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/8	97	10YR 7/8	3	C	M	Loamy/Clayey	Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 60

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 268

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.635077 Long: -85.784231 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded (HcdC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 60 is representative of Wetland 29. DP 60 is located along the southbound lanes of I-65 approximately 2.1 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus torreyi*	80	Yes	FACW
2. *Juncus effusus*	10	No	OBL
3. *Paspalum floridanum*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		190 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 60

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 4/2	97	10YR 7/8	3	C	M	Loamy/Clayey	Prominent redox concentrations
9-18	2.5YR 7/2	85	10YR 6/8	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 61

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 268

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.635001 Long: -85.784210 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded (HcdC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 61 is representative of the upland area around Wetland 29. DP 61 is located along the southbound lanes of I-65 approximately 2.1 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rubus alumnus*	7	Yes	FACU
2.			
3.			
4.			
5.			
	7 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	65	Yes	UPL
2. *Paspalum floridanum*	30	Yes	FACW
3. *Echinochloa crus-galli*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	15	Yes	FACU
2.			
	15 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	22	x 4 =	88
UPL species	65	x 5 =	325
Column Totals:	127 (A)		493 (B)
Prevalence Index = B/A =			3.88

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 61

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 4/2	97	10YR 7/8	3	C	M	Loamy/Clayey	Prominent redox concentrations
9-18	2.5YR 7/2	85	10YR 6/8	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 62

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.658847 Long: -85.783421 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 62 is representative of Wetland 30. DP 62 is located along I-65 southbound lanes, approximately 0.70 mile north of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	30	Yes	FACW
2. *Leersia oryzoides*	15	Yes	OBL
3. *Carex vulpinoidea*	10	No	FACW
4. *Alisma subcordatum*	8	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	63 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	23	x 1 =	23
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	63 (A)		103 (B)

Prevalence Index = B/A = 1.63

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 62

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/2	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.25		
Water Table Present?	Yes X	No ___	Depth (inches): 0		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 63

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.658870 Long: -85.783454 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 63 is representative of the upland area around Wetland 30. DP 63 is located along the southbound lanes of I-65 approximately 0.70 mile north of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	10	Yes	FACW
2. *Platanus occidentalis*	10	Yes	FACW
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Elaeagnus umbellata*	5	Yes	UPL
2. *Juniperus virginiana*	1	No	FACU
3. *Rosa palustris*	1	No	OBL
4.			
5.			
	7	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	50	Yes	FACU
2. *Sorghum halepense*	25	Yes	FACU
3. *Lotus corniculatus*	8	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	83	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Vitis labrusca*	3	No	FACU
2.			
	3	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	1	x 1 =	1
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	87	x 4 =	348
UPL species	5	x 5 =	25
Column Totals:	113 (A)		414 (B)

Prevalence Index = B/A = 3.66

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 63

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/4	100					Loamy/Clayey	
3-16	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 64

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.662329 Long: -85.782779 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 2 to 4 percent slopes (BbhB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 64 is representative of Wetland 31. DP 64 is located along the southbound lanes of I-65 approximately 0.60 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schoenoplectus tabernaemontani*	40	Yes	OBL
2. *Leersia oryzoides*	30	Yes	OBL
3. *Carex frankii*	20	No	OBL
4. *Setaria pumila*	8	No	FAC
5. *Typha latifolia*	5	No	OBL
6.			
7.			
8.			
9.			
10.			
	103	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	0	x 2 =	0
FAC species	8	x 3 =	24
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	103 (A)		119 (B)

Prevalence Index = B/A = 1.16

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 64

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 4/1	95	10YR 4/6	5	C	M	Mucky Loam/Clay	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: riprap

Depth (inches): 15

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.25
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 65

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.662314 Long: -85.782824 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 2 to 4 percent slopes (BbhB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 65 is representative of the upland area around Wetland 31. DP 65 is located along the southbound lanes of I-65 approximately 0.60 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	40	Yes	FACU
2. *Setaria pumila*	20	Yes	FAC
3. *Cirsium vulgare*	10	No	FACU
4. *Solidago altissima*	7	No	FACU
5. *Asclepias syriaca*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	82	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Vitis labrusca*	5	Yes	FACU
2.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	67	x 4 =	268
UPL species	0	x 5 =	0
Column Totals:	87 (A)		328 (B)

Prevalence Index = B/A = 3.77

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 65

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Loamy/Clayey	
7-18	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 66

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.664804 Long: -85.782685 Datum: WGS_1984

Soil Map Unit Name: Dubois silt loam, 2 to 6 percent slopes, eroded (DfnB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 66 is representative of Wetland 32. DP 66 is located along the southbound lanes of I-65 approximately 0.43 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	3	No	FACW
2.			
3.			
4.			
5.			
	3 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	85	Yes	OBL
2. *Schoenoplectus tabernaemontani*	5	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	3	x 2 =	6
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	93 (A)		96 (B)

Prevalence Index = B/A = 1.03

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 66

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	90	10YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 67

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.664825 Long: -85.782699 Datum: WGS_1984

Soil Map Unit Name: Dubois silt loam, 2 to 6 percent slopes, eroded (DfnB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 67 is representative of the upland area around Wetland 32. DP 67 is located along the southbound lanes of I-65 approximately 0.43 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Diospyros virginiana*	15	Yes	FAC
2. *Acer saccharinum*	7	Yes	FACW
3.			
4.			
5.			
	22	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	30	Yes	FACU
2. *Fraxinus pennsylvanica*	8	Yes	FACW
3.			
4.			
5.			
	38	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	30	Yes	FACU
2. *Setaria pumila*	15	Yes	FAC
3. *Symphyotrichum pilosum*	2	No	FACU
4. *Asclepias syriaca*	1	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	48	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	30	Yes	FACU
2. *Toxicodendron radicans*	20	Yes	FAC
	50	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 62.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	50	x 3 =	150
FACU species	93	x 4 =	372
UPL species	0	x 5 =	0
Column Totals:	158 (A)		552 (B)
Prevalence Index = B/A =			3.49

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 67

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 68

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.676307 Long: -85.786569 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded (HcdC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 68 is representative of Wetland 33. DP 68 is located along the southbound lanes of I-65 approximately 0.40 mile north of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	60	Yes	FACW
2. *Leersia oryzoides*	20	Yes	OBL
3. *Persicaria lapathifolia*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	65	x 2 =	130
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		150 (B)

Prevalence Index = B/A = 1.76

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 68

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	90	10YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 69

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.676341 Long: -85.786703 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 69 is representative of the upland area around Wetland 33. DP 69 is located along the southbound lanes of I-65 approximately 0.40 mile north of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus nigra*	30	Yes	UPL
2. *Liquidambar styraciflua*	20	Yes	FACW
3. *Cercis canadensis*	15	No	FACU
4. *Platanus occidentalis*	15	No	FACW
5. *Juglans nigra*	10	No	FACU
	90	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lindera benzoin*	25	Yes	FACW
2. *Liquidambar styraciflua*	15	Yes	FACW
3.			
4.			
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Parthenocissus quinquefolia*	10	Yes	FACU
2. *Toxicodendron radicans*	7	Yes	FAC
	17	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	7	x 3 =	21
FACU species	35	x 4 =	140
UPL species	30	x 5 =	150
Column Totals:	147 (A)		461 (B)

Prevalence Index = B/A = 3.14

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 69

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	2.5YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 70

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): concave

Slope (%): 0 Lat: 38.677799 Long: -85.787207 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded (HcdC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 70 is representative of Wetland 34. DP 70 is located along the southbound lanes of I-65 approximately 0.52 mile north of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Panicum virgatum*	30	Yes	FAC
2. *Cyperus esculentus*	20	Yes	FACW
3. *Leersia oryzoides*	15	No	OBL
4. *Asclepias incarnata*	10	No	OBL
5. *Typha latifolia*	10	No	OBL
6. *Schedonorus arundinaceus*	5	No	FACU
7. *Schoenoplectus tabernaemontani*	5	No	OBL
8. *Mimulus ringens*	3	No	OBL
9. *Ambrosia artemisiifolia*	1	No	FACU
10.			
	99	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	43	x 1 =	43
FACW species	20	x 2 =	40
FAC species	30	x 3 =	90
FACU species	6	x 4 =	24
UPL species	0	x 5 =	0
Column Totals:	99 (A)		197 (B)

Prevalence Index = B/A = 1.99

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 70

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	2.5Y 4/1	92	2.5Y 4/4	8	C	M	Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 0.25

Water Table Present? Yes X No ___ Depth (inches): 3

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 71

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.677733 Long: -85.787149 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded (HcdC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 71 is representative of the upland area around Wetland 34. DP 71 is located along the southbound lanes of I-65 approximately 0.51 mile north of Lake Road

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	55	Yes	FACU
2. *Paspalum floridanum*	15	No	FACW
3. *Setaria pumila*	10	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	10	x 3 =	30
FACU species	55	x 4 =	220
UPL species	0	x 5 =	0
Column Totals:	80 (A)		280 (B)

Prevalence Index = B/A = 3.50

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 71

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Loamy/Clayey	
5-18	2.5YR 5/3	98	2.5YR 5/6	2	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 72

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.684182 Long: -85.788333 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 72 is representative of Wetland 35. DP 72 is located in the southwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	60	Yes	FACW
2. *Leersia oryzoides*	25	Yes	OBL
3. *Schoenoplectus tabernaemontani*	5	No	OBL
4. *Echinochloa crus-galli*	2	No	FACW
5. *Juncus tenuis*	1	No	FAC
6. *Acalypha rhomboidea*	1	No	FACU
7.			
8.			
9.			
10.			
	94 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	62	x 2 =	124
FAC species	1	x 3 =	3
FACU species	1	x 4 =	4
UPL species	0	x 5 =	0
Column Totals:	94 (A)		161 (B)

Prevalence Index = B/A = 1.71

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 72

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	100					Loamy/Clayey	
3-18	10YR 5/1	92	10YR 5/6	8	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 73

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.684027 Long: -85.788386 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 73 is representative of the upland area around Wetland 35. DP 73 is located in the southwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	70	Yes	FACU
2. *Setaria pumila*	10	No	FAC
3. *Xanthium strumarium*	8	No	FAC
4. *Andropogon virginicus*	5	No	FACU
5. *Lotus corniculatus*	5	No	FACU
6. *Eragrostis spectabilis*	5	No	UPL
7. *Apocynum cannabinum*	3	No	FAC
8. *Agrostis gigantea*	3	No	FACW
9.			
10.			
	109 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	3	x 2 =	6
FAC species	21	x 3 =	63
FACU species	80	x 4 =	320
UPL species	5	x 5 =	25
Column Totals:	109 (A)		414 (B)

Prevalence Index = B/A = 3.80

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 73

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 74

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.684666 Long: -85.788408 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 74 is representative of Wetland 36. DP 74 is located in the southwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	30	Yes	OBL
2. *Typha latifolia*	20	Yes	OBL
3. *Apocynum cannabinum*	5	No	FAC
4. *Juncus effusus*	2	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	57 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	52	x 1 =	52
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	57 (A)		67 (B)

Prevalence Index = B/A = 1.18

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 74

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No ___	Depth (inches):	1
Water Table Present?	Yes	X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes	X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 75

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): none

Slope (%): 0 Lat: 38.685004 Long: -85.788833 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 75 is representative of Wetland 36. DP 75 is located in the southwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	60	Yes	FACW
2. *Schoenoplectus tabernaemontani*	40	Yes	OBL
3. *Echinochloa crus-galli*	25	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	125 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	85	x 2 =	170
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	125 (A)		210 (B)

Prevalence Index = B/A = 1.68

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 75

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/1	98	10YR 4/6	2	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 76

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.685069 Long: -85.788897 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 76 is representative of the upland area around Wetland 36. DP 76 is located in the southwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	2	No	FACW
2.			
3.			
4.			
5.			
	2 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	65	Yes	FACU
2. *Setaria pumila*	15	No	FAC
3. *Echinochloa crus-galli*	8	No	FACW
4. *Cyperus esculentus*	3	No	FACW
5. *Verbena hastata*	1	No	FACW
6.			
7.			
8.			
9.			
10.			
	92 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	14	x 2 =	28
FAC species	15	x 3 =	45
FACU species	65	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	94 (A)		333 (B)

Prevalence Index = B/A = 3.54

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 76

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	
4-18	10YR 4/3	98	10YR 4/6	2	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 77

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.686060 Long: -85.788854 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 77 is representative of Wetland 37. DP 77 is located in the northwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	80	Yes	OBL
2. *Typha latifolia*	20	No	OBL
3. *Persicaria lapathifolia*	2	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	102 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	100	x 1 =	100
FACW species	2	x 2 =	4
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	102 (A)		104 (B)

Prevalence Index = B/A = 1.02

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 77

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 78

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.686026 Long: -85.788538 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 78 is representative of the upland area around Wetland 37. DP 78 is located in the northwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	60	Yes	FACU
2. *Echinochloa crus-galli*	40	Yes	FACW
3. *Cyperus esculentus*	10	No	FACW
4. *Carex pallescens*	5	No	FACW
5. *Setaria pumila*	2	No	FAC
6.			
7.			
8.			
9.			
10.			
	117 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	2	x 3 =	6
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	117 (A)		356 (B)

Prevalence Index = B/A = 3.04

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 78

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 79

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.686860 Long: -85.788545 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No ____	

Remarks:
DP 79 is representative of Wetland 38. DP 79 is located in the northwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	60	Yes	OBL
2. *Echinochloa crus-galli*	15	No	FACW
3. *Cyperus esculentus*	10	No	FACW
4. *Setaria pumila*	8	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	93 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	25	x 2 =	50
FAC species	8	x 3 =	24
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	93 (A)		134 (B)

Prevalence Index = B/A = 1.44

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 79

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	95	10YR 5/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 80

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.686809 Long: -85.789134 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 80 is representative of the upland area around Wetland 38. DP 80 is located in the northwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	50	Yes	FACW
2. *Juncus effusus*	15	Yes	OBL
3. *Cyperus esculentus*	5	No	FACW
4. *Carex frankii*	2	No	OBL
5. *Setaria pumila*	2	No	FAC
6.			
7.			
8.			
9.			
10.			
	74	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	17	x 1 =	17
FACW species	55	x 2 =	110
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	74 (A)		133 (B)

Prevalence Index = B/A = 1.80

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 80

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	2.5YR 5/3	100					Loamy/Clayey	
4-18	2.5YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 81

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.687431 Long: 85.789108 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 81 is representative of Wetland 39. DP 81 is located along the southbound exit ramp in the northwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Platanus occidentalis*	8	Yes	FACW
2.			
3.			
4.			
5.			
	8 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	60	Yes	OBL
2. *Persicaria lapathifolia*	8	No	FACW
3. *Bidens frondosa*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	73 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	21	x 2 =	42
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	81 (A)		102 (B)

Prevalence Index = B/A = 1.26

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 81

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	100					Loamy/Clayey	
10-18	GLEY1 2.5/N	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- X Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 11
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 82

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.687715 Long: -85.788960 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 82 is representative of the upland area around Wetland 39. DP 82 is located in the northwest quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	8	Yes	FACW
2.			
3.			
4.			
5.			
	8 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	60	Yes	FACU
2. *Plantago major*	15	No	FAC
3. *Setaria pumila*	10	No	FAC
4. *Securigera varia*	8	No	UPL
5. *Agrostis gigantea*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	98 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	13	x 2 =	26
FAC species	25	x 3 =	75
FACU species	60	x 4 =	240
UPL species	8	x 5 =	40
Column Totals:	106 (A)		381 (B)
Prevalence Index = B/A =			3.59

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 82

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					Loamy/Clayey	
5-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 83

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.688924 Long: -85.788701 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 83 is representative of Wetland 40. DP 83 is located along the southbound lanes of I-65 approximately 0.24 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	70	Yes	OBL
2. *Juncus effusus*	15	No	OBL
3. *Typha latifolia*	10	No	OBL
4. *Carex pallescens*	3	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	98	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	3	x 2 =	6
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	98 (A)		101 (B)

Prevalence Index = B/A = 1.03

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 83

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No ___	Depth (inches):	0.25
Water Table Present?	Yes	X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes	X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 84

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.688878 Long: -85.788690 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 84 is representative of the upland area around Wetland 40. DP 84 is located along the southbound lanes of I-65 approximately 0.24 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	85	Yes	FACU
2. *Setaria pumila*	8	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	93 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	8	x 3 =	24
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	93 (A)		364 (B)

Prevalence Index = B/A = 3.91

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 84

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 85

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.691744 Long: -85.788914 Datum: WGS_1984

Soil Map Unit Name: Haubstadt silt loam, 2 to 6 percent slopes, eroded (HccB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 85 is representative of Wetland 41.1. DP 85 is located along the southbound lanes of I-65 approximately 0.44 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	55	Yes	FACW
2. *Echinochloa crus-galli*	45	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 85

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/1	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	GLEY1 7/10Y	80	10YR 4/6	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- X Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

2017 IndianaMap Aerial Photography

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 86

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.691743 Long: -85.788929 Datum: WGS_1984

Soil Map Unit Name: Haubstadt silt loam, 2 to 6 percent slopes, eroded (HccB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 86 is representative of the upland area around Wetland 41.1. DP 86 is located along the southbound lanes of I-65 approximately 0.44 mile north of the I-65 and SR 56 overpass

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	25	Yes	FACW
2. *Diospyros virginiana*	10	Yes	FAC
3.			
4.			
5.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	30	Yes	FACU
2. *Liquidambar styraciflua*	8	No	FACW
3. *Rhus glabra*	5	No	UPL
4. *Euonymus alatus*	5	No	UPL
5.			
	48	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	5	Yes	FACU
2. *Solidago canadensis*	1	No	FACU
3. *Daucus carota*	1	No	UPL
4. *Achillea millefolium*	1	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	8	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Vitis labrusca*	4	No	FACU
2.			
	4	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	33	x 2 =	66
FAC species	10	x 3 =	30
FACU species	41	x 4 =	164
UPL species	11	x 5 =	55
Column Totals:	95 (A)		315 (B)

Prevalence Index = B/A = 3.32

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 86

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5YR 6/4	95	2.5YR 5/6	5	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 87

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.694180 Long: -85.789188 Datum: WGS_1984

Soil Map Unit Name: Bonnie silt loam, 0 to 1 percent slopes, frequently flooded, brief duration (BodAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 87 is representative of the upland area around Wetland 41.1. DP 87 is located along the southbound lanes of I-65 approximately 0.60 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus palustris*	30	Yes	FACW
2. *Diospyros virginiana*	15	Yes	FAC
3. *Fraxinus pennsylvanica*	10	No	FACW
4.			
5.			
	55	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cephalanthus occidentalis*	8	Yes	OBL
2.			
3.			
4.			
5.			
	8	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	45	Yes	FACU
2. *Ambrosia artemisiifolia*	15	Yes	FACU
3. *Bidens frondosa*	8	No	FACW
4. *Juncus tenuis*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	73	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	5	Yes	FACU
2.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	8	x 1 =	8
FACW species	48	x 2 =	96
FAC species	20	x 3 =	60
FACU species	65	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	141 (A)		424 (B)
Prevalence Index = B/A =			3.01

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 87

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	98	10YR 4/6	2	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 88

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.695503 Long: -85.789448 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 88 is representative of Wetland 41.2. DP 88 is located along the southbound lanes of I-65 approximately 0.70 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	20	Yes	FACW
2. *Salix nigra*	15	Yes	OBL
3.			
4.			
5.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Acer pensylvanicum*	8	Yes	FACU
2. *Quercus palustris*	3	Yes	FACW
3. *Rosa palustris*	3	Yes	OBL
4.			
5.			
	14	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Saururus cernuus*	70	Yes	OBL
2. *Elymus virginicus*	10	No	FACW
3. *Lysimachia nummularia*	8	No	FACW
4. *Typha latifolia*	8	No	OBL
5. *Persicaria lapathifolia*	5	No	FACW
6. *Carex lupulina*	5	No	OBL
7. *Bidens frondosa*	3	No	FACW
8.			
9.			
10.			
	109	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	101	x 1 =	101
FACW species	49	x 2 =	98
FAC species	0	x 3 =	0
FACU species	8	x 4 =	32
UPL species	0	x 5 =	0
Column Totals:	158 (A)		231 (B)

Prevalence Index = B/A = 1.46

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 88

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	98	10YR 4/6	2	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 89

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.695520 Long: -85.789436 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 89 is representative of the upland area around Wetland 41.2. DP 89 is located along the southbound lanes of I-65 approximately 0.70 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 89

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					Loamy/Clayey	
5-18	10YR 4/3	100					Loamy/Clayey	Distributed mix with various soils

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 90

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.695939 Long: -85.789570 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 90 is representative of Wetland 42. DP 90 is located along the southbound lanes of I-65 approximately 0.73 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cephalanthus occidentalis*	5	Yes	OBL
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		205 (B)

Prevalence Index = B/A = 1.95

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 90

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5Y 5/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 91

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.695927 Long: -85.789536 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 91 is representative of the upland area around Wetland 42. DP 91 is located along the southbound lanes of I-65 approximately 0.73 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	75	Yes	FACU
2. *Carex squarrosa*	5	No	OBL
3. *Juncus effusus*	5	No	OBL
4. *Elymus virginicus*	3	No	FACW
5. *Carex pallescens*	2	No	FACW
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	90 (A)		320 (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 91

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5Y 5/2	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 92

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.696090 Long: -85.789590 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 92 is representative of the upland area around Wetland 42. DP 92 is located along the southbound lanes of I-65 approximately 0.74 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	30	Yes	FACW
2. *Liquidambar styraciflua*	20	Yes	FACW
3. *Acer saccharinum*	15	Yes	FACW
4. *Quercus rubra*	5	No	FACU
5.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Acer saccharinum*	10	Yes	FACW
2. *Cephalanthus occidentalis*	7	Yes	OBL
3. *Rosa palustris*	7	Yes	OBL
4. *Cercis canadensis*	5	No	FACU
5.			
	29	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	35	Yes	FACU
2. *Solidago canadensis*	7	No	FACU
3. *Carex squarrosa*	5	No	OBL
4. *Carex grayi*	5	No	FACW
5. *Carex pallescens*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	57	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	19	x 1 =	19
FACW species	85	x 2 =	170
FAC species	0	x 3 =	0
FACU species	52	x 4 =	208
UPL species	0	x 5 =	0
Column Totals:	156 (A)		397 (B)

Prevalence Index = B/A = 2.54

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 92

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 93

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.696502 Long: -85.789692 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 93 is representative of Wetland 42. DP 93 is located along the southbound lanes of I-65 approximately 0.77 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	15	Yes	FACW
2. *Acer saccharinum*	10	Yes	FACW
3. *Fraxinus pennsylvanica*	10	Yes	FACW
4.			
5.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Cephalanthus occidentalis*	7	Yes	OBL
3. *Rosa palustris*	5	Yes	OBL
4. *Ulmus americana*	2	No	FACW
5.			
	24	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	10	Yes	OBL
2. *Juncus effusus*	5	Yes	OBL
3. *Bidens frondosa*	5	Yes	FACW
4. *Agrostis gigantea*	3	No	FACW
5. *Ambrosia artemisiifolia*	3	No	FACU
6. *Impatiens capensis*	3	No	FACW
7. *Cyperus esculentus*	2	No	FACW
8.			
9.			
10.			
	31	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Toxicodendron radicans*	5	Yes	FAC
2. *Lonicera japonica*	2	Yes	FACU
	7	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 10 (A)

Total Number of Dominant Species Across All Strata: 11 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 90.9% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	27	x 1 =	27
FACW species	60	x 2 =	120
FAC species	5	x 3 =	15
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	97 (A)		182 (B)

Prevalence Index = B/A = 1.88

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 93

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/2	93	10YR 4/6	7	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 94

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.697590 Long: -85.790018 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 94 is representative of Wetland 43. DP 94 is located along the southbound lanes of I-65 approximately 0.71 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Pyrus calleryana*	10	Yes	UPL
2. *Liquidambar styraciflua*	5	Yes	FACW
3. *Platanus occidentalis*	5	Yes	FACW
4. *Fraxinus pennsylvanica*	3	No	FACW
5.			
	23 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	45	Yes	FACW
2. *Typha latifolia*	25	Yes	OBL
3. *Juncus torreyi*	15	No	FACW
4. *Paspalum floridanum*	5	No	FACW
5. *Festuca rubra*	5	No	FACU
6. *Juncus effusus*	5	No	OBL
7. *Setaria pumila*	3	No	FAC
8.			
9.			
10.			
	103 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	78	x 2 =	156
FAC species	3	x 3 =	9
FACU species	5	x 4 =	20
UPL species	10	x 5 =	50
Column Totals:	126 (A)		265 (B)
Prevalence Index = B/A =			2.10

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 94

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	10YR 5/1	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 95

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.698213 Long: -85.790200 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 95 is representative of the upland area around Wetland 43. DP 95 is located along the southbound lanes of I-65 approximately 0.67 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	15	Yes	FACU
2. *Fraxinus pennsylvanica*	10	Yes	FACW
3. *Pyrus calleryana*	3	No	UPL
4.			
5.			
	28	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	15	Yes	FAC
2. *Pycnanthemum virginianum*	10	Yes	FACW
3. *Dichanthelium clandestinum*	3	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	28	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	45	Yes	FACU
2. *Vitis labrusca*	8	No	FACU
	53	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	23	x 2 =	46
FAC species	15	x 3 =	45
FACU species	68	x 4 =	272
UPL species	3	x 5 =	15
Column Totals:	109 (A)		378 (B)

Prevalence Index = B/A = 3.47

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 95

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					Loamy/Clayey	
5-18	10YR 6/1	70	10YR 5/6	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 96

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.698713 Long: -85.790330 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 96 is representative of Wetland 43. DP 96 is located along the southbound lanes of I-65 approximately 0.63 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	30	Yes	FACW
2. *Juncus effusus*	25	Yes	OBL
3. *Juncus torreyi*	25	Yes	FACW
4. *Juncus tenuis*	5	No	FAC
5. *Carex frankii*	5	No	OBL
6. *Paspalum floridanum*	3	No	FACW
7. *Setaria pumila*	2	No	FAC
8. *Agrostis gigantea*	2	No	FACW
9.			
10.			
	97	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	60	x 2 =	120
FAC species	7	x 3 =	21
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	97 (A)		171 (B)

Prevalence Index = B/A = 1.76

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 96

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/4	90	10YR 4/6	10	C	M	Loamy/Clayey	Distinct redox concentrations
3-6	10YR 5/2	55	10YR 4/6	45	C	M	Loamy/Clayey	
6-18	GLEY1 6/5G	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- X Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 6

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 97

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.699720 Long: -85.790795 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 97 is representative of Wetland 44. DP 97 is located along the southbound lanes of I-65 approximately 0.55 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2.			
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2.			
3.			
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	35	Yes	OBL
2. *Hibiscus moscheutos*	15	Yes	OBL
3. *Leersia oryzoides*	10	No	OBL
4. *Rumex crispus*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	65	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	40	x 2 =	80
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		155 (B)

Prevalence Index = B/A = 1.48

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 97

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 5

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to sample soils past 5 inches but the wetland area was underlain by gravel.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 98

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.699666 Long: -85.790726 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 98 is representative of the upland area around Wetland 44. DP 98 is located along the southbound lanes of I-65 approximately 0.56 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	40	Yes	FACU
2. *Paspalum floridanum*	20	Yes	FACW
3. *Echinochloa crus-galli*	15	No	FACW
4. *Setaria pumila*	15	No	FAC
5. *Asclepias syriaca*	3	No	FACU
6.			
7.			
8.			
9.			
10.			
	93	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Toxicodendron radicans*	10	Yes	FAC
2.			
	10	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	25	x 3 =	75
FACU species	43	x 4 =	172
UPL species	0	x 5 =	0
Column Totals:	103 (A)		317 (B)

Prevalence Index = B/A = 3.08

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 98

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	100					Loamy/Clayey	
8-18	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 99

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 23, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.710021 Long: -85.796183 Datum: WGS_1984

Soil Map Unit Name: Bonnie silt loam, 0 to 1 percent slopes, frequently flooded, brief duration (BodAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 99 is representative of Wetland 45. DP 99 is located within the I-65 median approximately 0.2 mile north of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	30	Yes	FACW
2. *Paspalum floridanum*	30	Yes	FACW
3. *Cyperus esculentus*	15	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	75 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		150 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 99

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 5/2	85	10YR 5/6	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	3
Water Table Present?	Yes X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 100

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 23, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.710009 Long: -85.796158 Datum: WGS_1984

Soil Map Unit Name: Bonnie silt loam, 0 to 1 percent slopes, frequently flooded, brief duration (BodAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 100 is representative of the upland area around Wetland 45. DP 100 is located within the I-65 median approximately 0.2 mile north of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	60	Yes	UPL
2. *Andropogon gerardii*	20	No	FAC
3. *Paspalum floridanum*	20	No	FACW
4. *Cyperus esculentus*	3	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	103 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	23	x 2 =	46
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	60	x 5 =	300
Column Totals:	103 (A)		406 (B)

Prevalence Index = B/A = 3.94

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 100

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 5/4	80	10YR 6/1	10	D	M	Loamy/Clayey	
			10YR 5/8	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 101

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.695290 Long: -85.789100 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slipes, occasionally flooded, very brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 101 is representative of Wetland 46. DP 101 is located along the median of I-65 approximately 0.87 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Panicum dichotomiflorum*	40	Yes	FACW
2. *Paspalum floridanum*	20	Yes	FACW
3. *Setaria pumila*	15	No	FAC
4. *Cyperus entrerianus*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	85 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	70	x 2 =	140
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		185 (B)

Prevalence Index = B/A = 2.18

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 101

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	95	10YR 5/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	10YR 5/6	80	10YR 5/2	15	D	M	Loamy/Clayey	
			10YR 4/6	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1		
Water Table Present?	Yes ___	No X	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 102

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Flat

Slope (%): 0.5 Lat: 38.695263 Long: -85.789103 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slipes, occasionally flooded, very brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 102 is representative of the upland area around Wetland 46. DP 102 is located along the median of I-65 approximately 0.87 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	60	Yes	FAC
2. *Lolium perenne*	20	Yes	FACU
3. *Echinochloa crus-galli*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	60	x 3 =	180
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	90 (A)		280 (B)

Prevalence Index = B/A = 3.11

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 102

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Loamy/Clayey	
2-7	10YR 5/3	80	10YR 5/2	20	D	M	Loamy/Clayey	
7-9	10YR 4/2	97	10YR 4/6	3	C	M	Loamy/Clayey	
9-18	10YR 5/3	80	10YR 5/2	20	D	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 103

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.678009 Long: -85.786984 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded (HcdC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 103 is representative of Wetland 47. DP 103 is located within the I-65 median approximately 0.5 mile north of SR 56.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	30	Yes	OBL
2. *Echinochloa crus-galli*	30	Yes	FACW
3. *Cyperus esculentus*	30	Yes	FACW
4. *Setaria pumila*	10	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	60	x 2 =	120
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		180 (B)

Prevalence Index = B/A = 1.80

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 103

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/2	70	10YR 4/6	20	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 4/1	10	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 5
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 104

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): None

Slope (%): 2 Lat: 38.678065 Long: -85.786989 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded (HcdC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 104 is representative of the upland area around Wetland 47. DP 104 is located within the I-65 median approximately 0.5 mile north of SR 56.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	80	Yes	UPL
2. *Setaria pumila*	10	No	FAC
3. *Festuca rubra*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	10	x 4 =	40
UPL species	80	x 5 =	400
Column Totals:	100 (A)		470 (B)

Prevalence Index = B/A = 4.70

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 104

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 105

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.672846 Long: -85.784387 Datum: WGS_1984

Soil Map Unit Name: Haubstadt silt loam, 0 to 2 percent slopes, eroded (HccB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 105 is representative of Wetland 48. DP 105 is located along the median of I-65 approximately 0.15 mile north of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	20	Yes	FACW
2. *Panicum dichotomiflorum*	20	Yes	FACW
3. *Setaria pumila*	10	No	FAC
4. *Paspalum floridanum*	5	No	FACW
5. *Solanum carolinense*	2	No	FACU
6.			
7.			
8.			
9.			
10.			
	57	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	45	x 2 =	90
FAC species	10	x 3 =	30
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	57 (A)		128 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 105

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	95	10YR 5/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
2-18	10YR 5/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.25		
Water Table Present?	Yes ___	No X	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 106

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.672856 Long: -85.784436 Datum: WGS_1984

Soil Map Unit Name: Haubstadt silt loam, 0 to 2 percent slopes, eroded (HccB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 106 is representative of the upland area around Wetland 48. DP 106 is located along the median of I-65 approximately 0.15 mile north of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	70	Yes	UPL
2. *Setaria pumila*	10	No	FAC
3. *Cyperus esculentus*	10	No	FACW
4. *Echinochloa crus-galli*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	70	x 5 =	350
Column Totals:	95 (A)		410 (B)

Prevalence Index = B/A = 4.32

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 106

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					Loamy/Clayey	
2-18	10YR 5/3	60	10YR 5/6	40	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 107

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.646514 Long: -85.783711 Datum: WGS_1984

Soil Map Unit Name: Cincinnati silt loam, 2 to 6 percent slopes, eroded (CkkB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 107 is representative of Wetland 49. DP 107 is located along the median of I-65 approximately 0.15 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus interior*	30	Yes	FAC
2. *Setaria pumila*	20	Yes	FAC
3. *Panicum virgatum*	20	Yes	FAC
4. *Echinochloa crus-galli*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	75	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	70	x 3 =	210
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		220 (B)

Prevalence Index = B/A = 2.93

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 107

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	
4-18	10YR 6/2	70	10YR 6/6	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1		
Water Table Present?	Yes X	No ___	Depth (inches): 0		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 108

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.646481 Long: -85.783721 Datum: WGS_1984

Soil Map Unit Name: Cincinnati silt loam, 2 to 6 percent slopes, eroded (CkkB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 108 is representative of the upland area around Wetland 49. DP 108 is located along the median of I-65 approximately 0.15 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Andropogon virginicus*	50	Yes	FACU
2. *Setaria pumila*	20	Yes	FAC
3. *Bothriochloa laguroides*	15	No	UPL
4. *Paspalum floridanum*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	20	x 3 =	60
FACU species	50	x 4 =	200
UPL species	15	x 5 =	75
Column Totals:	95 (A)		355 (B)

Prevalence Index = B/A = 3.74

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 108

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 6/2	60	10YR 6/4	30	C	M	Loamy/Clayey	
			10YR 6/6	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 109

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.640970 Long: -85.783795 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 109 is representative of Wetland 50. DP 109 is located within the I-65 median approximately 0.55 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	60	Yes	FACW
2. *Cyperus bipartitus*	20	Yes	OBL
3. *Cyperus esculentus*	15	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	75	x 2 =	150
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		170 (B)

Prevalence Index = B/A = 1.79

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 109

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	100					Loamy/Clayey	
7-18	10YR 5/2	80	10YR 5/8	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	3
Water Table Present?	Yes X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 110

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.640964 Long: -85.78377 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 110 is representative of the upland area around Wetland 50. DP 110 is located within the I-65 median approximately 0.55 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	80	Yes	UPL
2. *Setaria viridis*	20	Yes	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 110

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/4	100					Loamy/Clayey	
3-18	10YR 5/6	70	10YR 6/2	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 111

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.634106 Long: -85.78391 Datum: WGS_1984

Soil Map Unit Name: Cincinnati-Blocher silt loams, 6 to 12 percent slopes, severely eroded (CldC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
DP 111 is representative of Wetland 51. DP 111 is located within the I-65 median approximately 1 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	50	Yes	FACW
2. *Leersia oryzoides*	30	Yes	OBL
3. *Cyperus bipartitus*	20	No	OBL
4. *Setaria pumila*	15	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	115 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	50	x 2 =	100
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		195 (B)

Prevalence Index = B/A = 1.70

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 111

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					Loamy/Clayey	
7-18	10YR 6/1	85	10YR 5/8	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	2
Water Table Present?	Yes X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 112

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.634107 Long: -85.783882 Datum: WGS_1984

Soil Map Unit Name: Cincinnati-Blocher silt loams, 6 to 12 percent slopes, severely eroded (CldC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 112 is representative of the upland area around Wetland 51. DP 112 is located within the I-65 median approximately 1 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	95	Yes	UPL
2. *Setaria viridis*	5	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 112

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	85	10YR 6/6	15	C	M	Loamy/Clayey	Distinct redox concentrations
4-18	10YR 6/3	75	10YR 6/6	25	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 113

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.607363 Long: -85.781468 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 113 is a non-wetland data point and was taken due to the presence of hydrophytic vegetation. DP 113 is located along the median of I-65 approximately 0.16 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	40	Yes	FAC
2. *Sorghastrum nutans*	30	Yes	FACU
3. *Echinochloa crus-galli*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	40	x 3 =	120
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	90 (A)		280 (B)

Prevalence Index = B/A = 3.11

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 113

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Heavy rains occurred the night prior.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 114

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.590497 Long: -85.778843 Datum: WGS_1984

Soil Map Unit Name: Wilbut silt loam, 0 to 2 percent slipes, frequently flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 114 is representative of Wetland 52. DP 114 is located along the median of I-65 approximately 0.99 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	30	Yes	FACW
2. *Eleocharis palustris*	20	Yes	OBL
3. *Bothriochloa laguroides*	20	Yes	UPL
4. *Cyperus esculentus*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	20	x 5 =	100
Column Totals:	80 (A)		200 (B)

Prevalence Index = B/A = 2.50

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 114

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/1	100					Loamy/Clayey	
5-18	10YR 5/1	95	10YR 5/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No ___	Depth (inches):	1
Water Table Present?	Yes	X	No ___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes	X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 115

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Flat

Slope (%): 0.5 Lat: 38.590552 Long: -85.778835 Datum: WGS_1984

Soil Map Unit Name: Wilbut silt loam, 0 to 2 percent slipes, frequently flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 115 is representative of the upland area around Wetland 52. DP 115 is located along the median of I-65 approximately 0.99 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	80	Yes	FACU
2. *Echinochloa crus-galli*	10	No	FACW
3. *Setaria pumila*	5	No	FAC
4. *Tridens flavus*	2	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	97	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	5	x 3 =	15
FACU species	80	x 4 =	320
UPL species	2	x 5 =	10
Column Totals:	97 (A)		365 (B)

Prevalence Index = B/A = 3.76

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 115

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 116

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.588446 Long: -85.778819 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 6 to 12 percent slopes, severely eroded (ConC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 116 is representative of Wetland 53. DP 116 is located along the median of I-65 approximately 1.14 miles south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	30	Yes	UPL
2. *Echinochloa crus-galli*	20	Yes	FACW
3. *Panicum dichotomiflorum*	20	Yes	FACW
4. *Cyperus esculentus*	10	No	FACW
5. *Setaria pumila*	10	No	FAC
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	90 (A)		280 (B)

Prevalence Index = B/A = 3.11

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 116

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	GLEY1 6/5GY	100					Loamy/Clayey	
4-18	10YR 5/2	97	10YR 5/4	3	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- X Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 117

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.588402 Long: -85.778850 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 6 to 12 percent slopes, severely eroded (ConC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 117 is representative of the upland area around Wetland 53. DP 117 is located along the median of I-65 approximately 1.14 miles south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	70	Yes	FACU
2. *Setaria pumila*	15	No	FAC
3. *Paspalum floridanum*	10	No	FACW
4. *Eragrostis spectabilis*	5	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	15	x 3 =	45
FACU species	70	x 4 =	280
UPL species	5	x 5 =	25
Column Totals:	100 (A)		370 (B)

Prevalence Index = B/A = 3.70

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 117

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 4/1	97	10YR 5/6	3	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 118

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.584979 Long: -85.778796 Datum: WGS_1984

Soil Map Unit Name: Udorthents,cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 118 is representative of Wetland 54. DP 118 is located along the median of I-65 approximately 1.34 miles south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	95	Yes	FACW
2. *Cyperus esculentus*	5	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 118

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Loamy/Clayey	
2-18	10YR 5/2	70	10YR 5/8	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 119

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.584973 Long: -85.778774 Datum: WGS_1984

Soil Map Unit Name: Udorthents,cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 119 is representative of the upland area around Wetland 54. DP 119 is located along the median of I-65 approximately 1.34 miles south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	60	Yes	UPL
2. *Paspalum floridanum*	20	Yes	FACW
3. *Festuca rubra*	10	No	FACU
4. *Setaria pumila*	5	No	FAC
5. *Setaria viridis*	5	No	UPL
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	5	x 3 =	15
FACU species	10	x 4 =	40
UPL species	65	x 5 =	325
Column Totals:	100 (A)		420 (B)

Prevalence Index = B/A = 4.20

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 119

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy/Clayey	
3-18	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 120

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Flat

Slope (%): 0.5 Lat: 38.583897 Long: -85.778808 Datum: WGS_1984

Soil Map Unit Name: Udorthents,cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 120 is representative of Wetland 55. DP 120 is located along the median of I-65 approximately 0.94 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	30	Yes	FACW
2. *Paspalum floridanum*	20	Yes	FACW
3. *Cyperus esculentus*	15	Yes	FACW
4. *Setaria pumila*	5	No	FAC
5. *Juncus tenuis*	2	No	FAC
6.			
7.			
8.			
9.			
10.			
	72	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	7	x 3 =	21
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	72 (A)		151 (B)

Prevalence Index = B/A = 2.10

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 120

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Loamy/Clayey	
2-18	10YR 5/2	70	10YR 5/8	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 121

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Flat

Slope (%): 0.5 Lat: 38.583893 Long: -85.778793 Datum: WGS_1984

Soil Map Unit Name: Udorthents,cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 121 is representative of the upland area around Wetland 55. DP 121 is located along the median of I-65 approximately 0.94 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Andropogon virginicus*	40	Yes	FACU
2. *Sorghastrum nutans*	30	Yes	FACU
3. *Paspalum floridanum*	30	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	100 (A)		340 (B)

Prevalence Index = B/A = 3.40

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 121

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2						Loamy/Clayey	
2-18	10YR 5/2	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 122

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.578010 Long: -85.778818 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 122 is representative of Wetland 56. DP 122 is located along the median of I-65 approximately 0.53 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Panicum virgatum*	60	Yes	FAC
2. *Echinochloa crus-galli*	10	No	FACW
3. *Cyperus esculentus*	5	No	FACW
4. *Paspalum floridanum*	5	No	FACW
5. *Juncus interior*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	65	x 3 =	195
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		235 (B)

Prevalence Index = B/A = 2.76

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 122

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Loamy/Clayey	
2-18	10YR 5/2	60	10YR 5/4	40	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 12
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 123

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Flat

Slope (%): 0.5 Lat: 38.578107 Long: -85.778858 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 123 is representative of the upland area around Wetland 56. DP 123 is located along the median of I-65 approximately 0.53 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	50	Yes	FACU
2. *Setaria pumila*	30	Yes	FAC
3. *Echinochloa crus-galli*	10	No	FACW
4. *Paspalum floridanum*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	30	x 3 =	90
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	100 (A)		330 (B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 123

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	
4-18	10YR 5/2	60	10YR 5/4	40	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 124

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 10, Township 5 N, Range 2 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.574300 Long: -85.778825 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock, substratum-Weddel silt loams, 6 to 12 percent slopes eroded (BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 124 is representative of Wetland 57. DP 124 is llocated along the median of I-65 approximately 0.28 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	40	Yes	FACU
2. *Setaria pumila*	30	Yes	FAC
3. *Paspalum floridanum*	20	Yes	FACW
4. *Echinochloa crus-galli*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	30	x 3 =	90
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	100 (A)		310 (B)

Prevalence Index = B/A = 3.10

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 124

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	100					Loamy/Clayey	
3-18	10YR 5/1	70	10YR 5/6	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 1

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 125

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 10, Township 5 N, Range 2 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.574401 Long: -85.778746 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock, substratum-Weddel silt loams, 6 to 12 percent slopes eroded (BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 125 is representative of the upland area around Wetland 57. DP 125 is located along the median of I-65 approximately 0.28 mile north of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	60	Yes	FACU
2. *Setaria viridis*	30	Yes	UPL
3. *Echinochloa crus-galli*	5	No	FACW
4. *Setaria pumila*	2	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	97	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	2	x 3 =	6
FACU species	60	x 4 =	240
UPL species	30	x 5 =	150
Column Totals:	97 (A)		406 (B)

Prevalence Index = B/A = 4.19

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 125

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	100					Loamy/Clayey	
2-18	10YR 5/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 126

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.561301 Long: -85.778811 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 126 is representative of Wetland 58. DP 126 is located along the median of I-65 approximately 0.16 mile north of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	60	Yes	FACW
2. *Juncus interior*	30	Yes	FAC
3. *Echinochloa crus-galli*	5	No	FACW
4. *Setaria pumila*	5	No	FAC
5. *Paspalum floridanum*	3	No	FACW
6.			
7.			
8.			
9.			
10.			
	103	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	68	x 2 =	136
FAC species	35	x 3 =	105
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	103 (A)		241 (B)

Prevalence Index = B/A = 2.34

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 126

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	90	10YR 5/4	10	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.5		
Water Table Present?	Yes ___	No X	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 127

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.561341 Long: -85.778830 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 127 is representative of the upland area around Wetland 58. DP 127 is located along the median of I-65 approximately 0.16 mile north of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Andropogon virginicus*	70	Yes	FACU
2. *Bothriochloa laguroides*	15	No	UPL
3. *Setaria pumila*	10	No	FAC
4. *Echinochloa crus-galli*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	10	x 3 =	30
FACU species	70	x 4 =	280
UPL species	15	x 5 =	75
Column Totals:	100 (A)		395 (B)

Prevalence Index = B/A = 3.95

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 127

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 128

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.559511 Long: -85.778815 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 128 is representative of Wetland 59. DP 128 is located along the median of I-65 approximately 0.05 mile north of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	30	Yes	FACW
2. *Cyperus esculentus*	10	No	FACW
3. *Paspalum floridanum*	5	No	FACW
4. *Juncus effusus*	5	No	OBL
5. *Juncus torreyi*	1	No	FACW
6.			
7.			
8.			
9.			
10.			
	51 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	46	x 2 =	92
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	51 (A)		97 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 128

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	100					Loamy/Clayey	
7-18	10YR 5/2	95	10YR 5/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.25
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 129

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 240

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.559484 Long: -85.778834 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 129 is representative of the upland area around Wetland 59. DP 129 is located along the median of I-65 approximately 0.05 mile north of Winding Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Paspalum floridanum*	50	Yes	FACW
2. *Setaria pumila*	20	Yes	FAC
3. *Festuca rubra*	20	Yes	FACU
4. *Echinochloa crus-galli*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	20	x 3 =	60
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	95 (A)		250 (B)

Prevalence Index = B/A = 2.63

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 129

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/1	100					Loamy/Clayey	
3-18	10YR 4/2	95	10YR 5/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 130

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): concave

Slope (%): 0 Lat: 38.550145 Long: -85.778842 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 130 is representative of Wetland 60. DP 130 is located within the I-65 median approximately 0.69 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	80	Yes	FACW
2. *Paspalum floridanum*	15	No	FACW
3. *Setaria pumila*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		205 (B)

Prevalence Index = B/A = 2.05

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 130

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes X No ___ Depth (inches): 3

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

2017 IndianaMap Aerial Photography

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 131

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): none

Slope (%): 0 Lat: 38.550080 Long: -85.778800 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 131 is representative of the upland area around Wetland 60. DP 131 is 60 located within the I-65 median approximately 0.67 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	100	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 131

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	100						
12-18	10YR 4/2	50	10YR 4/6	50	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/13/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 132

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): concave

Slope (%): .5 Lat: 38.542771 Long: -85.778093 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 132 is representative of Wetland 61. DP 132 is 61 located within the I-65 median approximately 0.17 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	40	Yes	FACW
2. *Cyperus esculentus*	15	Yes	FACW
3. *Juncus effusus*	5	No	OBL
4. *Cyperus acuminatus*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	65	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	55	x 2 =	110
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	65 (A)		120 (B)

Prevalence Index = B/A = 1.85

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 132

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	96	10YR 5/6	4	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 4/1	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes X No ___ Depth (inches): 7

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 133

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): convex

Slope (%): 0.5 Lat: 38.542645 Long: -85.778064 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 133 is representative of the upland area around Wetland 61. DP 133 is 61 located within the I-65 median approximately 0.16 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		

Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	97	Yes	UPL
2. *Setaria pumila*	3	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	3	x 3 =	9
FACU species	0	x 4 =	0
UPL species	97	x 5 =	485
Column Totals:	100 (A)		494 (B)
Prevalence Index = B/A =			4.94

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 133

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
8-18	10YR 5/1	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 134

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Sesction 47, Township 4 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.535331 Long: -85.776244 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 134 is representative of Wetland 62. DP 134 is located along the median of I-65 approximately 0.35 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	30	Yes	FACW
2. *Panicum virgatum*	30	Yes	FAC
3. *Leersia oryzoides*	5	No	OBL
4. *Leersia oryzoides*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	70	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	30	x 2 =	60
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		160 (B)

Prevalence Index = B/A = 2.29

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 134

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	95	10YR 3/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 4/2	90	7.5YR 4/4	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 1

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 135

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Sesction 47, Township 4 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.535320 Long: -85.776273 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 135 is representative of the upland area around Wetland 62. DP 135 is located along the median of I-65 approximately 0.35 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	25	Yes	FAC
2. *Panicum capillare*	25	Yes	FAC
3. *Sorghastrum nutans*	25	Yes	FACU
4. *Echinochloa crus-galli*	5	No	FACW
5. *Cyperus esculentus*	5	No	FACW
6. *Tridens flavus*	5	No	UPL
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	50	x 3 =	150
FACU species	25	x 4 =	100
UPL species	5	x 5 =	25
Column Totals:	90 (A)		295 (B)

Prevalence Index = B/A = 3.28

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 135

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy/Clayey	
3-18	10YR 7/1	60	10YR 6/8	40	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Memphis/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 136

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 220

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.498291 Long: -85.770708 Datum: WGS_1984

Soil Map Unit Name: Peoga silt loam, 0 to 1 percent slopes (PhaA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 136 is representative of Wetland 63. DP 136 is located along the northbound lanes of I-65 approximately 0.20 mile south of Blue Lick Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	30	Yes	FACW
2. *Carex frankii*	10	Yes	OBL
3. *Echinochloa crus-galli*	5	No	FACW
4. *Carex muskingumensis*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	50 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	35	x 2 =	70
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	50 (A)		85 (B)

Prevalence Index = B/A = 1.70

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 136

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 6

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Memphis/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 137

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 220

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 38.498194 Long: -85.770643 Datum: WGS_1984

Soil Map Unit Name: Peoga silt loam, 0 to 1 percent slopes (PhaA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 137 is representative of the upland area around Wetland 63. DP 137 is located along the northbound lanes of I-65 approximately 0.20 mile south of Blue Lick Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	30	Yes	FAC
2. *Nyssa sylvatica*	20	Yes	FAC
3. *Fagus grandifolia*	20	Yes	FACU
4. *Betula nigra*	10	No	FACW
5.			
	80	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fagus grandifolia*	5	Yes	FACU
2. *Juniperus virginiana*	5	Yes	FACU
3. *Fraxinus pennsylvanica*	2	No	FACW
4. *Quercus palustris*	2	No	FACW
5.			
	14	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	30	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	10	Yes	FACU
2. *Toxicodendron radicans*	5	Yes	FAC
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 37.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	14	x 2 =	28
FAC species	55	x 3 =	165
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	139 (A)		473 (B)

Prevalence Index = B/A = 3.40

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 137

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	100					Loamy/Clayey	
2-18	10YR 6/2	90	10YR 6/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 138

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.512349 Long: -85.771733 Datum: WGS_1984

Soil Map Unit Name: Deputy-Trappist silt loams , 6 to 12 percent slopes, eroded (DtvC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 138 is representative of Wetland 64. DP 138 is located along the northbound lanes of I-65 approximately 0.57 mile north of Biggs Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	30	Yes	OBL
2. *Bidens aristosa*	5	No	FACW
3. *Echinochloa crus-galli*	5	No	FACW
4. *Iva annua*	1	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	41	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	10	x 2 =	20
FAC species	1	x 3 =	3
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	41 (A)		53 (B)

Prevalence Index = B/A = 1.29

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 138

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	95	10YR 5/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- X Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 139

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 38.512413 Long: -85.771740 Datum: WGS_1984

Soil Map Unit Name: Deputy-Trappist silt loams , 6 to 12 percent slopes, eroded (DtvC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 139 is representative of the upland area around Wetland 64. DP 139 is located along the northbound lanes of I-65 approximately 0.57 mile north of Biggs Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Sorghum halepense*	70	Yes	FACU
2. *Tridens flavus*	25	Yes	UPL
3. *Paspalum floridanum*	10	No	FACW
4. *Erechtites hieraciifolius*	10	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	115 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	70	x 4 =	280
UPL species	25	x 5 =	125
Column Totals:	105 (A)		425 (B)

Prevalence Index = B/A = 4.05

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 139

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 4/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 140

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.514395 Long: -85.771920 Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam, 2 to 6 percent slopes, eroded (HcgAV) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 140 is representative of Wetland 65. DP 140 is located along the northbound lanes of I-65 approximately 0.70 mile north of Biggs Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Platanus occidentalis*	60	Yes	FACW
2.			
3.			
4.			
5.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Ulmus rubra*	7	Yes	FAC
2. *Fraxinus pennsylvanica*	5	Yes	FACW
3. *Juglans nigra*	3	Yes	FACU
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Solidago gigantea*	10	Yes	FACW
2. *Rudbeckia laciniata*	7	Yes	FACW
3. *Microstegium vimineum*	5	Yes	FAC
4. *Glechoma hederacea*	5	Yes	FACU
5. *Actaea racemosa*	2	No	UPL
6. *Symphyotrichum lanceolatum*	2	No	FAC
7. *Pilea pumila*	1	No	FACW
8. *Polygonum pensylvanicum*	1	No	FACW
9. *Poa pratensis*	1	No	FAC
10.			
	34	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	84	x 2 =	168
FAC species	15	x 3 =	45
FACU species	8	x 4 =	32
UPL species	2	x 5 =	10
Column Totals:	109 (A)		255 (B)

Prevalence Index = B/A = 2.34

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 140

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	100					Loamy/Clayey	
7-18	10YR 4/1	95	10YR 5/8	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 141

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.514314 Long: -85.771854 Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam, 2 to 6 percent slopes, eroded (HcgAV) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 141 is representative of the upland area around Wetland 65. DP 141 is located along the northbound lanes of I-65 approximately 0.70 mile north of Biggs Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	80	Yes	FACU
2.			
3.			
4.			
5.			
	80	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Acer saccharum*	5	Yes	FACU
2. *Lindera benzoin*	2	Yes	FACW
3. *Carya ovata*	2	Yes	FACU
4. *Fagus grandifolia*	2	Yes	FACU
5.			
	11	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Symphyotrichum lanceolatum*	3	Yes	FAC
2. *Microstegium vimineum*	3	Yes	FAC
3. *Ambrosia trifida*	1	No	FAC
4. *Oxalis stricta*	1	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	8	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	5	Yes	FACU
2.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 37.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	7	x 3 =	21
FACU species	95	x 4 =	380
UPL species	0	x 5 =	0
Column Totals:	104 (A)		405 (B)

Prevalence Index = B/A = 3.89

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 141

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Loamy/Clayey	
4-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 142

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.515858 Long: -85.772204 Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam, 0 to 2 percent slopes, frequently flooded, very brief duration (HcgAV) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 142 is representative of Wetland 66. DP 142 is located along the northbound lanes of I-65 approximately 0.07 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	70	Yes	OBL
2. *Juncus interior*	5	No	FAC
3. *Juncus effusus*	5	No	OBL
4. *Leersia oryzoides*	5	No	OBL
5. *Echinochloa crus-galli*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	5	x 2 =	10
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		105 (B)

Prevalence Index = B/A = 1.17

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 142

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 5/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 6/1	95	10YR 5/8	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County | City/County: Henryville/Clark County | Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District | State: IN | Sampling Point: DP 143

Investigator(s): Josh Iddings, Kylie Bright | Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Flood plain | Local relief (concave, convex, none): Flat

Slope (%): 0.5 | Lat: 38.515832 | Long: -85.772120 | Datum: WGS_1984

Soil Map Unit Name: Haymond silt loam, 0 to 2 percent slopes, frequently flooded, very brief duration (HcgAV) | NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 143 is representative of the upland area around Wetland 66. DP 143 is located along the northbound lanes of I-65 approximately 0.07 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	25	Yes	FACW
2. *Pyrus calleryana*	10	Yes	UPL
3.			
4.			
5.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	5	Yes	FACW
2. *Fraxinus pennsylvanica*	5	Yes	FACW
3. *Ulmus rubra*	2	No	FAC
4.			
5.			
	12	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schizachyrium scoparium*	70	Yes	FACU
2. *Setaria pumila*	15	No	FAC
3. *Paspalum floridanum*	10	No	FACW
4. *Solidago gigantea*	2	No	FACW
5. *Cirsium discolor*	2	No	FACU
6.			
7.			
8.			
9.			
10.			
	99	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	47	x 2 =	94
FAC species	17	x 3 =	51
FACU species	72	x 4 =	288
UPL species	10	x 5 =	50
Column Totals:	146 (A)		483 (B)

Prevalence Index = B/A = 3.31

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 143

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-7	10YR 5/4	100					Loamy/Clayey	
7-18	10YR 5/3	95	7.5YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 144

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.519114 Long: -85.772651 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, rarely flooded (StdAQ) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 144 is representative of Wetland 67. DP 144 is located along the northbound lanes of I-65 approximately 0.21 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	70	Yes	FACW
2. *Paspalum floridanum*	10	No	FACW
3. *Agrostis gigantea*	5	No	FACW
4. *Juncus effusus*	2	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	87	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species	85	x 2 =	170
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	87 (A)		172 (B)

Prevalence Index = B/A = 1.98

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 144

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5YR 4/2	97	10YR 4/4	3	C	M	Loamy/Clayey	Prominent redox concentrations
8-18	2.5YR 5/2	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 5
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 145

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 250

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Flat

Slope (%): 0.5 Lat: 38.519272 Long: -85.772639 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, rarely flooded (StdAQ) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 145 is representative of the upland area around Wetland 67. DP 145 is located along the northbound lanes of I-65 approximately 0.21 mile north of Caney Fork.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus rubra*	30	Yes	FAC
2. *Acer rubrum*	10	Yes	FAC
3. *Quercus imbricaria*	5	No	FACU
4.			
5.			
	45	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Ulmus rubra*	30	Yes	FAC
2. *Rhus copallinum*	10	Yes	UPL
3. *Liquidambar styraciflua*	3	No	FACW
4. *Fraxinus pennsylvanica*	2	No	FACW
5.			
	45	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	2	No	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	2	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera maackii*	10	Yes	UPL
2. *Vitis aestivalis*	10	Yes	FACU
	20	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	7	x 2 =	14
FAC species	70	x 3 =	210
FACU species	15	x 4 =	60
UPL species	20	x 5 =	100
Column Totals:	112 (A)		384 (B)

Prevalence Index = B/A = 3.43

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 145

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 146

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 26, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.524444 Long: -85.773362 Datum: WGS_1984

Soil Map Unit Name: Trappist-Deputy complex, 6 to 12 percent slopes, severely eroded (TsaC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 146 is representative of Wetland 68. DP 146 is located along the northbound lanes of I-65 approximately 1.16 miles south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Paspalum floridanum*	50	Yes	FACW
2. *Juncus effusus*	30	Yes	OBL
3. *Echinochloa crus-galli*	15	No	FACW
4. *Leersia oryzoides*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	35	x 1 =	35
FACW species	65	x 2 =	130
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		165 (B)

Prevalence Index = B/A = 1.65

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 146

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	97	10YR 4/4	3	C	M	Loamy/Clayey	Distinct redox concentrations
7-18	10YR 5/2	97	10YR 5/6	3	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 147

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 26, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 38.524446 Long: -85.773333 Datum: WGS_1984

Soil Map Unit Name: Trappist-Deputy complex, 6 to 12 percent slopes, severely eroded (TsaC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 147 is representative of the upland area around Wetland 68. DP 147 is located along the northbound lanes of I-65 approximately 1.16 miles south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	10	Yes	FACW
2. *Juniperus virginiana*	10	Yes	FACU
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Sassafras albidum*	10	Yes	FACU
2. *Pyrus calleryana*	5	Yes	UPL
3. *Fraxinus pennsylvanica*	5	Yes	FACW
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera maackii*	100	Yes	UPL
2.			
	100	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	105	x 5 =	525
Column Totals:	140 (A)		635 (B)

Prevalence Index = B/A = 4.54

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 147

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	100					Loamy/Clayey	
6-18	10YR 5/2	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 148

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 26, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.512349 Long: -85.771733 Datum: WGS_1984

Soil Map Unit Name: Deputy-Trappist silt loams, 6 to 12 percent slopes, eroded (DtvC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 148 is representative of Wetland 69. DP148 is located along the northbound lanes of I-65 approximately 0.50 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bidens aristosa*	80	Yes	FACW
2. *Microstegium vimineum*	20	No	FAC
3. *Impatiens capensis*	5	No	FACW
4. *Vernonia missurica*	2	No	FAC
5. *Ambrosia artemisiifolia*	1	No	FACU
6. *Ambrosia trifida*	1	No	FAC
7.			
8.			
9.			
10.			
	109 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	23	x 3 =	69
FACU species	1	x 4 =	4
UPL species	0	x 5 =	0
Column Totals:	114 (A)		253 (B)

Prevalence Index = B/A = 2.22

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 148

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	100					Loamy/Clayey	
5-18	10YR 5/2	95	10YR 5/4	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 149

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 26, Township 1 N, Range 5 E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 38.529554 Long: -85.774080 Datum: WGS_1984

Soil Map Unit Name: Deputy-Trappist silt loams, 6 to 12 percent slopes, eroded (DtvC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 149 is representative of the upland area around Wetland 69. DP 149 is located along the northbound lanes of I-65 approximately 0.50 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Robinia pseudoacacia*	5	Yes	FACU
2. *Juglans nigra*	2	Yes	FACU
3.			
4.			
5.			
	7 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Ambrosia trifida*	50	Yes	FAC
2. *Bidens aristosa*	40	Yes	FACW
3. *Microstegium vimineum*	10	No	FAC
4. *Oenothera biennis*	2	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	102 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	60	x 3 =	180
FACU species	9	x 4 =	36
UPL species	0	x 5 =	0
Column Totals:	109 (A)		296 (B)

Prevalence Index = B/A = 2.72

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 149

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/2	100					Loamy/Clayey	
10-18	10YR 5/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 150

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 27, Township 4 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.533129 Long: -85.775213 Datum: WGS_1984

Soil Map Unit Name: Jennings-Blocher, hard bedrock substratum, silt loams, 6 to 12 percent slopes, eroded (JafC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 150 is representative of Wetland 70. DP 150 is located along the northbound lanes of I-65 approximately 0.45 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	90	Yes	OBL
2. *Mimulus ringens*	5	No	OBL
3. *Conoclinium coelestinum*	5	No	FACW
4. *Juncus effusus*	3	No	OBL
5. *Setaria pumila*	2	No	FAC
6. *Eupatorium perfoliatum*	1	No	OBL
7.			
8.			
9.			
10.			
	106 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera maackii*	10	Yes	UPL
2.			
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	99	x 1 =	99
FACW species	10	x 2 =	20
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	10	x 5 =	50
Column Totals:	121 (A)		175 (B)

Prevalence Index = B/A = 1.45

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 150

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 5/2	95	10YR 5/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 0.5
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 151

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 27, Township 4 N, Range 5 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.533140 Long: -85.775233 Datum: WGS_1984

Soil Map Unit Name: Jennings-Blocher, hard bedrock substratum, silt loams, 6 to 12 percent slopes, eroded (JafC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 151 is representative of the upland area around Wetland 70. DP 151 is located along the northbound lanes of I-65 approximately 0.45 mile south of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	1	No	FACW
2. *Pyrus calleryana*	1	No	UPL
3.			
4.			
5.			
	2 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bothriochloa laguroides*	80	Yes	UPL
2. *Setaria pumila*	15	No	FAC
3. *Paspalum floridanum*	5	No	FACW
4. *Agrostis gigantea*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Strophostyles helvola*	5	Yes	FAC
2. *Lonicera japonica*	5	Yes	FACU
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	11	x 2 =	22
FAC species	20	x 3 =	60
FACU species	5	x 4 =	20
UPL species	81	x 5 =	405
Column Totals:	117 (A)		507 (B)
Prevalence Index = B/A =			4.33

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 151

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 152

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.539715 Long: -85.777204 Datum: WGS_1984

Soil Map Unit Name: Udorthents,cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 152 is representative of Wetland 71. DP 152 is located along the northbound lanes of I-65 in the southeast quadrant of the I-65 and SR 160 overpass

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		

Herb Stratum (Plot size: 5 ft)			
1. *Typha latifolia*	85	Yes	OBL
2. *Agrostis gigantea*	10	No	FACW
3. *Juncus effusus*	10	No	OBL
4. *Setaria pumila*	2	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	107 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	10	x 2 =	20
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	107 (A)		121 (B)

Prevalence Index = B/A = 1.13

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 152

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 5/2	95	7.5YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 6/2	95	10YR 6/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 6

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 153

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 38.539742 Long: -85.777067 Datum: WGS_1984

Soil Map Unit Name: Udorthents,cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 153 is representative of the upland area around Wetland 71. DP 153 is located along the northbound lanes of I-65 in the southeast quadrant of the I-65 and SR 160 overpass

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	2	No	FACU
2.			
3.			
4.			
5.			
	2 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	60	Yes	FAC
2. *Securigera varia*	30	Yes	UPL
3. *Cirsium discolor*	15	No	FACU
4. *Andropogon virginicus*	10	No	FACU
5. *Juniperus virginiana*	2	No	FACU
6.			
7.			
8.			
9.			
10.			
	117 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	29	x 4 =	116
UPL species	30	x 5 =	150
Column Totals:	119 (A)		446 (B)

Prevalence Index = B/A = 3.75

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 153

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 154

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Conocave

Slope (%): 0.5 Lat: 38.543700 Long: -85.777887 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 154 is representative of Wetland 72. DP 154 is located along the northbound lanes of I-65 approximately 0.25 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	40	Yes	OBL
2. *Typha latifolia*	30	Yes	OBL
3. *Juncus effusus*	30	Yes	OBL
4. *Scirpus cyperinus*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	105	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	105	x 1 =	105
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		105 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 154

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	90	10YR 4/6	10	C	M	Loamy/Clayey	
4-18	10YR 5/1	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes X No ___ Depth (inches): 6

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 155

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.543771 Long: -85.777844 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 155 is representative of the upland area around Wetland 72. DP 155 is located along the northbound lanes of I-65 approximately 0.25 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	2	No	FACW
2. *Ulmus rubra*	2	No	FAC
3.			
4.			
5.			
	4	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Tridens flavus*	40	Yes	UPL
2. *Solidago gigantea*	20	Yes	FACW
3. *Apocynum cannabinum*	15	No	FAC
4. *Asclepias syriaca*	5	No	FACU
5. *Vernonia fasciculata*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	32	x 2 =	64
FAC species	17	x 3 =	51
FACU species	5	x 4 =	20
UPL species	40	x 5 =	200
Column Totals:	94 (A)		335 (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 155

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 156

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.546757 Long: -85.778369 Datum: WGS_1984

Soil Map Unit Name: Jennings silt loam, 2 to 6 percent slopes, eroded (JaeB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 156 is representative of Wetland 73. DP 156 is located along the northbound lanes of I-65 approximately 0.45 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	90	Yes	FACW
2. *Agrostis gigantea*	2	No	FACW
3. *Bidens frondosa*	2	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	94 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	94	x 2 =	188
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	94 (A)		188 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 156

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	95	10YR 5/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 157

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Section 30, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 38.546775 Long: -85.778401 Datum: WGS_1984

Soil Map Unit Name: Jennings silt loam, 2 to 6 percent slopes, eroded (JaeB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 157 is representative of the upland area around Wetland 73. DP 157 is located along the northbound lanes of I-65 approximately 0.45 mile north of SR 160.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Sassafras albidum*	40	Yes	FACU
2. *Ulmus rubra*	10	No	FAC
3. *Liquidambar styraciflua*	10	No	FACW
4. *Acer rubrum*	5	No	FAC
5.			
	65	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rhus copallinum*	30	Yes	UPL
2. *Liquidambar styraciflua*	5	No	FACW
3. *Fraxinus pennsylvanica*	3	No	FACW
4.			
5.			
	38	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	60	Yes	FACU
2. *Bothriochloa laguroides*	10	No	UPL
3. *Dichanthelium acuminatum*	2	No	FAC
4. *Chamaecrista fasciculata*	2	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	74	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera maackii*	30	Yes	UPL
2. *Smilax rotundifolia*	2	No	FAC
	32	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	18	x 2 =	36
FAC species	19	x 3 =	57
FACU species	102	x 4 =	408
UPL species	70	x 5 =	350
Column Totals:	209 (A)		851 (B)

Prevalence Index = B/A = 4.07

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 157

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	
4-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 158

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 240

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.563630 Long: -85.778359 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 158 is representative of Wetland 74. DP 158 is located along the northbound lanes of I-65 approximately 0.50 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Salix nigra*	3	No	OBL
2.			
3.			
4.			
5.			
	3 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Glyceria striata*	30	Yes	OBL
2. *Leersia oryzoides*	25	Yes	OBL
3. *Carex vulpinoidea*	10	No	FACW
4. *Bidens aristosa*	10	No	FACW
5. *Scirpus atrovirens*	5	No	OBL
6. *Lycopus americanus*	1	No	OBL
7.			
8.			
9.			
10.			
	81 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	64	x 1 =	64
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	84 (A)		104 (B)

Prevalence Index = B/A = 1.24

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 158

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A perched water table was present at the surface, but no saturation or water table were present.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 159

Investigator(s): Josh Iddings, Kylie Bright Section, Township, Range: Transect No. 240

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.563629 Long: -85.778284 Datum: WGS_1984

Soil Map Unit Name: Coolville-Rarden complex, 12 to 18 percent slopes (ConD) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 159 is representative of the upland area around Wetland 74. DP 159 is located along the northbound lanes of I-65 approximately 0.50 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus alba*	50	Yes	FACU
2. *Ulmus rubra*	5	No	FAC
3. *Carya ovata*	10	No	FACU
4. *Pinus virginiana*	5	No	UPL
5. *Prunus serotina*	2	No	FACU
	72	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Quercus alba*	5	Yes	FACU
2. *Fraxinus pennsylvanica*	5	Yes	FACW
3. *Carya ovata*	2	No	FACU
4. *Ulmus rubra*	2	No	FAC
5.			
	14	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	25	Yes	FACU
2. *Smilax rotundifolia*	5	No	FAC
	30	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	12	x 3 =	36
FACU species	94	x 4 =	376
UPL species	5	x 5 =	25
Column Totals:	116 (A)		447 (B)

Prevalence Index = B/A = 3.85

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 159

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 160

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.566841 Long: -85.77858 Datum: WGS_1984

Soil Map Unit Name: Deam silty clay loam, 20 to 55 percent slopes (DbrG) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 160 is representative of Wetland 75. DP 160 is located along the northbound lanes of I-65 approximately 0.2 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Scirpus atrovirens*	75	Yes	OBL
2. *Poa pratensis*	20	Yes	FAC
3. *Typha latifolia*	1	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	96 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	76	x 1 =	76
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	96 (A)		136 (B)

Prevalence Index = B/A = 1.42

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 160

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	97	10YR 5/4	3	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: paved concrete

Depth (inches): 6

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 161

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.567018 Long: -85.778578 Datum: WGS_1984

Soil Map Unit Name: Deam silty clay loam, 20 to 55 percent slopes (DbrG) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 161 is representative of the upland area around Wetland 75. DP 161 is located along the northbound lanes of I-65 approximately 0.2 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Poa pratensis*	60	Yes	FAC
2. *Bromus inermis*	20	Yes	FACU
3. *Schedonorus arundinaceus*	20	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	100 (A)		340 (B)

Prevalence Index = B/A = 3.40

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 161

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: riprap

Depth (inches): 6

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to collect soil beyond 6" but the area was underlaid with riprap.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 162

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.567920 Long: -85.778294 Datum: WGS_1984

Soil Map Unit Name: Beanblossom silt loam, 1 to 3 percent slopes, occasionally flooded, very brief duration (BcrAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 162 is representative of Wetland 76. DP 162 is located along the northbound lanes of I-65 approximately 0.1 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	=Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Sparsely vegetated concave surface.

SOIL

Sampling Point: DP 162

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
10-18	10YR 6/1	90	10YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 163

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): None

Slope (%): 1 Lat: 38.568051 Long: -85.77832 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, rarely flooded (StdAQ) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 163 is representative of the upland area around Wetland 76. DP 163 is located along the northbound lanes of I-65 approximately 0.1 mile south of Brownstown Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liriodendron tulipifera*	70	Yes	FACU
2. *Carya glabra*	25	Yes	FACU
3.			
4.			
5.			
	95	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Actaea racemosa*	7	Yes	UPL
2.			
3.			
4.			
5.			
	7	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Sanicula canadensis*	30	Yes	FACU
2. *Symphyotrichum pilosum*	15	Yes	FACU
3. *Lycopus americanus*	10	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	55	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	140	x 4 =	560
UPL species	7	x 5 =	35
Column Totals:	157 (A)		605 (B)

Prevalence Index = B/A = 3.85

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 163

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/1	97	10YR 7/8	3	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

DP 163 is on the active floodplain of UNT 3 to Miller Fk and not necessarily indicative of wetland hydrology but a brief or infrequent flood event.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 164

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.569832 Long: -85.778236 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 164 is representative of Wetland 77. DP 164 is located in the northeast quadrant of the I-65 and Brownstown Road overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Scirpus atrovirens*	45	Yes	OBL
2. *Echinochloa crus-galli*	10	No	FACW
3. *Bidens frondosa*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	45	x 1 =	45
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	60 (A)		75 (B)

Prevalence Index = B/A = 1.25

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 164

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/1	90	5YR 3/4	10	C	M	Loamy/Clayey	Prominent redox concentrations
8-18	10YR 5/1	75	10YR 5/6	25	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 165

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Tract No. 240

Landform (hillside, terrace, etc.): Shale hills Local relief (concave, convex, none): None

Slope (%): 2 Lat: 38.569806 Long: -85.778186 Datum: WGS_1984

Soil Map Unit Name: Coolville silt loam, 6 to 12 percent slopes (ComC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 165 is representative of the upland area around Wetland 77. DP 165 is located in the northeast quadrant of the I-65 and Brownstown Road overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rosa multiflora*	10	Yes	FACU
2. *Pinus strobus*	3	Yes	FACU
3.			
4.			
5.			
	13 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	50	Yes	FACU
2. *Paspalum floridanum*	20	Yes	FACW
3. *Vernonia gigantea*	10	No	FAC
4. *Bidens frondosa*	7	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	87 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	27	x 2 =	54
FAC species	10	x 3 =	30
FACU species	63	x 4 =	252
UPL species	0	x 5 =	0
Column Totals:	100 (A)		336 (B)

Prevalence Index = B/A = 3.36

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 165

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100					Loamy/Clayey	
9-18	10YR 6/1	85	10YR 5/6	15	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 166

Investigator(s): Monical Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.583775 Long: -85.778373 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 166 is representative of Wetland 78. DP 166 is located along the northbound lanes of I-65 adjacent to the rest area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus effusus*	60	Yes	OBL
2. *Leersia oryzoides*	50	Yes	OBL
3. *Bidens frondosa*	7	No	FACW
4. *Impatiens capensis*	5	No	FACW
5. *Cyperus esculentus*	3	No	FACW
6.			
7.			
8.			
9.			
10.			
	125	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	110	x 1 =	110
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	125 (A)		140 (B)

Prevalence Index = B/A = 1.12

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 166

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/1	90	10YR 3/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: riprap

Depth (inches): 7

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Multiple attempts were made to collect soil beyond 7" but the area was underlaid with riprap.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 5

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 167

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.583792 Long: -85.778317 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 167 is representative of the upland area around Wetland 78. DP 167 is located along the northbound lanes of I-65 adjacent to the rest area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rubus alumnus*	2	No	FACU
2.			
3.			
4.			
5.			
	2 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	25	Yes	FAC
2. *Cirsium vulgare*	20	Yes	FACU
3. *Securigera varia*	20	Yes	UPL
4. *Paspalum floridanum*	20	Yes	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	85 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	20	Yes	FACU
2.			
	20 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	25	x 3 =	75
FACU species	42	x 4 =	168
UPL species	20	x 5 =	100
Column Totals:	107 (A)		383 (B)

Prevalence Index = B/A = 3.58

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 167

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 168

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.587513 Long: -85.778515 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 168 is representative of Wetland 79. DP 168 is located along the northbound lanes of I-65 approximately 1.3 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	25	Yes	FACW
2. *Juncus effusus*	20	Yes	OBL
3. *Echinochloa crus-galli*	15	Yes	FACW
4. *Paspalum floridanum*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	50	x 2 =	100
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		120 (B)

Prevalence Index = B/A = 1.71

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 168

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 5/2	95	10YR 7/8	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	10YR 7/1	85	10YR 7/8	15	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Henryville/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 169

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.587578 Long: -85.778512 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 169 is representative of the upland area around Wetland 79. DP 169 is located along the northbound lanes of I-65 approximately 1.3 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	30	Yes	FACU
2. *Echinochloa crus-galli*	30	Yes	FACW
3. *Setaria viridis*	20	Yes	UPL
4. *Paspalum floridanum*	15	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	45	x 2 =	90
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	20	x 5 =	100
Column Totals:	95 (A)		310 (B)

Prevalence Index = B/A = 3.26

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 169

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5YR 5/3	95	2.5YR 5/6	5	C	PL	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Riprap

Depth (inches): 8

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 170

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.590209 Long: -85.778419 Datum: WGS_1984

Soil Map Unit Name: NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** **Yes** X **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:
DP 170 is representative of Wetland 80. DP 170 is located along the northbound lanes of I-65 approximately 1 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	60	Yes	OBL
2. *Scirpus atrovirens*	20	No	OBL
3. *Poa pratensis*	20	No	FAC
4. *Typha latifolia*	1	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	101 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	81	x 1 =	81
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	101 (A)		141 (B)

Prevalence Index = B/A = 1.40

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 170

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/3	100					Loamy/Clayey	
2-18	10YR 5/1	85	10YR 5/6	15	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 171

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 36, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Conves

Slope (%): 5 Lat: 38.590257 Long: -85.778399 Datum: WGS_1984

Soil Map Unit Name: Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WokAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 171 is representative of the upland area around Wetland 80. DP 171 is located along the northbound lanes of I-65 approximately 1 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	3	Yes	FACW
2. *Acer saccharinum*	3	Yes	FACW
3.			
4.			
5.			
	6 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	20	Yes	FAC
2. *Setaria viridis*	20	Yes	UPL
3. *Poa pratensis*	20	Yes	FAC
4. *Eupatorium serotinum*	20	Yes	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	6	x 2 =	12
FAC species	60	x 3 =	180
FACU species	0	x 4 =	0
UPL species	20	x 5 =	100
Column Totals:	86 (A)		292 (B)

Prevalence Index = B/A = 3.40

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 171

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	100					Loamy/Clayey	
5-18	10YR 5/3	75	10YR 5/8	25	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 172

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.592589 Long: -85.778530 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded (BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 172 is representative of Wetland 81. DP 172 is located along the northbound lanes of I-65 approximately 0.8 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus effusus*	30	Yes	OBL
2. *Juncus torreyi*	20	Yes	FACW
3. *Cyperus esculentus*	10	No	FACW
4. *Echinochloa crus-galli*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		110 (B)

Prevalence Index = B/A = 1.57

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 172

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/1	100					Mucky Loam/Clay	
1-7	10YR 5/1	90	10YR 6/8	10	C	M	Loamy/Clayey	Prominent redox concentrations
7-18	10YR 7/1	80	10YR 6/8	20	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 3		
Water Table Present?	Yes X	No ___	Depth (inches): 0		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0	**Wetland Hydrology Present?**	**Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 173

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.592633 Long: -85.778532 Datum: WGS_1984

Soil Map Unit Name: Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded (BfbC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 173 is representative of the upland area around Wetland 81. DP 173 is located along the northbound lanes of I-65 approximately 0.8 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	60	Yes	FACU
2. *Paspalum floridanum*	30	Yes	FACW
3. *Festuca rubra*	15	No	FACU
4. *Juncus effusus*	5	No	OBL
5. *Apocynum cannabinum*	2	No	FAC
6.			
7.			
8.			
9.			
10.			
	112 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	30	x 2 =	60
FAC species	2	x 3 =	6
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	112 (A)		371 (B)

Prevalence Index = B/A = 3.31

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 173

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/2	90	10YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 174

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.603902 Long: -85.781065 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 174 is representative of Wetland 82. DP 174 is located along the northbound lanes of I-65 approximately 0.1 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	50	Yes	OBL
2. *Juncus effusus*	20	Yes	OBL
3. *Bidens aristosa*	10	No	FACW
4. *Carex squarrosa*	10	No	OBL
5. *Cyperus esculentus*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		110 (B)

Prevalence Index = B/A = 1.16

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 174

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 5/3	100					Sandy	
5-18	10YR 6/2	95	10YR 7/8	5	C	M	Sandy	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 175

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.604094 Long: -85.781089 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 175 is representative of the upland area around Wetland 82. DP 175 is located along the northbound lanes of I-65 approximately 0.1 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	35	Yes	FACU
2. *Echinochloa crus-galli*	10	No	FACW
3. *Bidens aristosa*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	55 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	55 (A)		180 (B)

Prevalence Index = B/A = 3.27

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 175

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 5/3	95	10YR 5/6	5	C	M	Loamy/Clayey	Distinct redox concentrations
5-18	10YR 6/1	85	10YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 4/6	5	C	M		Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drainage patterns were present due to the location within the roadside ditch.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 176

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.604446 Long: -85.781118 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 176 is representative of Wetland 83. DP 176 is located along the northbound lanes of I-65 approximately 0.05 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus effusus*	70	Yes	OBL
2. *Scirpus atrovirens*	10	No	OBL
3. *Echinochloa crus-galli*	10	No	FACW
4. *Setaria viridis*	10	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	10	x 5 =	50
Column Totals:	100 (A)		150 (B)

Prevalence Index = B/A = 1.50

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 176

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 5/2	100					Loamy/Clayey	
6-18	10YR 5/2	70	10YR 6/8	30	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Underwood/Clark Sampling Date: 08/31/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 177

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 27, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.604392 Long: -85.781114 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 177 is representative of the upland area around Wetland 83. DP 177 is located along the northbound lanes of I-65 approximately 0.05 mile south of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Securigera varia*	95	Yes	UPL
2. *Pastinaca sativa*	10	No	FACW
3. *Liquidambar styraciflua*	2	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	107 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	12	x 2 =	24
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	95	x 5 =	475
Column Totals:	107 (A)		499 (B)

Prevalence Index = B/A = 4.66

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 177

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 5/4	95	10YR 5/8	5	C	M	Loamy/Clayey	Prominent redox concentrations
5-18	10YR 5/2	75	10YR 5/8	25	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drainage patterns were present due to the location within the roadside ditch.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 178

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.605519 Long: -85.781237 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 178 is representative of Wetland 84. DP 178 is located along the northbound lanes of I-65 approximately 0.05 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	70	Yes	FACW
2. *Echinochloa crus-galli*	20	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		180 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 178

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Loamy/Clayey	
5-18	10YR 5/1	80	10YR 5/8	20	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 179

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.605776 Long: -85.781234 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 179 is representative of the upland area around Wetland 84. DP 179 is located along the northbound lanes of I-65 approximately 0.05 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	40	Yes	FACU
2. *Echinochloa crus-galli*	40	Yes	FACW
3. *Setaria viridis*	25	Yes	UPL
4. *Cyperus esculentus*	3	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	108 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	43	x 2 =	86
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	25	x 5 =	125
Column Totals:	108 (A)		371 (B)

Prevalence Index = B/A = 3.44

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 179

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 5/2	90	10YR 5/8	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drainage patterns were present due to the location within the roadside ditch.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 180

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.608615 Long: -85.781168 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
DP 180 is representative of Wetland 85. DP 180 is located along the northbound lanes of I-65 approximately 0.2 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus effusus*	70	Yes	OBL
2. *Scirpus atrovirens*	10	No	OBL
3. *Echinochloa crus-galli*	7	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	87 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	7	x 2 =	14
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	87 (A)		94 (B)

Prevalence Index = B/A = 1.08

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 180

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-6	10YR 5/2	100					Loamy/Clayey	
6-18	10YR 6/1	75	10YR 5/8	25	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 181

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.608516 Long: -85.781172 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 181 is representative of the upland area around Wetland 85. DP 181 is located along the northbound lanes of I-65 approximately 0.2 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Paspalum floridanum*	60	Yes	FACW
2. *Schedonorus arundinaceus*	25	Yes	FACU
3. *Setaria viridis*	25	Yes	UPL
4. *Juncus tenuis*	10	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	10	x 3 =	30
FACU species	25	x 4 =	100
UPL species	25	x 5 =	125
Column Totals:	120 (A)		375 (B)

Prevalence Index = B/A = 3.13

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 181

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					Loamy/Clayey	
2-7	10YR 5/2	93	10YR 5/6	7	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 7

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drainage patterns were present due to the location within the roadside ditch.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 182

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Til plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.609968 Long: -85.781085 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 182 is representative of Wetland 86. DP 182 is located along the northbound lanes of I-65 approximately 0.3 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	50	Yes	FACW
2. *Diospyros virginiana*	20	Yes	FAC
3.			
4.			
5.			
	70 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	40	Yes	OBL
2. *Carex hystericina*	25	Yes	OBL
3. *Juncus effusus*	15	No	OBL
4. *Typha latifolia*	10	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	50	x 2 =	100
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	160 (A)		250 (B)

Prevalence Index = B/A = 1.56

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 182

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 5/1	80	10YR 4/6	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 183

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.610116 Long: -85.781117 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 183 is representative of the upland area around Wetland 86. DP 183 is located along the northbound lanes of I-65 approximately 0.3 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Diospyros virginiana*	3	No	FAC
2.			
3.			
4.			
5.			
	3 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Solidago gigantea*	50	Yes	FACW
2. *Daucus carota*	25	Yes	UPL
3. *Eupatorium serotinum*	20	Yes	FAC
4. *Lonicera japonica*	2	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	97 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	5	Yes	FACU
2.			
	5 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	23	x 3 =	69
FACU species	7	x 4 =	28
UPL species	25	x 5 =	125
Column Totals:	105 (A)		322 (B)

Prevalence Index = B/A = 3.07

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 183

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 4/3	85	10YR 5/4	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 184

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): None

Slope (%): 4 Lat: 38.610847 Long: -85.781176 Datum: WGS_1984

Soil Map Unit Name: Nabb silt loam, 2 to 6 percent slopes, eroded (NaaB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 184 is representative of Wetland 87. DP 184 is located along the northbound lanes of I-65 approximately 0.4 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus torreyi*	90	Yes	FACW
2. *Paspalum floridanum*	15	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	105	x 2 =	210
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		210 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 184

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loamy/Clayey	
4-18	10YR 6/1	80	10YR 5/8	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 185

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.610885 Long: -85.781182 Datum: WGS_1984

Soil Map Unit Name: Nabb silt loam, 2 to 6 percent slopes, eroded (NaaB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 185 is representative of the upland area around Wetland 87. DP 185 is located along the northbound lanes of I-65 approximately 0.4 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	100	Yes	FAC
2. *Poa pratensis*	10	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	110	x 3 =	330
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	110 (A)		330 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 185

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 186

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.615330 Long: -85.781301 Datum: WGS_1984

Soil Map Unit Name: Pekin silt loam, 2 to 6 percent slopes, eroded (PcrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 186 is representative of Wetland 88. DP 186 is located along the northbound lanes of I-65 approximately 0.6 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Scirpus atrovirens*	65	Yes	OBL
2. *Echinochloa crus-galli*	35	Yes	FACW
3. *Apocynum cannabinum*	3	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	103 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	35	x 2 =	70
FAC species	3	x 3 =	9
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	103 (A)		144 (B)

Prevalence Index = B/A = 1.40

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 186

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 6/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 187

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 4 Lat: 38.615332 Long: -85.781282 Datum: WGS_1984

Soil Map Unit Name: Pekin silt loam, 2 to 6 percent slopes, eroded (PcrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 187 is representative of the upland area around Wetland 88. DP 187 is located along the northbound lanes of I-65 approximately 0.6 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	20	Yes	FACW
2.			
3.			
4.			
5.			
	20 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Andropogon gerardii*	50	Yes	FAC
2. *Solidago gigantea*	20	Yes	FACW
3. *Festuca rubra*	10	No	FACU
4. *Setaria viridis*	10	No	UPL
5. *Eupatorium serotinum*	2	No	FAC
6. *Bidens aristosa*	2	No	FACW
7.			
8.			
9.			
10.			
	94 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	42	x 2 =	84
FAC species	52	x 3 =	156
FACU species	10	x 4 =	40
UPL species	10	x 5 =	50
Column Totals:	114 (A)		330 (B)
Prevalence Index = B/A =			2.89

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 187

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Loamy/Clayey	
7-18	10YR 6/1	85	10YR 6/8	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 188

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.618001 Long: -85.781924 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (StdAW) NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 188 is representative of Wetland 89. DP 188 is located along the northbound lanes of I-65 approximately 0.9 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	25	Yes	FACW
2. *Juncus effusus*	10	Yes	OBL
3. *Echinochloa crus-galli*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	40 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	40 (A)		70 (B)

Prevalence Index = B/A = 1.75

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 188

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 5/1	90	10YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 189

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 20, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 38.618000 Long: -85.781959 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (StdAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 189 is representative of the upland area around Wetland 89. DP 189 is located along the northbound lanes of I-65 approximately 0.9 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Poa pratensis*	50	Yes	FAC
2. *Schedonorus arundinaceus*	50	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.50

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 189

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Loamy/Clayey	
3-18	10YR 5/3	80	10YR 6/8	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 190

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 3 Lat: 38.620837 Long: -85.782956 Datum: WGS_1984

Soil Map Unit Name: Pekin silt loam, 6 to 12 percent slopes, severely eroded (PcrC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 190 is representative of Wetland 90. DP 190 is located along the northbound lanes of I-65 approximately 1.2 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	80	Yes	OBL
2. *Typha latifolia*	20	No	OBL
3. *Echinochloa crus-galli*	10	No	FACW
4. *Cyperus esculentus*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	115 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	100	x 1 =	100
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		130 (B)

Prevalence Index = B/A = 1.13

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 190

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	95	10YR 4/6	5	C	M	Loamy/Clayey	Distinct redox concentrations
3-18	10YR 6/1	95	10YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 191

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.620661 Long: -85.782895 Datum: WGS_1984

Soil Map Unit Name: Steff silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (StaAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 191 is representative of the upland area around Wetland 90. DP 191 is located along the northbound lanes of I-65 approximately 1.2 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lonicera maackii*	50	Yes	UPL
2.			
3.			
4.			
5.			
	50 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Symphyotrichum pilosum*	10	Yes	FACU
2. *Asclepias syriaca*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	50	Yes	FACU
2.			
	50 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	65	x 4 =	260
UPL species	50	x 5 =	250
Column Totals:	115 (A)		510 (B)

Prevalence Index = B/A = 4.43

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 191

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 6/1	80	10YR 5/8	20	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drainage patterns were present due to the location within the roadside ditch.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 192

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 38.622548 Long: -85.783524 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 0 to 2 percent slopes (BbhA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 192 is representative of Wetland 91. DP 192 is located along the northbound lanes of I-65 approximately 1.3 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus tenuis*	40	Yes	FAC
2. *Juncus effusus*	20	Yes	OBL
3. *Paspalum floridanum*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	20	x 2 =	40
FAC species	40	x 3 =	120
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		180 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 192

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 6/2	95	10YR 6/8	5	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	2.5YR 7/2	55	10YR 5/8	30	D	M	Loamy/Clayey	
	10YR 3/1	15						Organic material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 193

Investigator(s): Monica Del Real, Leah Perry Section, Township, Range: Section 15, Township 2 N, Range 6 E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 4 Lat: 38.622400 Long: -85.783494 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 0 to 2 percent slopes (BbhA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 193 is representative of the upland area around Wetland 91. DP 193 is located along the northbound lanes of I-65 approximately 1.3 mile north of Liberty Knob Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	60	Yes	FACU
2. *Setaria pumila*	30	Yes	FAC
3. *Poa pratensis*	20	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	110 (A)		390 (B)

Prevalence Index = B/A = 3.55

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 193

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	100					Loamy/Clayey	
8-18	10YR 6/1	80	10YR 5/8	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 194

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.646998 Long: -85.783436 Datum: WGS_1984

Soil Map Unit Name: Cincinnati silt loam, 2 to 6 percent slopes, eroded (CkkB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 194 is representative of Wetland 92. DP 194 is located along the northbound lanes of I-65 approximately 0.12 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	35	Yes	FACW
2. *Eleocharis palustris*	20	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	55 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	35	x 2 =	70
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	55 (A)		90 (B)

Prevalence Index = B/A = 1.64

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 194

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	100					Loamy/Clayey	
2-18	10YR 4/2	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 3
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 195

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 268

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.647017 Long: -85.783372 Datum: WGS_1984

Soil Map Unit Name: Cincinnati silt loam, 2 to 6 percent slopes, eroded (CkkB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 195 is representative of the upland area around Wetland 92. DP 195 is located along the northbound lanes of I-65 approximately 0.12 mile south of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rosa multiflora*	7	Yes	FACU
2. *Juniperus virginiana*	5	Yes	FACU
3. *Diospyros virginiana*	5	Yes	FAC
4.			
5.			
	17 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Andropogon virginicus*	15	Yes	FACU
2. *Juncus tenuis*	7	Yes	FAC
3. *Asclepias syriaca*	7	Yes	FACU
4. *Ambrosia artemisiifolia*	3	No	FACU
5. *Ageratina altissima*	2	No	FACU
6. *Setaria pumila*	2	No	FAC
7.			
8.			
9.			
10.			
	36 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	10	Yes	FACU
2. *Toxicodendron radicans*	6	Yes	FAC
	16 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 37.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	49	x 4 =	196
UPL species	0	x 5 =	0
Column Totals:	69 (A)		256 (B)

Prevalence Index = B/A = 3.71

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 195

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 196

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.650177 Long: -85.783395 Datum: WGS_1984

Soil Map Unit Name: Blocher-Cincinnati silt loams, 6 to 12 percent slopes, eroded (CldC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 196 is representative of Wetland 93. DP 196 is located along the northbound lanes of I-65 approximately 0.10 mile north of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Juncus tenuis*	20	Yes	FAC
2. *Cyperus esculentus*	15	Yes	FACW
3. *Echinochloa crus-galli*	10	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	45 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	45 (A)		110 (B)

Prevalence Index = B/A = 2.44

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 196

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
8-18	10YR 5/1	92	10YR 4/6	8	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 0.25

Water Table Present? Yes X No ___ Depth (inches): 0

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 197

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.650163 Long: -85.783360 Datum: WGS_1984

Soil Map Unit Name: Blocher-Cincinnati silt loams, 6 to 12 percent slopes, eroded (CldC2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 197 is representative of the upland area around Wetland 93. DP 197 is located along the northbound lanes of I-65 approximately 0.10 mile north of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Juniperus virginiana*	10	Yes	FACU
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	3	No	FACW
2.			
3.			
4.			
5.			
	3	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	30	Yes	FACU
2. *Ambrosia artemisiifolia*	15	Yes	FACU
3. *Festuca rubra*	10	No	FACU
4. *Sorghum halepense*	8	No	FACU
5. *Echinochloa crus-galli*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	68	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Toxicodendron radicans*	3	No	FAC
2.			
	3	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	18	x 2 =	36
FAC species	3	x 3 =	9
FACU species	73	x 4 =	292
UPL species	0	x 5 =	0
Column Totals:	94 (A)		337 (B)

Prevalence Index = B/A = 3.59

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 197

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 198

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.656683 Long: -85.783158 Datum: WGS_1984

Soil Map Unit Name: Cincinnati-Blocher silt loams, 6 to 12 percent slopes, severely eroded (CldC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 198 is representative of Wetland 94. DP 198 is located along the northbound lanes of I-65 approximately 0.54 mile north of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	60	Yes	FACW
2. *Juncus effusus*	30	Yes	OBL
3. *Echinochloa crus-galli*	8	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	98 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	68	x 2 =	136
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	98 (A)		166 (B)

Prevalence Index = B/A = 1.69

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 198

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches):	0.25
Water Table Present?	Yes X	No ___	Depth (inches):	6
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 199

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Till plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.656682 Long: -85.783129 Datum: WGS_1984

Soil Map Unit Name: Cincinnati silt loam, 2 to 6 percent slopes, eroded (CkkB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 199 is representative of the upland area around Wetland 94. DP 199 is located along the northbound lanes of I-65 approximately 0.54 mile north of Leota Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	10	Yes	FACU
2. *Pinus nigra*	7	Yes	UPL
3. *Ulmus americana*	7	Yes	FACW
4.			
5.			
	24	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	2	No	FACW
2. *Pinus nigra*	1	No	UPL
3.			
4.			
5.			
	3	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Symphyotrichum laeve*	15	Yes	FACU
2. *Ambrosia artemisiifolia*	7	Yes	FACU
3. *Symphyotrichum lateriflorum*	5	No	FACW
4. *Echinochloa crus-galli*	2	No	FACW
5. *Andropogon virginicus*	2	No	FACU
6.			
7.			
8.			
9.			
10.			
	31	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	16	x 2 =	32
FAC species	0	x 3 =	0
FACU species	34	x 4 =	136
UPL species	8	x 5 =	40
Column Totals:	58 (A)		208 (B)

Prevalence Index = B/A = 3.59

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 199

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 200

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.660811 Long: -85.782422 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 2 to 4 percent slopes (BbhB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 200 is representative of Wetland 95. DP 200 is located along the northbound lanes of I-65 approximately 0.70 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Salix nigra*	10	Yes	OBL
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	65	Yes	FACW
2. *Cyperus esculentus*	5	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	70	x 2 =	140
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		150 (B)

Prevalence Index = B/A = 1.88

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 200

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.25
Water Table Present?	Yes X	No ___	Depth (inches): 0.5
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 201

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.660805 Long: -85.782445 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 2 to 4 percent slopes (BbhB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 201 is representative of the upland area around Wetland 95. DP 201 is located along the northbound lanes of I-65 approximately 0.70 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	7	Yes	FACU
2. *Sassafras albidum*	5	Yes	FACU
3. *Fraxinus pennsylvanica*	3	No	FACW
4. *Liquidambar styraciflua*	3	No	FACW
5. *Rosa multiflora*	2	No	FACU
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	55	Yes	FACU
2. *Andropogon virginicus*	5	No	FACU
3. *Setaria pumila*	5	No	FAC
4. *Panicum virgatum*	2	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	67	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Campsis radicans*	3	No	FACU
2.			
	3	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	6	x 2 =	12
FAC species	7	x 3 =	21
FACU species	77	x 4 =	308
UPL species	0	x 5 =	0
Column Totals:	90 (A)		341 (B)

Prevalence Index = B/A = 3.79

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 201

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/3	100					Loamy/Clayey	
14-18	10YR 4/1	97	10YR 4/6	3	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 202

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.661648 Long: -85.782276 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 2 to 4 percent slopes (BbhB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 202 is representative of Wetland 95. DP 202 is located along the northbound lanes of I-65 approximately 0.64 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	65	Yes	FACW
2. *Typha latifolia*	15	No	OBL
3. *Setaria pumila*	3	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	83 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	65	x 2 =	130
FAC species	3	x 3 =	9
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	83 (A)		154 (B)

Prevalence Index = B/A = 1.86

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 202

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 203

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Transect No. 238

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.661848 Long: -85.782244 Datum: WGS_1984

Soil Map Unit Name: Bartle silt loam, 2 to 4 percent slopes (BbhB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 203 is representative of the upland area around Wetland 95. DP 203 is located along the northbound lanes of I-65 approximately 0.62 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	60	Yes	FACU
2. *Leersia oryzoides*	15	No	OBL
3. *Setaria pumila*	15	No	FAC
4. *Cirsium arvense*	3	No	FACU
5. *Carex pallescens*	3	No	FACW
6. *Echinochloa crus-galli*	2	No	FACW
7.			
8.			
9.			
10.			
	98	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	5	x 2 =	10
FAC species	15	x 3 =	45
FACU species	63	x 4 =	252
UPL species	0	x 5 =	0
Column Totals:	98 (A)		322 (B)

Prevalence Index = B/A = 3.29

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 203

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/3	100					Loamy/Clayey	
14-18	10YR 4/1	97	10YR 4/6	3	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 204

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.664776 Long: -85.782002 Datum: WGS_1984

Soil Map Unit Name: Dubois silt loam, 2 to 6 percent slopes, eroded (DfnB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 204 is representative of Wetland 96. DP 204 is located along the northbound lanes of I-65 approximately 0.43 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	2	No	FACW
2.			
3.			
4.			
5.			
	2 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	25	Yes	OBL
2. *Cyperus esculentus*	20	Yes	FACW
3. *Typha latifolia*	10	No	OBL
4. *Schoenoplectus tabernaemontani*	2	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	57 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	37	x 1 =	37
FACW species	22	x 2 =	44
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	59 (A)		81 (B)

Prevalence Index = B/A = 1.37

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 204

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	92	10YR 4/6	8	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 205

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.664823 Long: -85.782054 Datum: WGS_1984

Soil Map Unit Name: Dubois silt loam, 2 to 6 percent slopes, eroded (DfnB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 205 is representative of the upland area around Wetland 96. DP 205 is located along the northbound lanes of I-65 approximately 0.43 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	90	Yes	FACU
2. *Dipsacus fullonum*	8	No	FACU
3. *Apocynum cannabinum*	2	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	2	x 3 =	6
FACU species	98	x 4 =	392
UPL species	0	x 5 =	0
Column Totals:	100 (A)		398 (B)

Prevalence Index = B/A = 3.98

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 205

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	100					Loamy/Clayey	
12-18	10YR 4/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 206

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake Plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.665375 Long: -85.782036 Datum: WGS_1984

Soil Map Unit Name: Haubstadt silt loam, 2 to 6 percent slopes, eroded (HccB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil X, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 206 is representative of Wetland 97. DP 206 is located along the northbound lanes of I-65 approximately 0.39 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Phragmites australis*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 206

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: riprap

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

After multiple attempts, a soil sample could not be obtainted due to a restrictive layer of riprap. Based upon the hydrophytic vegetation and hydrology indicators it is assumed that hydric soils would be present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 207

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.665476 Long: -85.782115 Datum: WGS_1984

Soil Map Unit Name: Haubstadt silt loam, 2 to 6 percent slopes, eroded (HccB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 207 is representative of the upland area around Wetland 97. DP 207 is located along the northbound lanes of I-65 approximately 0.39 mile south of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 207

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 208

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.671645 Long: -85.783567 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 208 is representative of Wetland 98. DP 208 is located along the northbound lanes of I-65 approximately 0.05 mile north of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	90	Yes	FACW
2. *Cyperus esculentus*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 208

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/01/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 209

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 28, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.671633 Long: -85.783537 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 209 is representative of the upland area around Wetland 98. DP 209 is located along the northbound lanes of I-65 approximately 0.05 mile north of Lake Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus rubra*	3	Yes	FACU
2. *Acer saccharinum*	2	Yes	FACW
3. *Juniperus virginiana*	1	No	FACU
4.			
5.			
	6	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	3	No	FACW
2. *Pyrus calleryana*	1	No	UPL
3.			
4.			
5.			
	4	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Andropogon virginicus*	40	Yes	FACU
2. *Setaria pumila*	15	Yes	FAC
3. *Paspalum floridanum*	5	No	FACW
4. *Sorghum halepense*	3	No	FACU
5. *Ambrosia artemisiifolia*	1	No	FACU
6.			
7.			
8.			
9.			
10.			
	64	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	2	No	FACU
2.			
	2	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	15	x 3 =	45
FACU species	50	x 4 =	200
UPL species	1	x 5 =	5
Column Totals:	76 (A)		270 (B)

Prevalence Index = B/A = 3.55

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 209

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					Loamy/Clayey	
5-18	10YR 6/3	85	10YR 5/6	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 210

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.679604 Long: -85.787109 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 210 is representative of Wetland 99. DP 210 is located along the northbound lanes of I-65 approximately 0.41 mile south of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	3	No	FACW
2.			
3.			
4.			
5.			
	3 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	25	Yes	FACW
2. *Apocynum cannabinum*	10	Yes	FAC
3. *Schoenoplectus tabernaemontani*	10	Yes	OBL
4. *Juncus effusus*	8	No	OBL
5. *Leersia oryzoides*	7	No	OBL
6. *Setaria pumila*	2	No	FAC
7.			
8.			
9.			
10.			
	62 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	28	x 2 =	56
FAC species	12	x 3 =	36
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	65 (A)		117 (B)

Prevalence Index = B/A = 1.80

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 210

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 12

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 211

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.679615 Long: -85.787064 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 211 is representative of the upland area around Wetland 99. DP 211 is located along the northbound lanes of I-65 approximately 0.41 mile south of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rosa multiflora*	5	Yes	FACU
2. *Fraxinus pennsylvanica*	5	Yes	FACW
3. *Pyrus calleryana*	3	Yes	UPL
4.			
5.			
	13 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	35	Yes	FAC
2. *Apocynum cannabinum*	7	No	FAC
3. *Cyperus esculentus*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	47 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1. *Toxicodendron radicans*	10	Yes	FAC
2. *Lonicera japonica*	5	Yes	FACU
	15 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	52	x 3 =	156
FACU species	10	x 4 =	40
UPL species	3	x 5 =	15
Column Totals:	75 (A)		231 (B)
Prevalence Index = B/A =			3.08

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
2

SOIL

Sampling Point: DP 211

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 212

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.682284 Long: -85.787433 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 212 is representative of Wetland 100. DP 212 is located along the northbound lanes of I-65 approximately 0.23 mile south of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	1	No	FACW
2.			
3.			
4.			
5.			
	1	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	75	Yes	OBL
2. *Cyperus esculentus*	8	No	FACW
3. *Juncus effusus*	5	No	OBL
4. *Echinochloa crus-galli*	3	No	FACW
5. *Asclepias incarnata*	2	No	OBL
6. *Setaria pumila*	2	No	FAC
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	82	x 1 =	82
FACW species	12	x 2 =	24
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	96 (A)		112 (B)

Prevalence Index = B/A = 1.17

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 212

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.25
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 213

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.682529 Long: -85.787463 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 213 is representative of the upland area around Wetland 100. DP 213 is located along the northbound exit ramp in the southeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	80	Yes	FAC
2. *Poa pratensis*	20	No	FAC
3. *Apocynum cannabinum*	7	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	107 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	107	x 3 =	321
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	107 (A)		321 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 213

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	100					Loamy/Clayey	
5-18	10YR 4/1	98	10YR 4/6	2	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 214

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): None

Slope (%): 0.5 Lat: 38.683987 Long: -85.787102 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 214 is representative of Wetland 100. DP 214 is located in the southeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cephalanthus occidentalis*	20	Yes	OBL
2.			
3.			
4.			
5.			
	20 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	50	Yes	OBL
2. *Cyperus esculentus*	10	No	FACW
3. *Schoenoplectus tabernaemontani*	5	No	OBL
4. *Asclepias incarnata*	3	No	OBL
5. *Verbena hastata*	2	No	FACW
6.			
7.			
8.			
9.			
10.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	78	x 1 =	78
FACW species	12	x 2 =	24
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		102 (B)

Prevalence Index = B/A = 1.13

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 214

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 1

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 215

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.683961 Long: -85.787018 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 215 is representative of the upland area around Wetland 100. DP 215 is located in the southeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	40	Yes	FACU
2. *Trifolium repens*	20	Yes	FACU
3. *Cyperus esculentus*	18	No	FACW
4. *Setaria pumila*	12	No	FAC
5. *Paspalum floridanum*	3	No	FACW
6. *Lysimachia nummularia*	3	No	FACW
7. *Acalypha rhomboidea*	2	No	FACU
8.			
9.			
10.			
	98	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	24	x 2 =	48
FAC species	12	x 3 =	36
FACU species	62	x 4 =	248
UPL species	0	x 5 =	0
Column Totals:	98 (A)		332 (B)

Prevalence Index = B/A = 3.39

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 215

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	98	10YR 4/6	2	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 216

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave

Slope (%): 0.5 Lat: 38.683453 Long: -85.787599 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 261 is representative of Wetland 101. DP 216 is located in the southeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	70	Yes	FACW
2. *Cyperus esculentus*	20	Yes	FACW
3. *Setaria pumila*	4	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	94 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	4	x 3 =	12
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	94 (A)		192 (B)

Prevalence Index = B/A = 2.04

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 216

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

2017 IndianaMap Aerial Photography

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 217

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): Convex

Slope (%): 0.5 Lat: 38.683618 Long: -85.787628 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 217 is representative of the upland area around Wetland 101. DP 217 is located in the southeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	100	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		300 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 217

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/4	100					Loamy/Clayey	Partial fill

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 218

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): concave

Slope (%): 0 Lat: 38.686133 Long: -85.787698 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 218 is representative of Wetland 102. DP 218 is located in the northeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	35	Yes	FACW
2. *Paspalum floridanum*	30	Yes	FACW
3. *Cyperus esculentus*	25	Yes	FACW
4. *Setaria pumila*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		195 (B)

Prevalence Index = B/A = 2.05

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 218

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 219

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.686062 Long: -85.787552 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 219 is representative of the upland area around Wetland 102. DP 219 is located in the northeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	45	Yes	FACW
2. *Andropogon virginicus*	15	No	FACU
3. *Paspalum floridanum*	10	No	FACW
4. *Setaria pumila*	7	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	77	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	7	x 3 =	21
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	77 (A)		191 (B)

Prevalence Index = B/A = 2.48

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 219

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/3	90	10YR 4/6	10	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 220

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 38.686817 Long: -85.787408 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 220 is representative of Wetland 103. DP 220 is located along the northbound on-ramp in the northeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Persicaria maculosa*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 220

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: riprap

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

After multiple attempts, a soil sample could not be obtainted due to a restrictive layer of riprap. Based upon the hydrophytic vegetation and hydrology indicators it is assumed that hydric soils would be present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0.25
Water Table Present?	Yes X	No ___	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 7

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/02/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 221

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 38.686812 Long: -85.787430 Datum: WGS_1984

Soil Map Unit Name: Udorthents, cut and filled (Uaa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 221 is representative of the upland area around Wetland 103. DP 221 is located along the northbound on-ramp in the northeast quadrant of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	90	Yes	FACU
2. *Setaria pumila*	10	No	FAC
3. *Paspalum floridanum*	3	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	103 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	3	x 2 =	6
FAC species	10	x 3 =	30
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	103 (A)		396 (B)

Prevalence Index = B/A = 3.84

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 221

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 222

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): concave

Slope (%): 0.5 Lat: 38.691721 Long: -85.788358 Datum: WGS_1984

Soil Map Unit Name: Haubstadt silt loam, 2 to 6 percent slopes, eroded (HccB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 222 is representative of Wetland 104. DP 222 is located along the northbound lanes of I-65 approximately 0.43 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	97	Yes	FACW
2. *Setaria pumila*	3	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	97	x 2 =	194
FAC species	3	x 3 =	9
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		203 (B)

Prevalence Index = B/A = 2.03

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 222

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
3-18	10YR 4/1	92	10YR 4/6	8	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 223

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 32, Township 3 N, Range 5 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): convex

Slope (%): 1 Lat: 38.691675 Long: -85.788317 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 223 is representative of the upland area around Wetland 104. DP 223 is located along the northbound lanes of I-65 approximately 0.43 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	15	Yes	FACW
2. *Juglans nigra*	10	Yes	FACU
3. *Ulmus americana*	7	Yes	FACW
4.			
5.			
	32	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Liquidambar styraciflua*	3	No	FACW
2.			
3.			
4.			
5.			
	3	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Sorghum halepense*	20	Yes	FACU
2. *Poa pratensis*	8	Yes	FAC
3. *Ambrosia artemisiifolia*	5	No	FACU
4. *Cyperus esculentus*	2	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	35	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Lonicera japonica*	10	Yes	FACU
2. *Toxicodendron radicans*	8	Yes	FAC
	18	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	27	x 2 =	54
FAC species	16	x 3 =	48
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	88 (A)		282 (B)

Prevalence Index = B/A = 3.20

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 223

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Loamy/Clayey	
7-18	10YR 5/2	95	10YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 224

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): concave

Slope (%): 0.5 Lat: 38.695136 Long: -85.788763 Datum: WGS_1984

Soil Map Unit Name: Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (StdAH) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 224 is representative of Wetland 105. DP 224 is located along the northbound lanes of I-65 approximately 0.67 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	____	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Persicaria sagittata*	30	Yes	OBL
2. *Leersia oryzoides*	25	Yes	OBL
3. *Persicaria maculosa*	15	No	FACW
4. *Impatiens capensis*	8	No	FACW
5. *Typha latifolia*	7	No	OBL
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	62	x 1 =	62
FACW species	23	x 2 =	46
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		108 (B)

Prevalence Index = B/A = 1.27

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 224

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	95	10YR 4/6	5	C	PL	Mucky Loam/Clay	Prominent redox concentrations
8-18	10YR 3/1	100					Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 10

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 225

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): none

Slope (%): 0 Lat: 38.694504 Long: -85.788624 Datum: WGS_1984

Soil Map Unit Name: Wakeland silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (WaaAW) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 225 is representative of the upland area around Wetland 105. DP 225 is located along the northbound lanes of I-65 approximately 0.67 mile north of the I-65 and SR 56 overpass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Carya ovata*	15	Yes	FACU
2. *Quercus rubra*	10	Yes	FACU
3.			
4.			
5.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Asimina triloba*	15	Yes	FAC
2. *Liquidambar styraciflua*	10	Yes	FACW
3. *Cercis canadensis*	10	Yes	FACU
4. *Quercus rubra*	4	No	FACU
5. *Ulmus americana*	3	No	FACW
	42	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Schedonorus arundinaceus*	60	Yes	FACU
2. *Solidago canadensis*	7	No	FACU
3. *Symphyotrichum pilosum*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	72	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. *Celastrus orbiculatus*	15	Yes	UPL
2. *Lonicera japonica*	10	Yes	FACU
	25	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	13	x 2 =	26
FAC species	15	x 3 =	45
FACU species	121	x 4 =	484
UPL species	15	x 5 =	75
Column Totals:	164 (A)		630 (B)

Prevalence Index = B/A = 3.84

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 225

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Loamy/Clayey	
4-18	10YR 5/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 226

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): concave

Slope (%): 1 Lat: 38.703258 Long: -85.791822 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP 226 is representative of Wetland 106. DP 226 is located along the northbound lanes of I-65 approximately 0.30 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Leersia oryzoides*	40	Yes	OBL
2. *Impatiens capensis*	30	Yes	FACW
3. *Persicaria pensylvanica*	30	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		160 (B)

Prevalence Index = B/A = 1.60

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 226

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations
10-18	10YR 4/1	85	10YR 4/6	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 1
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: DES 1700135: I-65 Added Travel Lanes-Scott & Clark County City/County: Scottsburg/Scott County Sampling Date: 09/03/2020

Applicant/Owner: INDOT Seymour District State: IN Sampling Point: DP 227

Investigator(s): Rick Paul, Nakayla Krahn Section, Township, Range: Section 27, Township 3 N, Range 6 E

Landform (hillside, terrace, etc.): Lake plain Local relief (concave, convex, none): concave

Slope (%): .5 Lat: 38.70326049 Long: -85.79188023 Datum: WGS_1984

Soil Map Unit Name: Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded (HceC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
DP 227 is representative of the upland area around Wetland 106. DP 227 is located along the northbound lanes of I-65 approximately 0.30 mile south of Moonglo Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	98	Yes	FACU
2. *Paspalum floridanum*	2	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	0	x 3 =	0
FACU species	98	x 4 =	392
UPL species	0	x 5 =	0
Column Totals:	100 (A)		396 (B)

Prevalence Index = B/A = 3.96

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP 227

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/4	100					Loamy/Clayey	
3-18	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix C - Quality Assessment Forms

QHEI/HHEI

Ohio EPA — Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 57

Stream & Location: Blue Lick Creek **RM:** _ _ _._ **Date:** 9 / 01 / 20

Scorers Full Name & Affiliation: K. Bright & J. Iddings

River Code: _ _ _ - _ _ _ - _ _ _ **STORET #:** _ _ _ _ _ _ **Lat./ Long.:** (NAD 83 - decimal °) 38 . 50151 / 85 . 77138 **Office verified location** ☐

1] SUBSTRATE

Check **ONLY Two** substrate *TYPE BOXES*; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐ ☐ BLDR /SLABS [10]			☐ ☐ HARDPAN [4]		
☐ ☐ BOULDER [9]			☐ ☐ DETRITUS [3]		
☐ ☐ COBBLE [8]			☐ ☐ MUCK [2]		
☐ ☑ GRAVEL [7]	10	10	☐ ☐ SILT [2]		
☐ ☐ SAND [6]			☐ ☐ ARTIFICIAL [0]		
☒ ☒ BEDROCK [5]	90	90			

(Score natural substrates; ignore sludge from point-sources)

NUMBER OF BEST TYPES: ☐ 4 or more [2] ☑ 3 or less [0]

Check ONE (*Or 2 & average*)

ORIGIN
- ☐ LIMESTONE [1]
- ☑ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☑ SHALE [-1]
- ☐ COAL FINES [-2]

QUALITY

SILT
- ☐ HEAVY [-2]
- ☐ MODERATE [-1]
- ☐ NORMAL [0]
- ☑ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☐ MODERATE [-1]
- ☐ NORMAL [0]
- ☑ NONE [1]

Substrate 14 *Maximum 20*

Comments

2] INSTREAM COVER

Indicate presence 0 to 3: **0**-Absent; **1**-Very small amounts or if more common of marginal quality; **2**-Moderate amounts, but not of highest quality or in small amounts of highest quality; **3**-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

_ UNDERCUT BANKS [1]	_ POOLS > 70cm [2]	_ OXBOWS, BACKWATERS [1]
_ OVERHANGING VEGETATION [1]	_ ROOTWADS [1]	_ AQUATIC MACROPHYTES [1]
1 SHALLOWS (IN SLOW WATER) [1]	_ BOULDERS [1]	1 LOGS OR WOODY DEBRIS [1]
_ ROOTMATS [1]		

AMOUNT Check ONE (*Or 2 & average*)
- ☐ EXTENSIVE >75% [11]
- ☐ MODERATE 25-75% [7]
- ☑ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

Comments

Cover 5 *Maximum 20*

3] CHANNEL MORPHOLOGY

Check ONE in each category (*Or 2 & average*)

SINUOSITY
- ☐ HIGH [4]
- ☐ MODERATE [3]
- ☑ LOW [2]
- ☐ NONE [1]

DEVELOPMENT
- ☐ EXCELLENT [7]
- ☐ GOOD [5]
- ☑ FAIR [3]
- ☐ POOR [1]

CHANNELIZATION
- ☑ NONE [6]
- ☐ RECOVERED [4]
- ☐ RECOVERING [3]
- ☐ RECENT OR NO RECOVERY [1]

STABILITY
- ☐ HIGH [3]
- ☑ MODERATE [2]
- ☐ LOW [1]

Comments

Channel 13 *Maximum 20*

4] BANK EROSION AND RIPARIAN ZONE

Check **ONE** in each category for ***EACH BANK*** (*Or 2 per bank & average*)

River right looking downstream

EROSION

L	R	
☑	☑	NONE / LITTLE [3]
☐	☐	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

RIPARIAN WIDTH

L	R	
☐	☐	WIDE > 50m [4]
☑	☑	MODERATE 10-50m [3]
☐	☐	NARROW 5-10m [2]
☐	☐	VERY NARROW < 5m [1]
☐	☐	NONE [0]

FLOOD PLAIN QUALITY

L	R	
☑	☑	FOREST, SWAMP [3]
☐	☐	SHRUB OR OLD FIELD [2]
☐	☐	RESIDENTIAL, PARK, NEW FIELD [1]
☐	☐	FENCED PASTURE [1]
☐	☐	OPEN PASTURE, ROWCROP [0]

L	R	
☐	☐	CONSERVATION TILLAGE [1]
☐	☐	URBAN OR INDUSTRIAL [0]
☐	☐	MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian 9 *Maximum 10*

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH Check **ONE** (*ONLY!*)
- ☐ > 1m [6]
- ☐ 0.7-<1m [4]
- ☐ 0.4-<0.7m [2]
- ☑ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH Check ONE (*Or 2 & average*)
- ☐ POOL WIDTH > RIFFLE WIDTH [2]
- ☑ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☐ FAST [1]
- ☐ MODERATE [1]
- ☑ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

Pool / Current 3 *Maximum 12*

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (*Or 2 & average*). ☐ NO RIFFLE [metric=0]

RIFFLE DEPTH
- ☐ BEST AREAS > 10cm [2]
- ☑ BEST AREAS 5-10cm [1]
- ☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
- ☐ MAXIMUM > 50cm [2]
- ☐ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
- ☑ STABLE (e.g., Cobble, Boulder) [2]
- ☐ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
- ☑ NONE [2]
- ☐ LOW [1]
- ☐ MODERATE [0]
- ☐ EXTENSIVE [-1]

Comments

Riffle / Run 5 *Maximum 8*

6] GRADIENT

(23.4 ft/mi)

DRAINAGE AREA (15.3 mi²)

- ☐ VERY LOW - LOW [2-4]
- ☐ MODERATE [6-10]
- ☐ HIGH - VERY HIGH [10-6]

%POOL: _ %GLIDE: 90

%RUN: _ %RIFFLE: 10

Gradient 8 *Maximum 10*

A] SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
- ☑ WADE
- ☐ L. LINE
- ☐ OTHER

STAGE

1st -sample pass-		2nd
☐	HIGH	☐
☐	UP	☐
☐	NORMAL	☐
☑	LOW	☐
☐	DRY	☐

DISTANCE

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

200 ft

meters

CLARITY

1st	--sample pass--	2nd
☐	< 20 cm	☐
☐	20-<40 cm	☐
☐	40-70 cm	☐
☐	> 70 cm/ CTB	☐
☐	SECCHI DEPTH	☐

1st pass _____ cm

2nd _____ cm

CANOPY

- ☐ > 85%- OPEN
- ☐ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

C] RECREATION

POOL: ☐ >100ft² ☐ >3ft (AREA DEPTH)

Comment RE: Reach consistency/ Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

OHWM depth: 1.6'

OHWM width: 30.5'

B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:



Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **31**

SITE NAME/LOCATION: UNT to Blue Lick Creek

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.08

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.50427 | LONG.: 85.77153 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: K. Bright | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	60%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	40%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

11

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 8

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.50

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☑	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None	☐ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☑ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Memphis**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **24, 33**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.45'
OHWM width: 3.5'

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 62

Stream & Location: Caney Fork **RM:** ___.__ **Date:** 9 / 01 / 20

Scorers Full Name & Affiliation: K. Bright & J. Iddings

River Code: ___-___-___ **STORET #:** ____ **Lat./ Long.:** (NAD 83 - decimal °) 38.51439 / 85.77168 Office verified location ☐

1] SUBSTRATE

Check **ONLY Two** substrate *TYPE BOXES*; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐ ☐ BLDR /SLABS [10]			☐ ☐ HARDPAN [4]		
☐ ☐ BOULDER [9]	10	10	☐ ☐ DETRITUS [3]		
☐ ☑ COBBLE [8]	40	40	☐ ☐ MUCK [2]		
☐ ☑ GRAVEL [7]	30	30	☐ ☐ SILT [2]		
☐ ☐ SAND [6]	20	20	☐ ☐ ARTIFICIAL [0]		
☐ ☐ BEDROCK [5]			(Score natural substrates; ignore sludge from point-sources)		

NUMBER OF BEST TYPES: ☑ 4 or more [2] ☐ 3 or less [0]

Check ONE (*Or 2 & average*)

ORIGIN
- ☐ LIMESTONE [1]
- ☑ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☑ SHALE [-1]
- ☐ COAL FINES [-2]

QUALITY

SILT
- ☐ HEAVY [-2]
- ☐ MODERATE [-1]
- ☑ NORMAL [0]
- ☐ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☑ MODERATE [-1]
- ☐ NORMAL [0]
- ☐ NONE [1]

Substrate 16 *Maximum 20*

Comments

2] INSTREAM COVER

Indicate presence 0 to 3: **0**-Absent; **1**-Very small amounts or if more common of marginal quality; **2**-Moderate amounts, but not of highest quality or in small amounts of highest quality; **3**-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

___ UNDERCUT BANKS [1]	___ POOLS > 70cm [2]	___ OXBOWS, BACKWATERS [1]
1 OVERHANGING VEGETATION [1]	___ ROOTWADS [1]	1 AQUATIC MACROPHYTES [1]
___ SHALLOWS (IN SLOW WATER) [1]	___ BOULDERS [1]	___ LOGS OR WOODY DEBRIS [1]
1 ROOTMATS [1]		

AMOUNT

Check ONE (*Or 2 & average*)
- ☐ EXTENSIVE >75% [11]
- ☑ MODERATE 25-75% [7]
- ☐ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

Comments

Cover *Maximum 20* 10

3] CHANNEL MORPHOLOGY

Check ONE in each category (*Or 2 & average*)

SINUOSITY
- ☐ HIGH [4]
- ☐ MODERATE [3]
- ☑ LOW [2]
- ☐ NONE [1]

DEVELOPMENT
- ☐ EXCELLENT [7]
- ☑ GOOD [5]
- ☐ FAIR [3]
- ☐ POOR [1]

CHANNELIZATION
- ☐ NONE [6]
- ☐ RECOVERED [4]
- ☑ RECOVERING [3]
- ☐ RECENT OR NO RECOVERY [1]

STABILITY
- ☐ HIGH [3]
- ☑ MODERATE [2]
- ☐ LOW [1]

Comments

Channel *Maximum 20* 12

4] BANK EROSION AND RIPARIAN ZONE

Check **ONE** in each category for ***EACH BANK*** (*Or 2 per bank & average*)

River right looking downstream

EROSION

L	R	
☑	☑	NONE / LITTLE [3]
☐	☐	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

RIPARIAN WIDTH

L	R	
☐	☐	WIDE > 50m [4]
☐	☐	MODERATE 10-50m [3]
☑	☑	NARROW 5-10m [2]
☐	☐	VERY NARROW < 5m [1]
☐	☐	NONE [0]

FLOOD PLAIN QUALITY

L	R	
☑	☑	FOREST, SWAMP [3]
☐	☐	SHRUB OR OLD FIELD [2]
☐	☐	RESIDENTIAL, PARK, NEW FIELD [1]
☐	☐	FENCED PASTURE [1]
☐	☐	OPEN PASTURE, ROWCROP [0]

L	R	
☐	☐	CONSERVATION TILLAGE [1]
☐	☐	URBAN OR INDUSTRIAL [0]
☐	☐	MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian *Maximum 10* 8

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH

Check **ONE** (*ONLY!*)
- ☐ > 1m [6]
- ☐ 0.7-<1m [4]
- ☑ 0.4-<0.7m [2]
- ☐ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH

Check ONE (*Or 2 & average*)
- ☐ POOL WIDTH > RIFFLE WIDTH [2]
- ☑ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY

Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☐ FAST [1]
- ☐ MODERATE [1]
- ☑ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

Pool / Current *Maximum 12* 4

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (*Or 2 & average*). ☐ NO RIFFLE [metric=0]

RIFFLE DEPTH
- ☑ BEST AREAS > 10cm [2]
- ☐ BEST AREAS 5-10cm [1]
- ☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
- ☐ MAXIMUM > 50cm [2]
- ☑ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
- ☐ STABLE (e.g., Cobble, Boulder) [2]
- ☑ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
- ☐ NONE [2]
- ☐ LOW [1]
- ☑ MODERATE [0]
- ☐ EXTENSIVE [-1]

Comments

Riffle / Run *Maximum 8* 4

6] GRADIENT

(41.6 ft/mi) ☐ VERY LOW - LOW [2-4] ☑ MODERATE [6-10] ☐ HIGH - VERY HIGH [10-6]

DRAINAGE AREA (7.87 mi²)

%POOL: ____ %GLIDE: 60

%RUN: 20 %RIFFLE: 20

Gradient *Maximum 10* 8

Attachment 14-1

A] SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
- ☑ WADE
- ☐ L. LINE
- ☐ OTHER

DISTANCE

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☑ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

200 meters

STAGE

1st -sample pass-		2nd
☐	HIGH	☐
☐	UP	☐
☐	NORMAL	☐
☑	LOW	☐
☐	DRY	☐

CLARITY

1st	--sample pass--	2nd
☐	< 20 cm	☐
☐	20-<40 cm	☐
☐	40-70 cm	☐
☐	> 70 cm/ CTB	☐
☐	SECCHI DEPTH	☐

1st pass _____ cm

2nd _____ cm

CANOPY

- ☐ > 85%- OPEN
- ☐ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

Comment RE: Reach consistency/ Is reach typical of steam?*, Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

OHWM depth: 1.5'

OHWM width: 27.4'

B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

C] RECREATION

AREA DEPTH

POOL: ☐ >100ft² ☐ >3ft

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:



Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **41**

SITE NAME/LOCATION: Henry Brook

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.35

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.51889 | LONG.: 85.77316 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: K. Bright | COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	60%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	40%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

11

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 10

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 1.50

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R		FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐ ☐ Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐ ☐ Urban or Industrial
☑	☑	Narrow <5m	☐	☐	Residential, Park, New Field	☐ ☐ Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐ ☐ Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None ☐ 0.5 ☐ 1.0 ☐ 1.5 ☐ 2.0 ☐ 2.5 ☐ 3.0 ☐ >3

STREAM GRADIENT ESTIMATE

☑ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Memphis**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **92-93, 102-104, 1155-1156, 1191, 1202-1208**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↙



OHWM depth: 0.55'
OHWM width: 7'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 32

SITE NAME/LOCATION: UNT to Caney Fork

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.06

LENGTH OF STREAM REACH (ft): 10 | LAT.: 38.53866 | LONG.: 85.77798 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: K. Bright | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	50%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	10%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	40%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

12

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 8

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.50

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☑	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☑	☑	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None	☐ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☑ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **152**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↖



OHWM depth: 0.33'
OHWM width: 3.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 43

SITE NAME/LOCATION: Ville Run

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.07

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.54569 | LONG.: 85.77812 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: K.Bright | COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	15%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	15%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	30%	☑	ARTIFICIAL [3 pts]	40%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 4

HHEI Metric Points

Substrate Max = 40: 13

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 10

Pool Depth Max = 30: 15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 1.50

Bankfull Width Max=30: 15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH L	R	(Per Bank)	FLOODPLAIN QUALITY L	R	(Most Predominant per Bank)	L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☑	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **1262-1264**

Elevated Turbidity? (Y/N): **Y** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **Y** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.33'
OHWM width: 2.5'

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 50.5

Stream & Location: Wolf Run **RM:** _ _ _._ **Date:** 8 / 31 / 20

Scorers Full Name & Affiliation: K. Bright & J. Iddings

River Code: _ _ _ - _ _ _ - _ _ _ **STORET #:** _ _ _ _ _ _ **Lat./ Long.:** (NAD 83 - decimal °) 38 . 55040 / 85 . 77930 **Office verified location** ☐

1] SUBSTRATE

Check **ONLY Two** substrate *TYPE BOXES*; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐ BLDR /SLABS [10]			☐ HARDPAN [4]		
☐ BOULDER [9]			☐ DETRITUS [3]		
☐ COBBLE [8]			☐ MUCK [2]		
☐ GRAVEL [7]	10	10	☑ SILT [2]	50	50
■ SAND [6]	40	40	☐ ARTIFICIAL [0]		
☐ BEDROCK [5]					

(Score natural substrates; ignore sludge from point-sources)

NUMBER OF BEST TYPES: ☐ 4 or more [2] ☑ 3 or less [0]

Check ONE (*Or 2 & average*)

ORIGIN
- ☐ LIMESTONE [1]
- ☑ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☐ SHALE [-1]
- ☐ COAL FINES [-2]

QUALITY

SILT
- ☐ HEAVY [-2]
- ☐ MODERATE [-1]
- ☑ NORMAL [0]
- ☐ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☐ MODERATE [-1]
- ☑ NORMAL [0]
- ☐ NONE [1]

Comments

Substrate 9 *Maximum 20*

2] INSTREAM COVER

Indicate presence 0 to 3: **0**-Absent; **1**-Very small amounts or if more common of marginal quality; **2**-Moderate amounts, but not of highest quality or in small amounts of highest quality; **3**-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

_ UNDERCUT BANKS [1]	_ POOLS > 70cm [2]	_ OXBOWS, BACKWATERS [1]
_ OVERHANGING VEGETATION [1]	_ ROOTWADS [1]	_ AQUATIC MACROPHYTES [1]
_ SHALLOWS (IN SLOW WATER) [1]	_ BOULDERS [1]	1 LOGS OR WOODY DEBRIS [1]
_ ROOTMATS [1]		

AMOUNT

Check ONE (*Or 2 & average*)
- ☐ EXTENSIVE >75% [11]
- ☐ MODERATE 25-75% [7]
- ☑ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

Comments

Cover 4 *Maximum 20*

3] CHANNEL MORPHOLOGY

Check ONE in each category (*Or 2 & average*)

SINUOSITY
- ☐ HIGH [4]
- ☐ MODERATE [3]
- ☑ LOW [2]
- ☐ NONE [1]

DEVELOPMENT
- ☐ EXCELLENT [7]
- ☑ GOOD [5]
- ☑ FAIR [3]
- ☐ POOR [1]

CHANNELIZATION
- ☑ NONE [6]
- ☐ RECOVERED [4]
- ☐ RECOVERING [3]
- ☐ RECENT OR NO RECOVERY [1]

STABILITY
- ☐ HIGH [3]
- ☑ MODERATE [2]
- ☐ LOW [1]

Comments

Channel 13 *Maximum 20*

4] BANK EROSION AND RIPARIAN ZONE

Check **ONE** in each category for ***EACH BANK*** (*Or 2 per bank & average*)

River right looking downstream

L	R	EROSION
☑	☐	NONE / LITTLE [3]
☐	☑	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

L	R	RIPARIAN WIDTH
☐	☐	WIDE > 50m [4]
☐	☐	MODERATE 10-50m [3]
☑	☑	NARROW 5-10m [2]
☐	☐	VERY NARROW < 5m [1]
☐	☐	NONE [0]

L	R	FLOOD PLAIN QUALITY
☑	☑	FOREST, SWAMP [3]
☐	☐	SHRUB OR OLD FIELD [2]
☐	☐	RESIDENTIAL, PARK, NEW FIELD [1]
☐	☐	FENCED PASTURE [1]
☐	☐	OPEN PASTURE, ROWCROP [0]

L	R	
☐	☐	CONSERVATION TILLAGE [1]
☐	☐	URBAN OR INDUSTRIAL [0]
☐	☐	MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian 7.5 *Maximum 10*

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH

Check **ONE** (*ONLY!*)
- ☐ > 1m [6]
- ☐ 0.7-<1m [4]
- ☑ 0.4-<0.7m [2]
- ☐ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH

Check ONE (*Or 2 & average*)
- ☑ POOL WIDTH > RIFFLE WIDTH [2]
- ☐ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY

Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☐ FAST [1]
- ☐ MODERATE [1]
- ☑ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

Pool / Current 5 *Maximum 12*

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (*Or 2 & average*). ☐ NO RIFFLE [metric=0]

RIFFLE DEPTH
- ☐ BEST AREAS > 10cm [2]
- ☑ BEST AREAS 5-10cm [1]
- ☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
- ☐ MAXIMUM > 50cm [2]
- ☐ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
- ☐ STABLE (e.g., Cobble, Boulder) [2]
- ☑ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
- ☑ NONE [2]
- ☐ LOW [1]
- ☐ MODERATE [0]
- ☐ EXTENSIVE [-1]

Comments

Riffle / Run 4 *Maximum 8*

6] GRADIENT

(54.8 ft/mi)

DRAINAGE AREA

(1.57 mi²)

- ☐ VERY LOW - LOW [2-4]
- ☐ MODERATE [6-10]
- ☐ HIGH - VERY HIGH [10-6]

%POOL: %GLIDE: 90

%RUN: %RIFFLE: 10

Gradient 8 *Maximum 10*

EPA 4520

Attachment 14-1

A] SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
- ☐ WADE
- ☐ L. LINE
- ☐ OTHER

DISTANCE

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

200 ft
meters

STAGE

1st -sample pass-	2nd
☐ HIGH	☐
☐ UP	☐
☐ NORMAL	☐
☑ LOW	☐
☐ DRY	☐

CLARITY

1st --sample pass--	2nd
☐ < 20 cm	☐
☐ 20-<40 cm	☐
☐ 40-70 cm	☐
☐ > 70 cm/ CTB	☐
☐ SECCHI DEPTH	☐

1st pass _____ cm
2nd _____ cm

CANOPY

- ☐ > 85%- OPEN
- ☐ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

Comment RE: Reach consistency/ Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

OHWM depth: 1.6'

OHWM width: 7.2'

B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

C] RECREATION

AREA DEPTH

POOL: ☐ >100ft² ☐ >3ft

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:



Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **21**

SITE NAME/LOCATION: UNT 1 to Wolf Run

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.06

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.55229 | LONG.: 85.77935 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: K. Bright | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	60%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	40%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☑	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 5

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.50

HHEI Metric Points

Substrate Max = 40: 11

A + B

Pool Depth Max = 30: 5

Bankfull Width Max=30: 5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R		FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☑	Wide >10m	☐	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **207-210**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↙



OHWM depth: 0.5'
OHWM width: 2'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **48**

SITE NAME/LOCATION: UNT 2 to Wolf Run

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.19

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.55764 | LONG.: 85.77838 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: K.Bright | COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	15%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	15%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	30%	☑	ARTIFICIAL [3 pts]	40%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 4

HHEI Metric Points

Substrate Max = 40

13

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 10

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 2.50

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☑	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **1296-1297**

Elevated Turbidity? (Y/N): **Y** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **Y** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW



OHWM depth: 3'
OHWM width: 7'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 64

SITE NAME/LOCATION: UNT 1 to Miller Fork

SITE NUMBER: _____ RIVER BASIN: Silver Creek DRAINAGE AREA (mi²): 0.27

LENGTH OF STREAM REACH (ft): 200 LAT.: 38.56303 LONG.: 85.77821 RIVER CODE: _____ RIVER MILE: _____

DATE: 09/01/20 SCORER: K.Bright COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	20%
☑	GRAVEL (2-64 mm) [9 pts]	30%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	40%	☐	ARTIFICIAL [3 pts]	10%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** Substrate Percentage Check **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 **TOTAL NUMBER OF SUBSTRATE TYPES:** 4

HHEI Metric Points

Substrate Max = 40

19

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: _____ **MAXIMUM POOL DEPTH (centimeters):** 20

Pool Depth Max = 30

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: _____ **AVERAGE BANKFULL WIDTH (meters):** 2.00

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS: _____

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS: _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None	☐ 1.0	☐ 2.0	☐ 3.0
☑ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **1303**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 2'
OHWM width: 3.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 28

SITE NAME/LOCATION: UNT 2 to Miller Fork

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.09

LENGTH OF STREAM REACH (ft): 30 | LAT.: 38.56312 | LONG.: 85.77832 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: K.Bright | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☑ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	10%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☑	ARTIFICIAL [3 pts]	90%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 5

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.75

HHEI Metric Points

Substrate Max = 40: 8

A + B

Pool Depth Max = 30: 15

Bankfull Width Max=30: 5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing ☐ Moist Channel, isolated pools, no flow (Intermittent)

☐ Subsurface flow with isolated pools (Interstitial) ☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None ☐ 1.0 ☐ 2.0 ☐ 3.0

☐ 0.5 ☐ 1.5 ☐ 2.5 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **1310**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↙



OHWM depth: 0.5'
OHWM width: 2'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 59

SITE NAME/LOCATION: UNT 3 to Miller Fork

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.25

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.56323 | LONG.: 85.77828 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: K. Bright | COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	20%
☑	GRAVEL (2-64 mm) [9 pts]	30%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	40%	☐	ARTIFICIAL [3 pts]	10%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 **TOTAL NUMBER OF SUBSTRATE TYPES:** 4

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

- ☐ > 30 centimeters [20 pts]
- ☐ > 22.5 - 30 cm [30 pts]
- ☑ > 10 - 22.5 cm [25 pts]
- ☐ > 5 cm - 10 cm [15 pts]
- ☐ < 5 cm [5 pts]
- ☐ NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 20

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

- ☐ > 4.0 meters (> 13') [30 pts]
- ☐ > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]
- ☐ > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]
- ☑ > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
- ☐ ≤ 1.0 m (<=3' 3") [5 pts]

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 1.50

HHEI Metric Points

	Max	Score
Substrate	40	19
A + B		
Pool Depth	30	25
Bankfull Width	30	15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland
☑	☑	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field
☐	☐	None	☐	☐	Fenced Pasture

L	R	
☐	☐	Conservation Tillage
☐	☐	Urban or Industrial
☐	☐	Open Pasture, Row Crop
☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

- ☑ Stream Flowing
- ☐ Subsurface flow with isolated pools (Interstitial)
- ☐ Moist Channel, isolated pools, no flow (Intermittent)
- ☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None	☑ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **1309, 1311-1312**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW



OHWM depth: 2'
OHWM width: 4.5'

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 52

Stream & Location: Miller Fork **RM:** _ _ _._ **Date:** 8 / 31 / 20

Scorers Full Name & Affiliation: M. Del Real, American Structurepoint, Inc.

River Code: _ _ _ - _ _ _ - _ _ _ **STORET #:** _ _ _ _ _ _ **Lat./ Long.:** (NAD 83 - decimal °) 38 . 567646 / 85 . 778216 **Office verified location** ☐

1] SUBSTRATE

Check **ONLY Two** substrate *TYPE BOXES*; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐ ☐ BLDR /SLABS [10]			☐ ☐ HARDPAN [4]		
☐ ☐ BOULDER [9]			☐ ☐ DETRITUS [3]		
☐ ☐ COBBLE [8]	10	10	☐ ☐ MUCK [2]		
☑ ☑ GRAVEL [7]	50	50	☐ ☐ SILT [2]	10	10
■ ■ SAND [6]	30	30	☐ ☐ ARTIFICIAL [0]		
☐ ☐ BEDROCK [5]			(Score natural substrates; ignore sludge from point-sources)		

NUMBER OF BEST TYPES: ☐ 4 or more [2] ☑ 3 or less [0]

Check ONE (*Or 2 & average*)

ORIGIN
- ☐ LIMESTONE [1]
- ☑ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☑ SHALE [-1]
- ☐ COAL FINES [-2]

QUALITY

SILT
- ☐ HEAVY [-2]
- ☐ MODERATE [-1]
- ☑ NORMAL [0]
- ☐ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☐ MODERATE [-1]
- ☑ NORMAL [0]
- ☐ NONE [1]

Substrate 13 *Maximum 20*

Comments

2] INSTREAM COVER

Indicate presence 0 to 3: **0**-Absent; **1**-Very small amounts or if more common of marginal quality; **2**-Moderate amounts, but not of highest quality or in small amounts of highest quality; **3**-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

___ UNDERCUT BANKS [1]	___ POOLS > 70cm [2]	___ OXBOWS, BACKWATERS [1]
1 OVERHANGING VEGETATION [1]	1 ROOTWADS [1]	___ AQUATIC MACROPHYTES [1]
___ SHALLOWS (IN SLOW WATER) [1]	___ BOULDERS [1]	1 LOGS OR WOODY DEBRIS [1]
___ ROOTMATS [1]		

AMOUNT

Check ONE (*Or 2 & average*)
- ☐ EXTENSIVE >75% [11]
- ☐ MODERATE 25-75% [7]
- ☑ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

Comments

Cover 6 *Maximum 20*

3] CHANNEL MORPHOLOGY

Check ONE in each category (*Or 2 & average*)

SINUOSITY
- ☐ HIGH [4]
- ☑ MODERATE [3]
- ☐ LOW [2]
- ☐ NONE [1]

DEVELOPMENT
- ☐ EXCELLENT [7]
- ☐ GOOD [5]
- ☑ FAIR [3]
- ☐ POOR [1]

CHANNELIZATION
- ☐ NONE [6]
- ☐ RECOVERED [4]
- ☑ RECOVERING [3]
- ☐ RECENT OR NO RECOVERY [1]

STABILITY
- ☐ HIGH [3]
- ☑ MODERATE [2]
- ☐ LOW [1]

Comments

Channel 11 *Maximum 20*

4] BANK EROSION AND RIPARIAN ZONE

Check **ONE** in each category for ***EACH BANK*** (*Or 2 per bank & average*)

River right looking downstream

L	R	EROSION
☐	☐	NONE / LITTLE [3]
☑	☑	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

L	R	RIPARIAN WIDTH
☑	☑	WIDE > 50m [4]
☐	☐	MODERATE 10-50m [3]
☐	☐	NARROW 5-10m [2]
☐	☐	VERY NARROW < 5m [1]
☐	☐	NONE [0]

L	R	FLOOD PLAIN QUALITY
☑	☑	FOREST, SWAMP [3]
☐	☐	SHRUB OR OLD FIELD [2]
☐	☐	RESIDENTIAL, PARK, NEW FIELD [1]
☐	☐	FENCED PASTURE [1]
☐	☐	OPEN PASTURE, ROWCROP [0]

L	R	
☐	☐	CONSERVATION TILLAGE [1]
☐	☐	URBAN OR INDUSTRIAL [0]
☐	☐	MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian 9 *Maximum 10*

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH

Check **ONE** (*ONLY!*)
- ☐ > 1m [6]
- ☐ 0.7-<1m [4]
- ☐ 0.4-<0.7m [2]
- ☑ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH

Check ONE (*Or 2 & average*)
- ☐ POOL WIDTH > RIFFLE WIDTH [2]
- ☑ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY

Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☐ FAST [1]
- ☐ MODERATE [1]
- ☑ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

Pool / Current 3 *Maximum 12*

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (*Or 2 & average*). ☐ NO RIFFLE [metric=0]

RIFFLE DEPTH
- ☐ BEST AREAS > 10cm [2]
- ☑ BEST AREAS 5-10cm [1]
- ☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
- ☐ MAXIMUM > 50cm [2]
- ☑ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
- ☐ STABLE (e.g., Cobble, Boulder) [2]
- ☐ MOD. STABLE (e.g., Large Gravel) [1]
- ☑ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
- ☑ NONE [2]
- ☐ LOW [1]
- ☐ MODERATE [0]
- ☐ EXTENSIVE [-1]

Comments

Riffle / Run 4 *Maximum 8*

6] GRADIENT

DRAINAGE AREA (1.367 mi²)

(63.3 ft/mi)
- ☐ VERY LOW - LOW [2-4]
- ☐ MODERATE [6-10]
- ☑ HIGH - VERY HIGH [10-6]

%POOL: 20 **%GLIDE:** 0 **%RUN:** 70 **%RIFFLE:** 10

Gradient 6 *Maximum 10*

A] SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
- ☑ WADE
- ☐ L. LINE
- ☐ OTHER

STAGE

1st -sample pass-		2nd
☐	HIGH	☐
☐	UP	☐
☑	NORMAL	☑
☐	LOW	☐
☐	DRY	☐

DISTANCE

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☑ OTHER

200 ft / meters

CLARITY

1st --sample pass--		2nd
☐	< 20 cm	☐
☐	20-<40 cm	☐
☐	40-70 cm	☐
☑	> 70 cm/ CTB	☑
☐	SECCHI DEPTH	☐

CANOPY

- ☐ > 85%- OPEN
- ☐ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☒ <10%- CLOSED

1st pass _____ cm

2nd pass _____ cm

Comment RE: Reach consistency/ Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

OHWM Width: 8 feet

OHWM Depth: 0.67 feet

Last rainfall: 8/29/2020, 0.51 inch

B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

C] RECREATION

POOL: AREA ☐ >100ft² DEPTH ☐ >3ft

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:

FLOW ↑



OHWM depth: 0.67'
OHWM width: 8'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 41

SITE NAME/LOCATION: UNT 4 to Miller Fork

SITE NUMBER: _____ RIVER BASIN: Silver Creek DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): _____ LAT.: 38.56862 LONG.: -85.77831 RIVER CODE: _____ RIVER MILE: _____

DATE: 08/31/20 SCORER: M. Del Real COMMENTS: Ephemeral

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	20%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	80%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) Substrate Percentage Check: 100% (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: _____ **MAXIMUM POOL DEPTH (centimeters):** 15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: _____ **AVERAGE BANKFULL WIDTH (meters):** 0.90

HHEI Metric Points

Substrate Max = 40: 11

A + B

Pool Depth Max = 30: 25

Bankfull Width Max=30: 5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS: _____

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐	Stream Flowing	☑	Moist Channel, isolated pools, no flow (Intermittent)
☐	Subsurface flow with isolated pools (Interstitial)	☐	Dry channel, no water (Ephemeral)

COMMENTS: _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☑	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

Attachment 14-1

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **Photo 1348-1349**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **10%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW



OHWM depth: 0.67'
OHWM width: 3'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **60**

SITE NAME/LOCATION: **UNT 1 to Meal Run**

SITE NUMBER: | RIVER BASIN: **Silver Creek** | DRAINAGE AREA (mi^2): **0.06**

LENGTH OF STREAM REACH (ft): **200** | LAT.: **38.57769** | LONG.: **-85.77832** | RIVER CODE: | RIVER MILE:

DATE: **08/31/20** | SCORER: **M. Del Real** | COMMENTS: **Intermittent**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	50%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☑	GRAVEL (2-64 mm) [9 pts]	30%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	20%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: **0.00%** (A) | Substrate Percentage Check: 100% (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **12** **TOTAL NUMBER OF SUBSTRATE TYPES:** **3**

HHEI Metric Points

Substrate Max = 40

15

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** **16**

Pool Depth Max = 30

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** **1.80**

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing ☑ Moist Channel, isolated pools, no flow (Intermittent)

☐ Subsurface flow with isolated pools (Interstitial) ☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None ☑ 1.0 ☐ 2.0 ☐ 3.0

☐ 0.5 ☐ 1.5 ☐ 2.5 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **Photo 310, Photo 1366-1367**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **5%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.6'
OHWM width: 4'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **64**

SITE NAME/LOCATION: **Meal Run**

SITE NUMBER: | RIVER BASIN: **Silver Creek** | DRAINAGE AREA (mi²): **0.14**

LENGTH OF STREAM REACH (ft): | LAT. **38.58190** | LONG. **-85.77819** | RIVER CODE: | RIVER MILE:

DATE: **08/31/20** | SCORER: **M. Del Real** | COMMENTS: **Intermittent**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	15%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☑	GRAVEL (2-64 mm) [9 pts]	60%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	20%	☐	ARTIFICIAL [3 pts]	5%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: **0.00%** (A)

Substrate Percentage Check: 100% (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **15** **TOTAL NUMBER OF SUBSTRATE TYPES:** **4**

HHEI Metric Points

Substrate Max = 40

19

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** **22**

Pool Depth Max = 30

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** **2.50**

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☑	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **Photo 329, 1370-1371**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **5%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↖



OHWM depth: 0.67'
OHWM width: 6'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **32**

SITE NAME/LOCATION: **Wheel Run**

SITE NUMBER: | RIVER BASIN: **Silver Creek** | DRAINAGE AREA (mi^2): **0.04**

LENGTH OF STREAM REACH (ft): **200** | LAT.: **38.58411** | LONG.: **-85.77929** | RIVER CODE: | RIVER MILE:

DATE: **09/02/20** | SCORER: **M. Del Real** | COMMENTS: **Intermittent**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	80%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	5%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	15%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: **0.00%** (A) | Substrate Percentage Check: 100% (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **9** **TOTAL NUMBER OF SUBSTRATE TYPES:** **3**

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** **8**

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** **0.90**

HHEI Metric Points

Substrate Max = 40: **12**

A + B

Pool Depth Max = 30: **15**

Bankfull Width Max=30: **5**

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH L	R	(Per Bank)	FLOODPLAIN QUALITY L	R	(Most Predominant per Bank)	L	R	
☑	☑	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing ☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Subsurface flow with isolated pools (Interstitial) ☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None ☑ 1.0 ☐ 2.0 ☐ 3.0
☐ 0.5 ☐ 1.5 ☐ 2.5 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **09/01/20** Quantity: **0.04**

Photograph Information: **Photo 331-332**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **10%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↘



OHWM depth: 0.4'
OHWM width: 6'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 60

SITE NAME/LOCATION: West Fork Silver Creek

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.26

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.58912 | LONG.: -85.77934 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: M. Del Real | COMMENTS: Intermittent

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	25%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	15%	☐	CLAY or HARDPAN [0 pt]	0%
☑	GRAVEL (2-64 mm) [9 pts]	60%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 15.00% (A) | Substrate Percentage Check: 100% (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

15

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 20

Pool Depth Max = 30

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 2.60

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐	Stream Flowing	☑	Moist Channel, isolated pools, no flow (Intermittent)
☐	Subsurface flow with isolated pools (Interstitial)	☐	Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☑	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **Photo 362-363, 1395-1396**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **10%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW



OHWM depth: 0.4'
OHWM width: 6'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 53

SITE NAME/LOCATION: UNT to West Fork Silver Creek

SITE NUMBER: | RIVER BASIN: Silver Creek | DRAINAGE AREA (mi²): 0.54

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.59062 | LONG.: -85.77828 | RIVER CODE: | RIVER MILE:

DATE: 09/02/20 | SCORER: M. Del Real | COMMENTS: Intermittent

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	20%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☑	ARTIFICIAL [3 pts]	80%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check: 100% | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 | **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40: 8

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 20

Pool Depth Max = 30: 25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 2.00

Bankfull Width Max=30: 20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **09/01/20** Quantity: **0.04**

Photograph Information: **Photo 378, 1405**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **10%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↖



OHWM depth: 0.6'
OHWM width: 4'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **42**

SITE NAME/LOCATION: **UNT to Pigeon Roost Creek**

SITE NUMBER: _____ RIVER BASIN: **Muscatatuck River** DRAINAGE AREA (mi^2): **0.04**

LENGTH OF STREAM REACH (ft): **200** LAT. **38.61564** LONG. **-85.78133** RIVER CODE: _____ RIVER MILE: _____

DATE: **09/01/20** SCORER: **M. Del Real** COMMENTS: **Ephemeral**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	40%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	25%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	35%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: **0.00%** (A) Substrate Percentage Check: 100% (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **9** **TOTAL NUMBER OF SUBSTRATE TYPES:** **3**

HHEI Metric Points

Substrate Max = 40

12

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

Pool Depth Max = 30

25

COMMENTS: _____ **MAXIMUM POOL DEPTH (centimeters):** **18**

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

Bankfull Width Max=30

5

COMMENTS: _____ **AVERAGE BANKFULL WIDTH (meters):** **0.90**

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☑	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS: _____

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS: _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **Photo 1485-1487**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **40%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↑



OHWM depth: 0.5'
OHWM width: 2'

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 42

Stream & Location: Pigeon Roost Creek **RM:** ___._ **Date:** 9 / 01 / 20

Scorers Full Name & Affiliation: M. Del Real, American Structurepoint, Inc.

River Code: ___-___-___ **STORET #:** ____ **Lat./ Long.:** (NAD 83 - decimal °) 38 . 62002 / 85 . 78263 Office verified location ☐

1] SUBSTRATE

Check *ONLY* **Two** substrate *TYPE BOXES*; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐ ☐ BLDR /SLABS [10]			☐ ☐ HARDPAN [4]		
☐ ☐ BOULDER [9]	10		☐ ☐ DETRITUS [3]		
☐ ☐ COBBLE [8]			☐ ☐ MUCK [2]		
☐ ☐ GRAVEL [7]	20		☑ ☐ SILT [2]	35	
■ ☐ SAND [6]	35		☐ ☐ ARTIFICIAL [0]		
☐ ☐ BEDROCK [5]					

(Score natural substrates; ignore sludge from point-sources)

NUMBER OF BEST TYPES: ☐ 4 or more [2] ☑ 3 or less [0]

Check ONE (*Or 2 & average*)

ORIGIN
- ☐ LIMESTONE [1]
- ☑ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☐ SHALE [-1]
- ☐ COAL FINES [-2]

QUALITY

SILT
- ☐ HEAVY [-2]
- ☑ MODERATE [-1]
- ☐ NORMAL [0]
- ☐ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☑ MODERATE [-1]
- ☐ NORMAL [0]
- ☐ NONE [1]

Substrate 7 *Maximum 20*

Comments

2] INSTREAM COVER

Indicate presence 0 to 3: **0**-Absent; **1**-Very small amounts or if more common of marginal quality; **2**-Moderate amounts, but not of highest quality or in small amounts of highest quality; **3**-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

___ UNDERCUT BANKS [1]	___ POOLS > 70cm [2]	___ OXBOWS, BACKWATERS [1]
1 OVERHANGING VEGETATION [1]	___ ROOTWADS [1]	___ AQUATIC MACROPHYTES [1]
___ SHALLOWS (IN SLOW WATER) [1]	1 BOULDERS [1]	___ LOGS OR WOODY DEBRIS [1]
___ ROOTMATS [1]		

AMOUNT

Check ONE (*Or 2 & average*)
- ☐ EXTENSIVE >75% [11]
- ☐ MODERATE 25-75% [7]
- ☑ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

Cover *Maximum 20* 5

Comments

3] CHANNEL MORPHOLOGY

Check ONE in each category (*Or 2 & average*)

SINUOSITY
- ☐ HIGH [4]
- ☐ MODERATE [3]
- ☑ LOW [2]
- ☐ NONE [1]

DEVELOPMENT
- ☐ EXCELLENT [7]
- ☑ GOOD [5]
- ☑ FAIR [3]
- ☐ POOR [1]

CHANNELIZATION
- ☐ NONE [6]
- ☐ RECOVERED [4]
- ☑ RECOVERING [3]
- ☐ RECENT OR NO RECOVERY [1]

STABILITY
- ☐ HIGH [3]
- ☑ MODERATE [2]
- ☐ LOW [1]

Channel *Maximum 20* 10

Comments

4] BANK EROSION AND RIPARIAN ZONE

Check **ONE** in each category for ***EACH BANK*** (*Or 2 per bank & average*)

River right looking downstream

L	R	EROSION
☐	☐	NONE / LITTLE [3]
☑	☑	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

L	R	RIPARIAN WIDTH
☐	☐	WIDE > 50m [4]
☐	☐	MODERATE 10-50m [3]
☐	☐	NARROW 5-10m [2]
☑	☑	VERY NARROW < 5m [1]
☐	☐	NONE [0]

L	R	FLOOD PLAIN QUALITY
☑	☑	FOREST, SWAMP [3]
☐	☐	SHRUB OR OLD FIELD [2]
☐	☐	RESIDENTIAL, PARK, NEW FIELD [1]
☐	☐	FENCED PASTURE [1]
☐	☐	OPEN PASTURE, ROWCROP [0]

L	R	
☐	☐	CONSERVATION TILLAGE [1]
☐	☐	URBAN OR INDUSTRIAL [0]
☐	☐	MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Riparian *Maximum 10* 6

Comments

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH

Check **ONE** (*ONLY!*)
- ☐ > 1m [6]
- ☐ 0.7-<1m [4]
- ☑ 0.4-<0.7m [2]
- ☐ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH

Check ONE (*Or 2 & average*)
- ☑ POOL WIDTH > RIFFLE WIDTH [2]
- ☐ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY

Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☐ FAST [1]
- ☐ MODERATE [1]
- ☑ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Pool / Current *Maximum 12* 5

Comments

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (*Or 2 & average*). ☐ NO RIFFLE [metric=0]

RIFFLE DEPTH
- ☐ BEST AREAS > 10cm [2]
- ☑ BEST AREAS 5-10cm [1]
- ☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
- ☐ MAXIMUM > 50cm [2]
- ☑ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
- ☐ STABLE (e.g., Cobble, Boulder) [2]
- ☑ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
- ☐ NONE [2]
- ☐ LOW [1]
- ☑ MODERATE [0]
- ☐ EXTENSIVE [-1]

Riffle / Run *Maximum 8* 3

Comments

6] GRADIENT

(31.6 ft/mi)

DRAINAGE AREA (8.959 mi²)

- ☐ VERY LOW - LOW [2-4]
- ☐ MODERATE [6-10]
- ☑ HIGH - VERY HIGH [10-6]

%POOL: 20 **%GLIDE:** 0 **%RUN:** 75 **%RIFFLE:** 5

Gradient *Maximum 10* 6

A] SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
- ☑ WADE
- ☐ L. LINE
- ☐ OTHER

STAGE

1st -sample pass-		2nd
☐	HIGH	☐
☐	UP	☐
☑	NORMAL	☑
☐	LOW	☐
☐	DRY	☐

DISTANCE

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

200 ft / meters

CLARITY

1st --sample pass--		2nd
☐	< 20 cm	☐
☐	20-<40 cm	☐
☐	40-70 cm	☐
☐	> 70 cm/ CTB	☐
☐	SECCHI DEPTH	☐

CANOPY

- ☐ > 85%- OPEN
- ☒ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

1st pass _____ cm

2nd _____ cm

Comment RE: Reach consistency/ Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

OHWM Width: 13 feet

OHWM Depth: 0.67 feet

Last Rainfall: 8/31/2020, 0.06 inch

B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

C] RECREATION

AREA DEPTH

POOL: ☐ >100ft² ☐ >3ft

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:

FLOW ↗



OHWM depth: 0.67'
OHWM width: 13'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 59

SITE NAME/LOCATION: UNT to Underwood Run

SITE NUMBER: | RIVER BASIN: Muscatatuck River | DRAINAGE AREA (mi²): 0.18

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.62434 | LONG.: -85.78358 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: M. Del Real | COMMENTS: Intermittent

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	65%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	15%	☑	ARTIFICIAL [3 pts]	20%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check: 100% | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

9

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 16

Pool Depth Max = 30

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☑	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 3.10

Bankfull Width Max=30

25

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☑	☑	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None	☐ 1.0	☐ 2.0	☐ 3.0
☑ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/29/20** Quantity: **0.51**

Photograph Information: **Photo 449-450, 1522-1524**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **70%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.33'
OHWM width: 6'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 72

SITE NAME/LOCATION: Tree Creek
SITE NUMBER: | RIVER BASIN: Muscatatuck River | DRAINAGE AREA (mi²): 0.82
LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.63393 | LONG.: -85.78346 | RIVER CODE: | RIVER MILE:
DATE: 09/01/20 | SCORER: M. Del Real | COMMENTS: Perennial

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	10%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☑	BEDROCK [16 pt]	15%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☑	ARTIFICIAL [3 pts]	75%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 15.00% (A)

Substrate Percentage Check: 100% (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 19 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points
Substrate Max = 40: 22
A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

- ☑ > 30 centimeters [20 pts]
- ☐ > 22.5 - 30 cm [30 pts]
- ☐ > 10 - 22.5 cm [25 pts]
- ☐ > 5 cm - 10 cm [15 pts]
- ☐ < 5 cm [5 pts]
- ☐ NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 45

Pool Depth Max = 30: 20

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

- ☑ > 4.0 meters (> 13') [30 pts]
- ☐ > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]
- ☐ > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]
- ☐ > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
- ☐ ≤ 1.0 m (<=3' 3") [5 pts]

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 4.60

Bankfull Width Max=30: 30

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

- ☐ Stream Flowing
- ☐ Subsurface flow with isolated pools (Interstitial)
- ☑ Moist Channel, isolated pools, no flow (Intermittent)
- ☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

- ☐ None
- ☑ 0.5
- ☐ 1.0
- ☐ 1.5
- ☐ 2.0
- ☐ 2.5
- ☐ 3.0
- ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

Attachment 14-1

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **Photo 1529-1530**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **30%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↖



OHWM depth: 1.2'
OHWM width: 12'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 58

SITE NAME/LOCATION: UNT to Tree Creek

SITE NUMBER: | RIVER BASIN: Muscatatuck River | DRAINAGE AREA (mi²): 0.08

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.63534 | LONG.: -85.78346 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: M. Del Real | COMMENTS: Intermittent

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	30%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	15%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	30%	☐	ARTIFICIAL [3 pts]	25%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check: 100% | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 4

HHEI Metric Points

Substrate Max = 40

13

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 20

Pool Depth Max = 30

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 2.80

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Henryville** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Clark** Township / City: **Henryville**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **Photo 472, Photo 1532-1533**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **30%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↖



OHWM depth: 1.2'
OHWM width: 12'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 38

SITE NAME/LOCATION: Sycamore Run

SITE NUMBER: _____ RIVER BASIN: Muscatatuck DRAINAGE AREA (mi²): 0.21

LENGTH OF STREAM REACH (ft): 150 LAT.: 38.64087 LONG.: -85.78421 RIVER CODE: _____ RIVER MILE: _____

DATE: 09/01/20 SCORER: R. Paul COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]	0%	☐☐	SILT [3 pt]	0%
☐☐	BOULDER (>256 mm) [16 pts]	0%	☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐☐	BEDROCK [16 pt]	0%	☐☑	FINE DETRITUS [3 pts]	5%
☐☐	COBBLE (65-256 mm) [12 pts]	0%	☐☐	CLAY or HARDPAN [0 pt]	0%
☐☐	GRAVEL (2-64 mm) [9 pts]	0%	☐☐	MUCK [0 pts]	0%
☐☐	SAND (<2 mm) [6 pts]	0%	☑☐	ARTIFICIAL [3 pts]	95%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) Substrate Percentage Check (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

8

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: _____ **MAXIMUM POOL DEPTH (centimeters):** 10

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: _____ **AVERAGE BANKFULL WIDTH (meters):** 1.50

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS: _____

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☑ Dry channel, no water (Ephemeral)

COMMENTS: _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None ☐ 1.0 ☐ 2.0 ☐ 3.0
☐ 0.5 ☐ 1.5 ☐ 2.5 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

Attachment 14-1

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 1539-1540

Elevated Turbidity? (Y/N): N Canopy (% open): 30%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.5'
OHWM width: 3.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 9

SITE NAME/LOCATION: UNT 1 to Sycamore Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.64373 | LONG.: -85.78395 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☑ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]	0%	☐☐	SILT [3 pt]	0%
☐☐	BOULDER (>256 mm) [16 pts]	0%	☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐☐	BEDROCK [16 pt]	0%	☐☐	FINE DETRITUS [3 pts]	0%
☐☐	COBBLE (65-256 mm) [12 pts]	0%	☐☑	CLAY or HARDPAN [0 pt]	5%
☐☐	GRAVEL (2-64 mm) [9 pts]	0%	☐☐	MUCK [0 pts]	0%
☐☐	SAND (<2 mm) [6 pts]	0%	☑☐	ARTIFICIAL [3 pts]	95%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 1

HHEI Metric Points

Substrate Max = 40: 4

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☑	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 0

Pool Depth Max = 30: 0

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check *ONLY* one box):

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 0.90

Bankfull Width Max=30: 5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L R		FLOODPLAIN QUALITY (Most Predominant per Bank) L R		L R	
☑	☑ Wide >10m	☐	☐ Mature Forest, Wetland	☐	☐ Conservation Tillage
☐	☐ Moderate 5-10m	☑	☑ Immature Forest, Shrub or Old Field	☐	☐ Urban or Industrial
☐	☐ Narrow <5m	☐	☐ Residential, Park, New Field	☐	☐ Open Pasture, Row Crop
☐	☐ None	☐	☐ Fenced Pasture	☐	☐ Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☑ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None	☐ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 484-485, 1544

Elevated Turbidity? (Y/N): N Canopy (% open): 15%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↙



OHWM depth: 0.2'
OHWM width: 1.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 17

SITE NAME/LOCATION: UNT 2 to Sycamore Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.64555 | LONG.: -85.78402 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☑ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	5%	☐	CLAY or HARDPAN [0 pt]	0%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	55%	☑	ARTIFICIAL [3 pts]	40%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 5.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☑	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 0

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 1.60

HHEI Metric Points

Substrate Max = 40: 12

A + B

Pool Depth Max = 30: 0

Bankfull Width Max=30: 5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH L	R	(Per Bank)	FLOODPLAIN QUALITY L	R	(Most Predominant per Bank)		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland		☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field		☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☑	☑	Residential, Park, New Field		☐	☐	Open Pasture, Row Crop
☑	☑	None	☐	☐	Fenced Pasture		☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐	Stream Flowing	☐	Moist Channel, isolated pools, no flow (Intermittent)
☐	Subsurface flow with isolated pools (Interstitial)	☑	Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑	None	☐	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Scottsburg** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Scott** Township / City: **Scottsburg**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **487-489, 1546-1547**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↑



OHWM depth: 0.8'
OHWM width: 1.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 51

SITE NAME/LOCATION: UNT 1 to Nest Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.65027 | LONG.: -85.78396 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐ ☐	BLDR SLABS [16 pts]	0%	☐ ☐	SILT [3 pt]	0%
☐ ☐	BOULDER (>256 mm) [16 pts]	0%	☐ ☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐ ☐	BEDROCK [16 pt]	0%	☐ ☐	FINE DETRITUS [3 pts]	5%
☐ ☐	COBBLE (65-256 mm) [12 pts]	5%	☑ ☐	CLAY or HARDPAN [0 pt]	75%
☐ ☐	GRAVEL (2-64 mm) [9 pts]	5%	☐ ☐	MUCK [0 pts]	0%
☐ ☑	SAND (<2 mm) [6 pts]	10%	☐ ☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 5.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 **TOTAL NUMBER OF SUBSTRATE TYPES:** 5

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

- ☐ > 30 centimeters [20 pts]
- ☐ > 22.5 - 30 cm [30 pts]
- ☑ > 10 - 22.5 cm [25 pts]
- ☐ > 5 cm - 10 cm [15 pts]
- ☐ < 5 cm [5 pts]
- ☐ NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

- ☐ > 4.0 meters (> 13') [30 pts]
- ☐ > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]
- ☐ > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]
- ☑ > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
- ☐ ≤ 1.0 m (<=3' 3") [5 pts]

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 4.80

HHEI Metric Points

	Max	Points
Substrate	40	11
A + B		
Pool Depth	30	25
Bankfull Width	30	15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L R	FLOODPLAIN QUALITY (Most Predominant per Bank) L R	
☐ ☐ Wide >10m	☐ ☐ Mature Forest, Wetland	☐ ☐ Conservation Tillage
☑ ☑ Moderate 5-10m	☑ ☑ Immature Forest, Shrub or Old Field	☐ ☐ Urban or Industrial
☐ ☐ Narrow <5m	☐ ☐ Residential, Park, New Field	☐ ☐ Open Pasture, Row Crop
☐ ☐ None	☐ ☐ Fenced Pasture	☐ ☐ Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

- ☑ Stream Flowing
- ☐ Subsurface flow with isolated pools (Interstitial)
- ☐ Moist Channel, isolated pools, no flow (Intermittent)
- ☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None	☑ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Scottsburg** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Scott** Township / City: **Scottsburg**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **494-945**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 2'
OHWM width: 7'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 44

SITE NAME/LOCATION: UNT 2 to Nest Run

SITE NUMBER: _____ RIVER BASIN: Muscatatuck DRAINAGE AREA (mi²): 0.16

LENGTH OF STREAM REACH (ft): 150 LAT.: 38.65185 LONG.: -85.78397 RIVER CODE: _____ RIVER MILE: _____

DATE: 09/01/20 SCORER: R. Paul COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☑ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	25%
☐	GRAVEL (2-64 mm) [9 pts]	10%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	60%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) Substrate Percentage Check (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

9

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: _____ **MAXIMUM POOL DEPTH (centimeters):** 9

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: _____ **AVERAGE BANKFULL WIDTH (meters):** 1.80

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS: _____

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS: _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☑	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 496-497, 1576

Elevated Turbidity? (Y/N): N Canopy (% open): 0%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 1.2'
OHWM width: 3'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **15**

SITE NAME/LOCATION: UNT 3 to Nest Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.65210 | LONG.: -85.783255 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☑	LEAF PACK/WOODY DEBRIS [3 pts]	10%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	90%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

5

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☑	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 2

Pool Depth Max = 30

5

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.90

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☑	Wide >10m	☐	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☐	Narrow <5m	☑	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐	Stream Flowing	☐	Moist Channel, isolated pools, no flow (Intermittent)
☐	Subsurface flow with isolated pools (Interstitial)	☑	Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☑	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 1572-1575

Elevated Turbidity? (Y/N): N Canopy (% open): 0%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↑



OHWM depth: 0.2'
OHWM width: 1.2'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 51

SITE NAME/LOCATION: Nest Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.73

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.65540 | LONG.: -85.78390 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	10%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	5%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	40%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☑	SAND (<2 mm) [6 pts]	25%	☐	ARTIFICIAL [3 pts]	20%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 **TOTAL NUMBER OF SUBSTRATE TYPES:** 5

HHEI Metric Points

Substrate Max = 40: 11

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 17

Pool Depth Max = 30: 25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 1.40

Bankfull Width Max=30: 15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Scottsburg** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Scott** Township / City: **Scottsburg**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **502-504, 1583-1585**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **20%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.4'
OHWM width: 2'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 61

SITE NAME/LOCATION: UNT 4 to Nest Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.08

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.65971 | LONG.: -85.78334 | RIVER CODE: | RIVER MILE:

DATE: 09/02/20 | SCORER: R. Paul | COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	10%
☑	COBBLE (65-256 mm) [12 pts]	10%	☑	CLAY or HARDPAN [0 pt]	75%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	5%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 10.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 **TOTAL NUMBER OF SUBSTRATE TYPES:** 4

HHEI Metric Points

Substrate Max = 40: 16

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☑	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 30

Pool Depth Max = 30: 30

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 1.40

Bankfull Width Max=30: 15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☑	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Scottsburh** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Scott** Township / City: **Scottsburg**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **09/01/20** Quantity: **0.04**

Photograph Information: **517, 1598-1599**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **0%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.5'
OHWM width: 2.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 25

SITE NAME/LOCATION: Elm Branch

SITE NUMBER: _____ RIVER BASIN: Muscatatuck DRAINAGE AREA (mi²): 0.03

LENGTH OF STREAM REACH (ft): 150 LAT.: 38.66447 LONG.: -85.78265 RIVER CODE: _____ RIVER MILE: _____

DATE: 09/01/20 SCORER: R. Paul COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]	0%	☐☐	SILT [3 pt]	0%
☐☐	BOULDER (>256 mm) [16 pts]	0%	☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐☐	BEDROCK [16 pt]	0%	☐☑	FINE DETRITUS [3 pts]	15%
☐☐	COBBLE (65-256 mm) [12 pts]	0%	☑☐	CLAY or HARDPAN [0 pt]	85%
☐☐	GRAVEL (2-64 mm) [9 pts]	0%	☐☐	MUCK [0 pts]	0%
☐☐	SAND (<2 mm) [6 pts]	0%	☐☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) Substrate Percentage Check (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

5

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: _____ **MAXIMUM POOL DEPTH (centimeters):** 8

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: _____ **AVERAGE BANKFULL WIDTH (meters):** 0.80

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☑	☑	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☑	☑	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS: _____

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS: _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None ☐ 0.5 ☐ 1.0 ☐ 1.5 ☐ 2.0 ☐ 2.5 ☐ 3.0 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

Attachment 14-1

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 531-532, 1619-1620

Elevated Turbidity? (Y/N): N Canopy (% open): 0%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.5'
OHWM width: 1'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **21**

SITE NAME/LOCATION: UNT to Elm Branch

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.66740 | LONG.: -85.78290 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	90%
☑	GRAVEL (2-64 mm) [9 pts]	10%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

11

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☑	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 5

Pool Depth Max = 30

5

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.70

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH L	RIPARIAN WIDTH R	(Per Bank)	FLOODPLAIN QUALITY L	FLOODPLAIN QUALITY R	(Most Predominant per Bank)	L	R	
☐	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☑	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☑	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None ☑ 1.0 ☐ 2.0 ☐ 3.0
☐ 0.5 ☐ 1.5 ☐ 2.5 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: **Scottsburg** NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: **Scott** Township / City: **Scottsburg**

MISCELLANEOUS

Base Flow Conditions? (Y/N): **Y** Date of last precipitation: **08/31/20** Quantity: **0.06**

Photograph Information: **545-547, 1638-1639**

Elevated Turbidity? (Y/N): **N** Canopy (% open): **60%**

Were samples collected for water chemistry? (Y/N): **N** (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) **Y** If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): **N** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) **N** Voucher? (Y/N) **N** Salamanders Observed? (Y/N) **N** Voucher? (Y/N) **N**

Frogs or Tadpoles Observed? (Y/N) **N** Voucher? (Y/N) **N** Aquatic Macroinvertebrates Observed? (Y/N) **N** Voucher? (Y/N) **N**

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ➔



OHWM depth: 0.4'
OHWM width: 1.2'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 32

SITE NAME/LOCATION: UNT 1 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.67717 | LONG.: -85.78698 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	5%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	70%
☑	GRAVEL (2-64 mm) [9 pts]	25%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

12

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 9

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.80

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☑	☑	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☐	1.0	☐	2.0	☐	3.0
☑	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 571-572

Elevated Turbidity? (Y/N): N Canopy (% open): 60%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↖



OHWM Depth: 0.6'
OHWM Width: 1.8'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 58

SITE NAME/LOCATION: UNT 2 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.05

LENGTH OF STREAM REACH (ft): 40 | LAT.: 38.68189 | LONG.: -85.78813 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Intermittent Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	5%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	2%	☑	CLAY or HARDPAN [0 pt]	88%
☑	GRAVEL (2-64 mm) [9 pts]	5%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 2.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 4

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 16

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☑	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 2.50

HHEI Metric Points

Substrate Max = 40: 13

A + B

Pool Depth Max = 30: 25

Bankfull Width Max=30: 20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☑	☑	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☑	☑	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None	☐ 1.0	☐ 2.0	☐ 3.0
☑ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 589-591

Elevated Turbidity? (Y/N): N Canopy (% open): 10%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW



OHWM depth: 2.7'
OHWM width: 7.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **10**

SITE NAME/LOCATION: UNT 3 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 120 | LAT.: 38.68491 | LONG.: -85.79019 | RIVER CODE: | RIVER MILE:

DATE: 09/01/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☑	LEAF PACK/WOODY DEBRIS [3 pts]	5%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	95%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

5

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☑	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 0

Pool Depth Max = 30

0

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 0.90

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☑ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None	☐ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☑ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/31/20 Quantity: 0.06

Photograph Information: 640-641

Elevated Turbidity? (Y/N): N Canopy (% open): 20%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↑



OHWM depth: 0.5'
OHWM width: 2'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 45

SITE NAME/LOCATION: UNT 4 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.07

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.68717 | LONG.: -85.78931 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☑	FINE DETRITUS [3 pts]	10%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	90%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40: 5

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☑	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 18

Pool Depth Max = 30: 25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 1.20

Bankfull Width Max=30: 15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☑	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/29/20 Quantity: 0.51

Photograph Information: 681-683

Elevated Turbidity? (Y/N): N Canopy (% open): 0%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW



OHWM depth: 0.4'
OHWM width: 3'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 51

SITE NAME/LOCATION: UNT 5 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.07

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.69058 | LONG.: -85.78881 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☑	SILT [3 pt]	25%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	10%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	65%
☐	GRAVEL (2-64 mm) [9 pts]	0%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

6

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☑	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 24

Pool Depth Max = 30

30

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 1.20

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☑	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐	None	☑	1.0	☐	2.0	☐	3.0
☐	0.5	☐	1.5	☐	2.5	☐	>3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/29/20 Quantity: 0.51

Photograph Information: 710-711

Elevated Turbidity? (Y/N): N Canopy (% open): 50%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↑



OHWM depth: 0.6'
OHWM width: 3'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 25

SITE NAME/LOCATION: UNT 6 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.05

LENGTH OF STREAM REACH (ft): 200 | LAT.: 38.69430 | LONG.: -85.78858 | RIVER CODE: | RIVER MILE:

DATE: 09/03/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☑ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]	0%	☐☐	SILT [3 pt]	0%
☐☐	BOULDER (>256 mm) [16 pts]	0%	☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐☐	BEDROCK [16 pt]	0%	☐☑	FINE DETRITUS [3 pts]	5%
☐☐	COBBLE (65-256 mm) [12 pts]	0%	☑☐	CLAY or HARDPAN [0 pt]	95%
☐☐	GRAVEL (2-64 mm) [9 pts]	0%	☐☐	MUCK [0 pts]	0%
☐☐	SAND (<2 mm) [6 pts]	0%	☐☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

5

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: After signficant rain **MAXIMUM POOL DEPTH (centimeters):** 10

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 0.90

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L R		FLOODPLAIN QUALITY (Most Predominant per Bank) L R		L R	
☑☑	Wide >10m	☐☐	Mature Forest, Wetland	☐☐	Conservation Tillage
☐☐	Moderate 5-10m	☑☑	Immature Forest, Shrub or Old Field	☐☐	Urban or Industrial
☐☐	Narrow <5m	☐☐	Residential, Park, New Field	☐☐	Open Pasture, Row Crop
☐☐	None	☐☐	Fenced Pasture	☐☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None ☑ 1.0 ☐ 2.0 ☐ 3.0
☐ 0.5 ☐ 1.5 ☐ 2.5 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 09/02/20 Quantity: 0.55

Photograph Information: 1764-1765

Elevated Turbidity? (Y/N): N Canopy (% open): 0%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↑



OHWM depth: 0.4'
OHWM width: 1.5'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 42

SITE NAME/LOCATION: UNT 7 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.69556 | LONG.: -85.78945 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☐	FINE DETRITUS [3 pts]	0%
☐	COBBLE (65-256 mm) [12 pts]	10%	☑	CLAY or HARDPAN [0 pt]	75%
☑	GRAVEL (2-64 mm) [9 pts]	15%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 10.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

12

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: | **MAXIMUM POOL DEPTH (centimeters):** 8

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: | **AVERAGE BANKFULL WIDTH (meters):** 1.10

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None	☐ 1.0	☐ 2.0	☐ 3.0
☑ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/29/20 Quantity: 0.51

Photograph Information: 746-747, 1775

Elevated Turbidity? (Y/N): N Canopy (% open): 10%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↑



OHWM depth: 0.4'
OHWM width: 3'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 35

SITE NAME/LOCATION: UNT 8 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.01

LENGTH OF STREAM REACH (ft): 100 | LAT.: 38.69755 | LONG.: -85.79003 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☑ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]	0%	☐☐	SILT [3 pt]	0%
☐☐	BOULDER (>256 mm) [16 pts]	0%	☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐☐	BEDROCK [16 pt]	0%	☐☑	FINE DETRITUS [3 pts]	20%
☐☐	COBBLE (65-256 mm) [12 pts]	0%	☑☐	CLAY or HARDPAN [0 pt]	80%
☐☐	GRAVEL (2-64 mm) [9 pts]	0%	☐☐	MUCK [0 pts]	0%
☐☐	SAND (<2 mm) [6 pts]	0%	☐☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% (A) | Substrate Percentage Check | (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 2

HHEI Metric Points

Substrate Max = 40

5

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☑	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 10

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☑	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 1.20

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L R		FLOODPLAIN QUALITY (Most Predominant per Bank) L R		L R	
☑☑	Wide >10m	☐☐	Mature Forest, Wetland	☐☐	Conservation Tillage
☐☐	Moderate 5-10m	☑☑	Immature Forest, Shrub or Old Field	☐☐	Urban or Industrial
☐☐	Narrow <5m	☐☐	Residential, Park, New Field	☐☐	Open Pasture, Row Crop
☐☐	None	☐☐	Fenced Pasture	☐☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☑ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☐ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None ☑ 1.0 ☐ 2.0 ☐ 3.0
☐ 0.5 ☐ 1.5 ☐ 2.5 ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☑ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/29/20 Quantity: 0.51

Photograph Information: 771-772

Elevated Turbidity? (Y/N): N Canopy (% open): 10%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

FLOW ↗



OHWM depth: 0.8'
OHWM width: 3'

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : **11**

SITE NAME/LOCATION: UNT 9 to Honey Run

SITE NUMBER: | RIVER BASIN: Muscatatuck | DRAINAGE AREA (mi²): 0.04

LENGTH OF STREAM REACH (ft): 150 | LAT.: 38.70491 | LONG.: -85.79340 | RIVER CODE: | RIVER MILE:

DATE: 08/31/20 | SCORER: R. Paul | COMMENTS: Ephemeral Stream

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☑ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐	BLDR SLABS [16 pts]	0%	☐	SILT [3 pt]	0%
☐	BOULDER (>256 mm) [16 pts]	0%	☐	LEAF PACK/WOODY DEBRIS [3 pts]	0%
☐	BEDROCK [16 pt]	0%	☑	FINE DETRITUS [3 pts]	10%
☐	COBBLE (65-256 mm) [12 pts]	0%	☑	CLAY or HARDPAN [0 pt]	85%
☐	GRAVEL (2-64 mm) [9 pts]	5%	☐	MUCK [0 pts]	0%
☐	SAND (<2 mm) [6 pts]	0%	☐	ARTIFICIAL [3 pts]	0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock: 0.00% **(A)** | Substrate Percentage Check | **(B)**

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 **TOTAL NUMBER OF SUBSTRATE TYPES:** 3

HHEI Metric Points

Substrate Max = 40

6

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	> 5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5 pts]
☐	> 10 - 22.5 cm [25 pts]	☑	NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS: **MAXIMUM POOL DEPTH (centimeters):** 0

Pool Depth Max = 30

0

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) **(Check *ONLY* one box):**

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☑	≤ 1.0 m (<=3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		

COMMENTS: **AVERAGE BANKFULL WIDTH (meters):** 0.70

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH (Per Bank) L	R	FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☑	☑	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☑	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS:

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

☐ Stream Flowing
☐ Subsurface flow with isolated pools (Interstitial)
☐ Moist Channel, isolated pools, no flow (Intermittent)
☑ Dry channel, no water (Ephemeral)

COMMENTS:

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☑ None	☐ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☑ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: Scottsburg NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: Scott Township / City: Scottsburg

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 08/29/20 Quantity: 0.51

Photograph Information: 810-812

Elevated Turbidity? (Y/N): N Canopy (% open): 60%

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: _____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

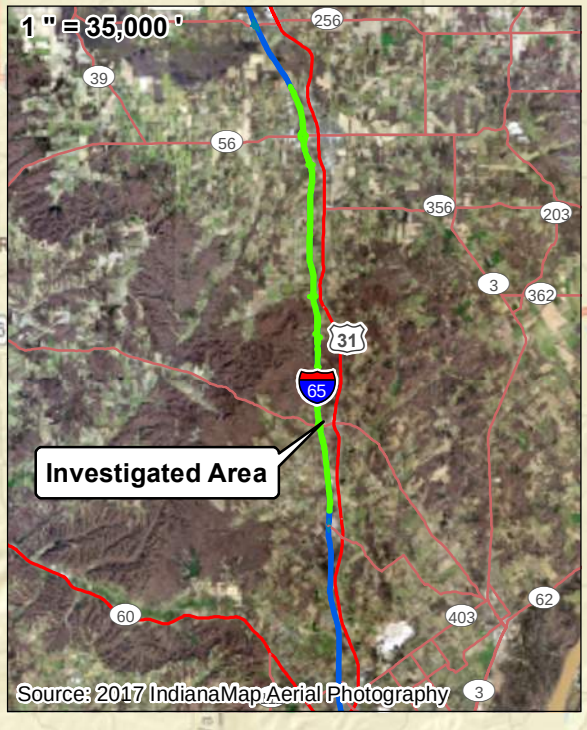
FLOW ↗

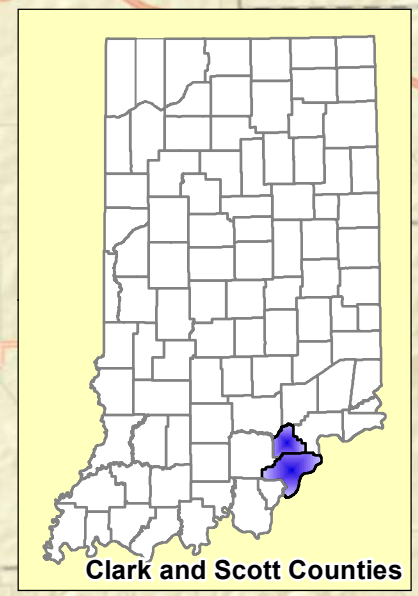


OHWM depth: 0.6'
OHWM width: 1.8'

Appendix D - Mapping

Figure 1: State Location Map
Figure 2: USGS Topographic Mapping
Figure 3: Clark and Scott County Mapped Soils - SSURGO
Figure 4: NWI and FEMA 100-Year Floodplain Mapping
Figure 5: 2017 Aerial Photography
Figure 6: 12-Digit HUC Map
Figure 7: Field Investigation and Photo Location Map





Investigated Area

Source: ESRI World Street Map

Not to Scale

Figure 1: State Location Map

AMERICAN STRUCTUREPOINT INC.

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg & Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/11/2020 State: Indiana

Appendix D

Attachment 14-1

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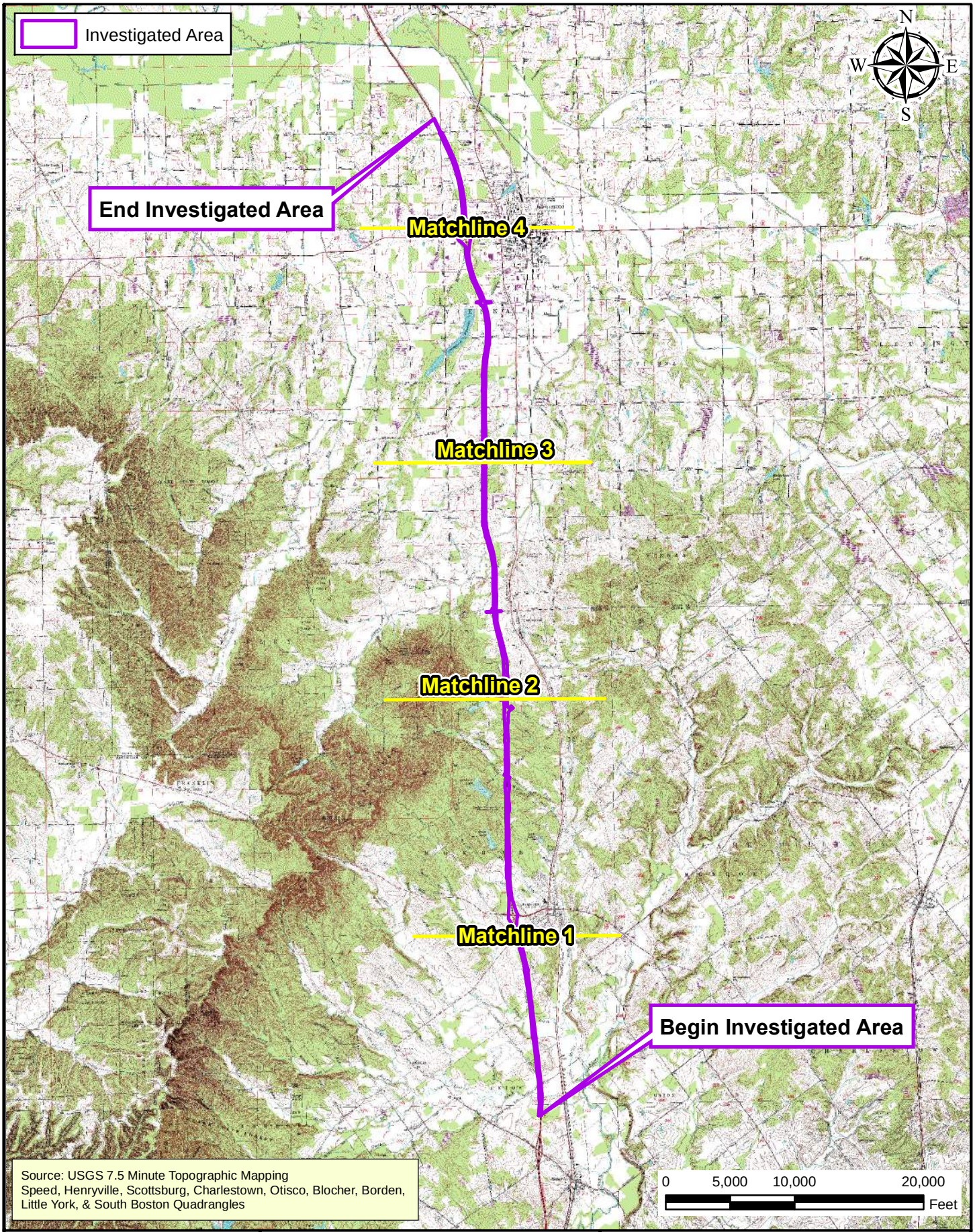

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AMERICAN STRUCTUREPOINT INC.

Figure 2: USGS Topographic Mapping - Matchline Key

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/11/2020 State: Indiana

Attachment 14-1 Appendix D

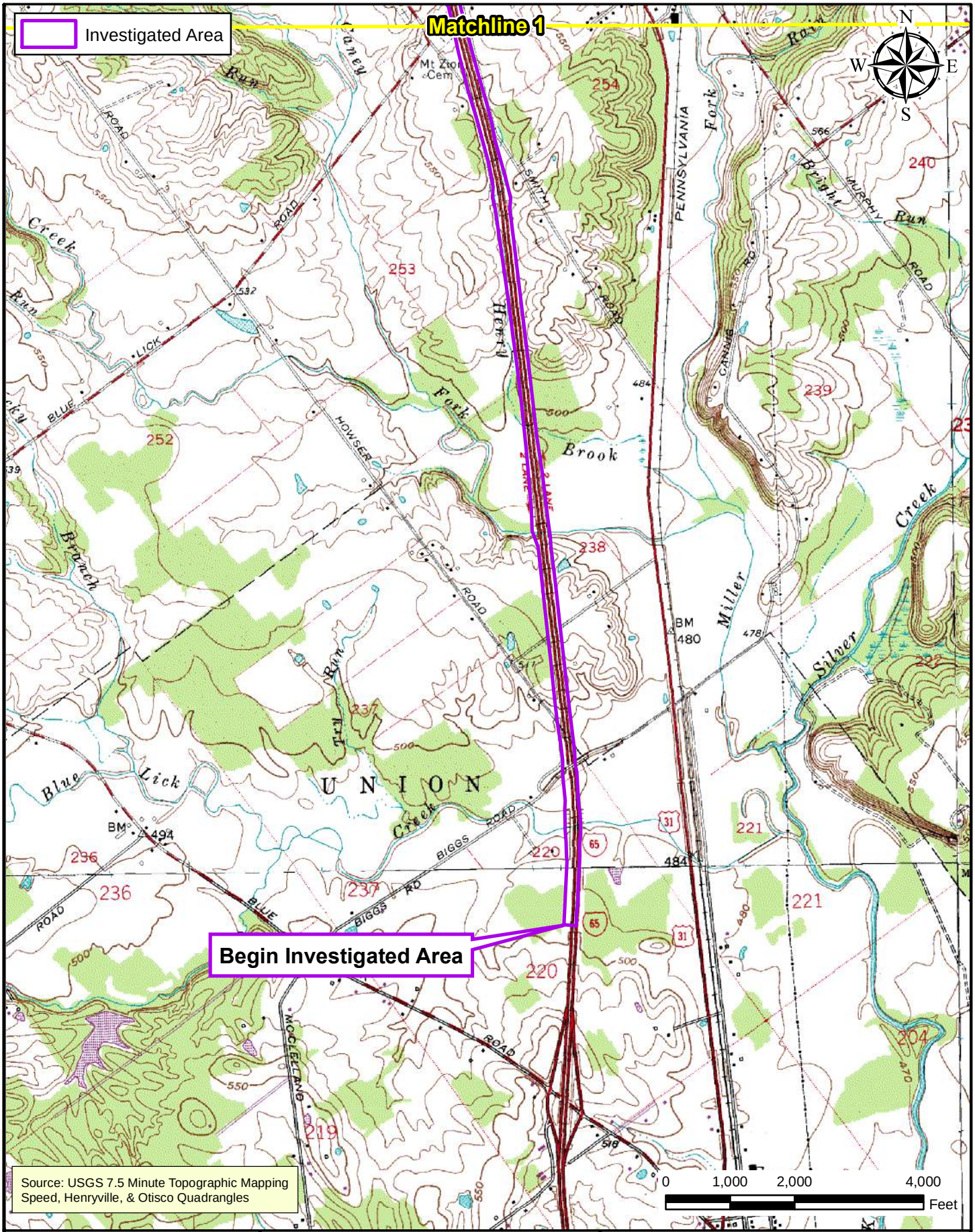

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Figure 2: USGS Topographic Mapping - Map 1 of 5

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/11/2020 State: Indiana

Appendix D

Attachment 14-1

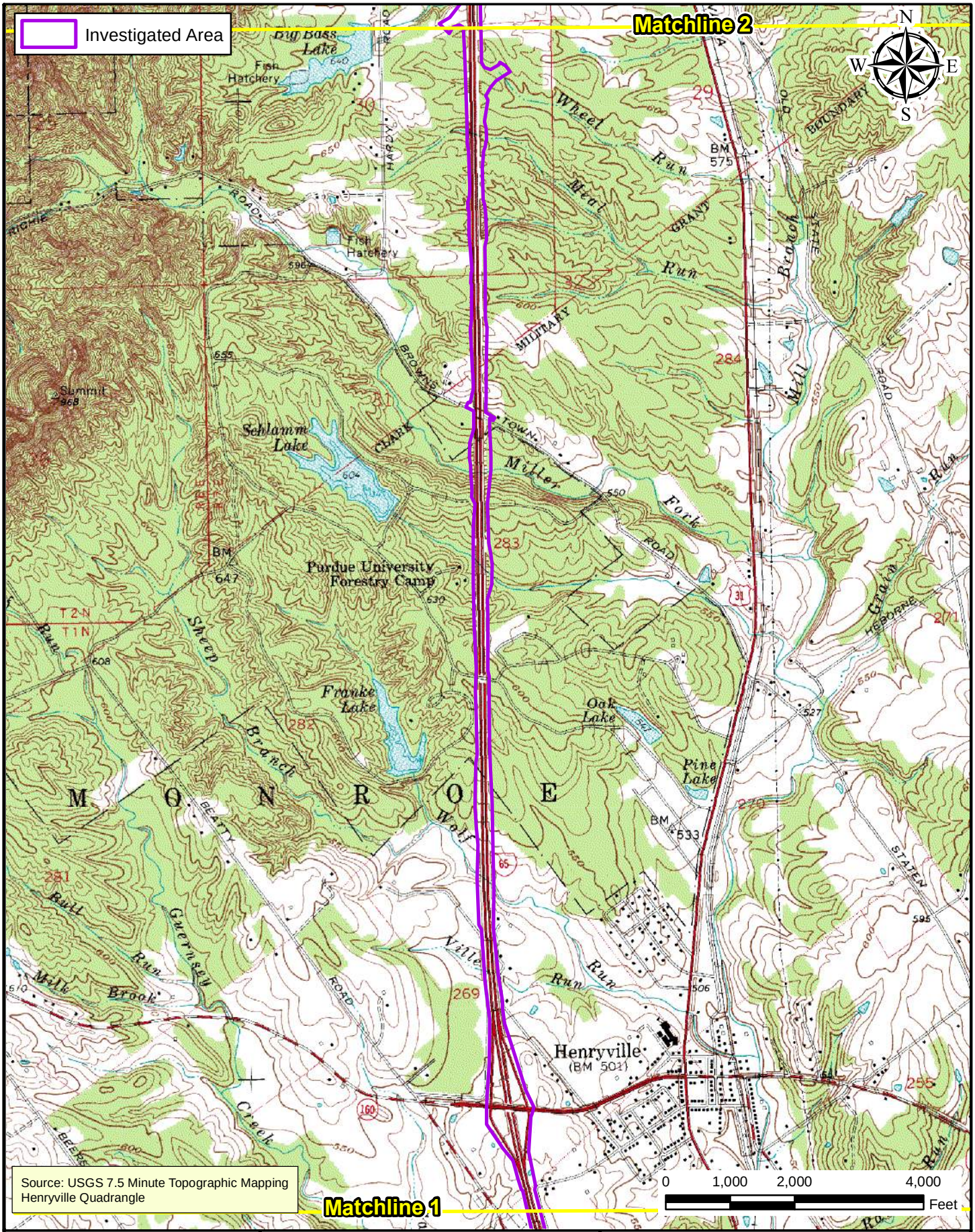

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Figure 2: USGS Topographic Mapping - Map 2 of 5

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/11/2020 State: Indiana

Appendix D

Attachment 14-1

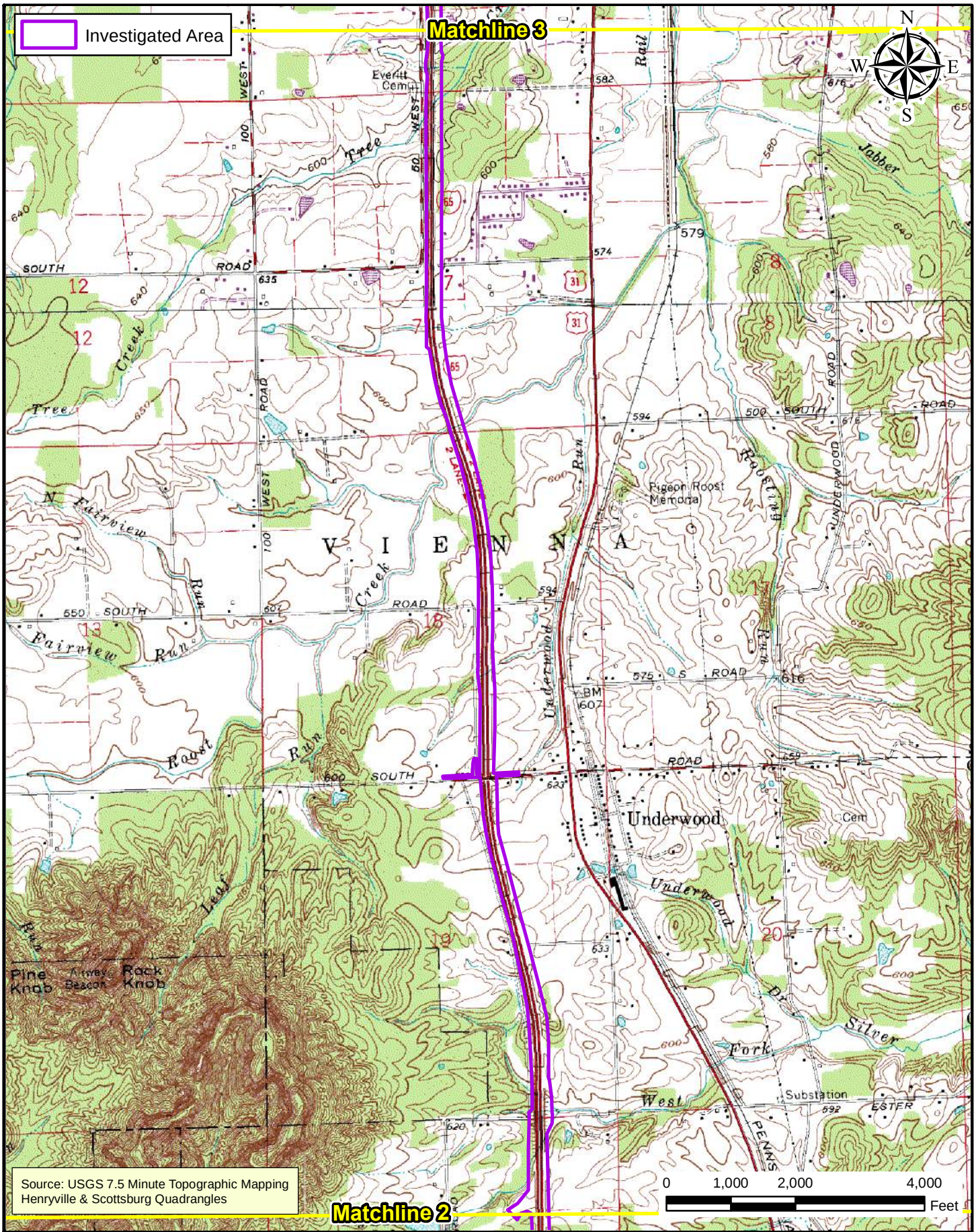

Figure 2: USGS Topographic Mapping - Map 3 of 5

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/11/2020 State: Indiana

AMERICAN STRUCTUREPOINT INC.

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

Appendix D

Attachment 14-1

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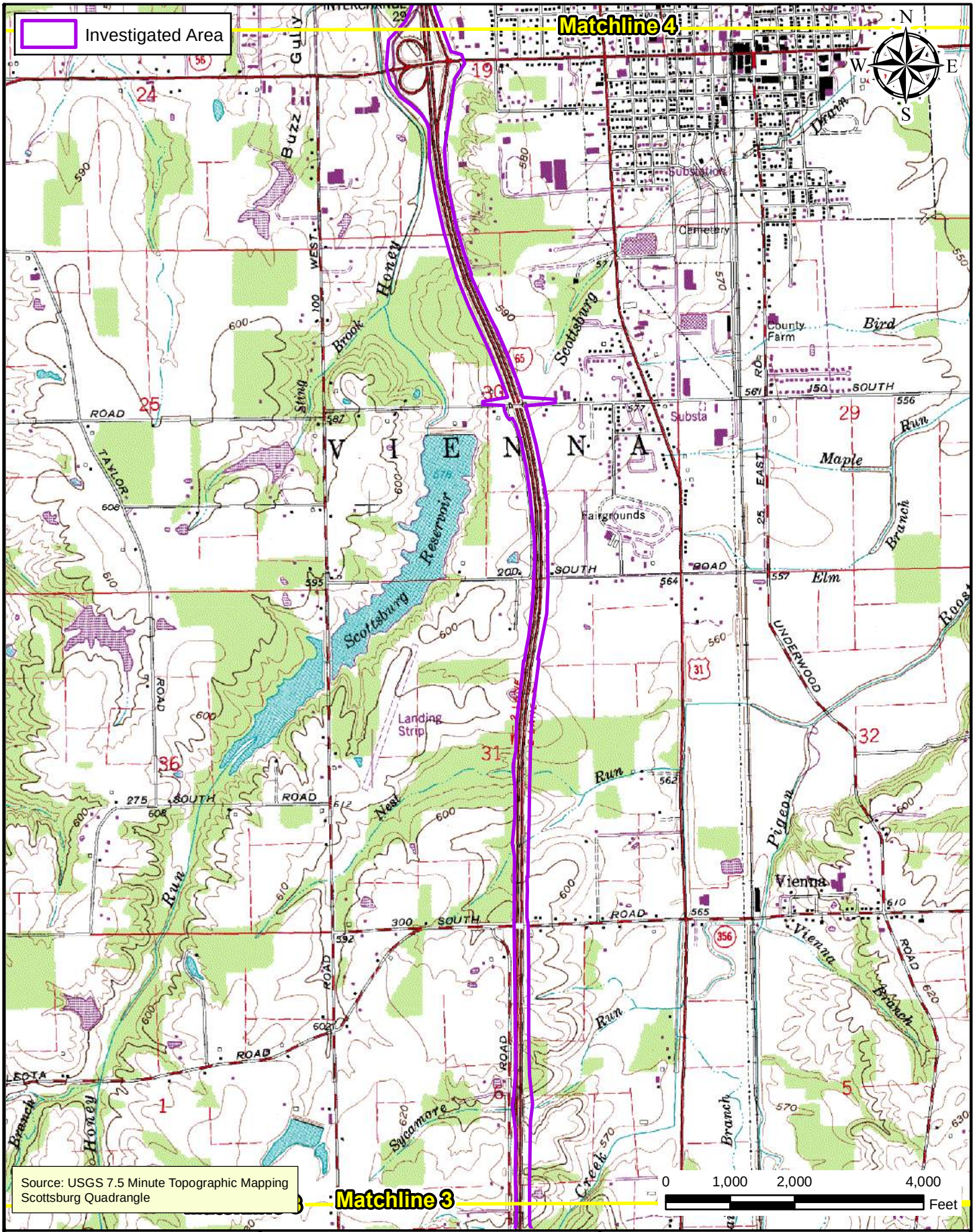

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Figure 2: USGS Topographic Mapping - Map 4 of 5

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/11/2020 State: Indiana

Attachment 14-1

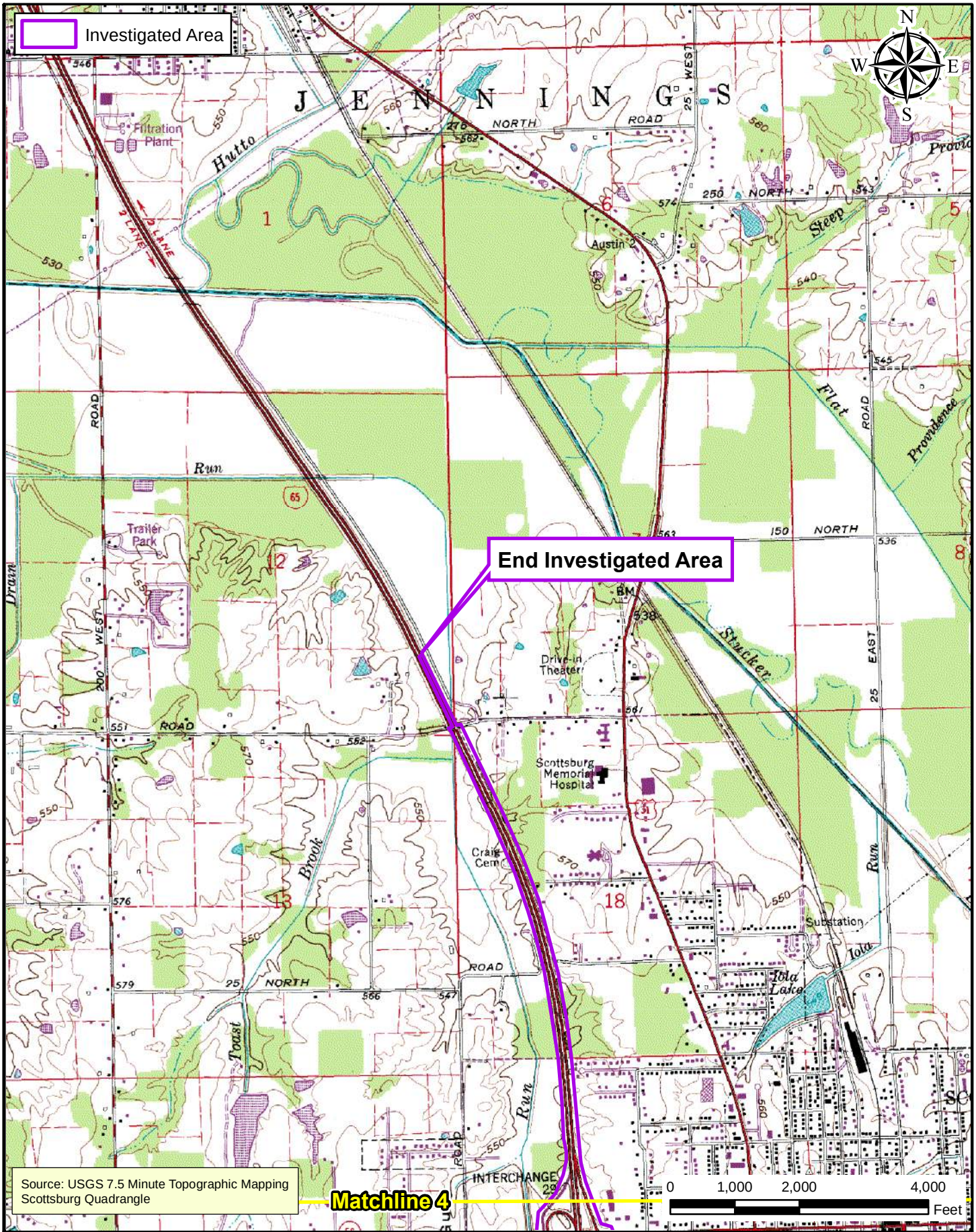

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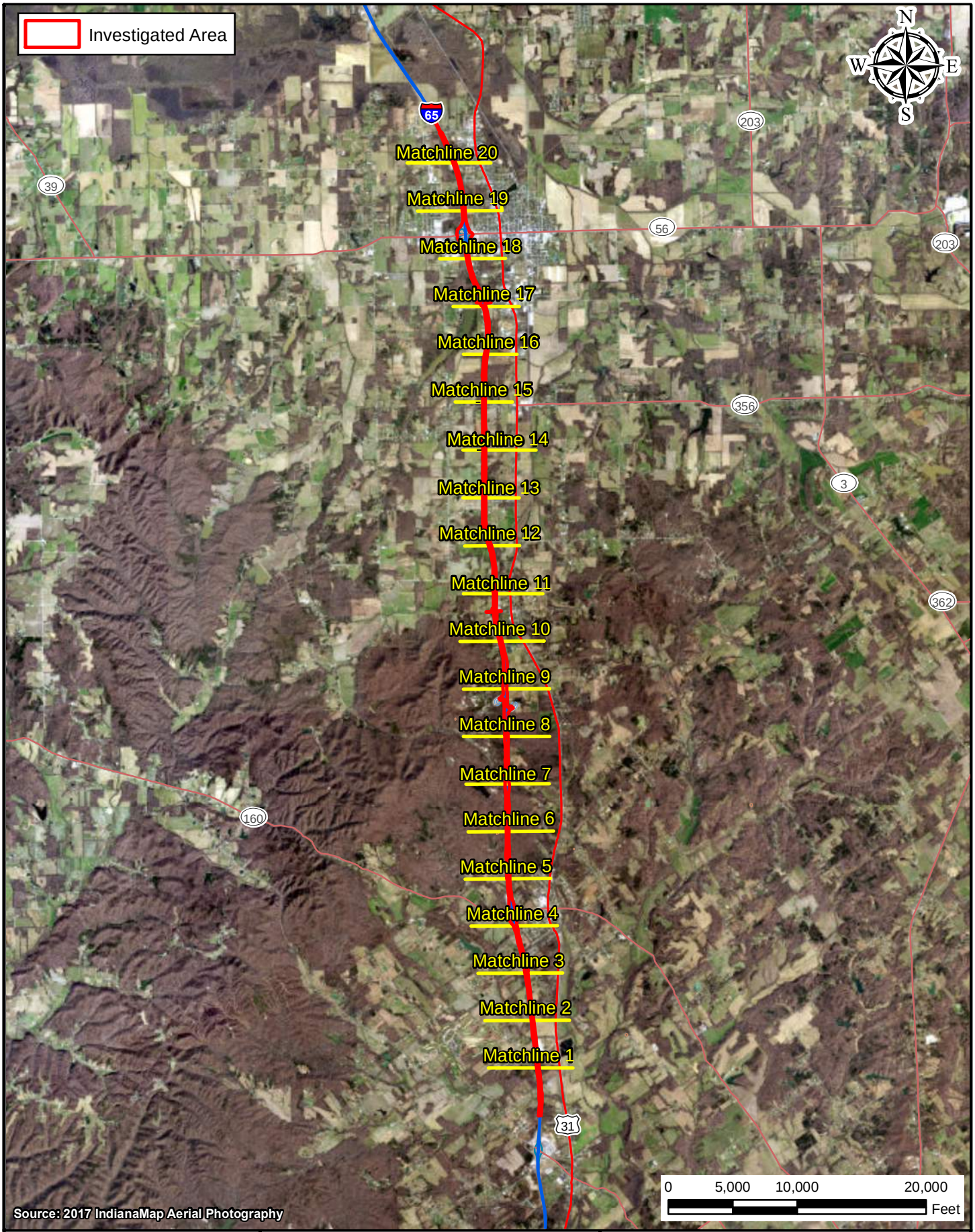
Figure 2: USGS Topographic Mapping - Map 5 of 5

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/11/2020 State: Indiana

Attachment 14-1 Appendix D



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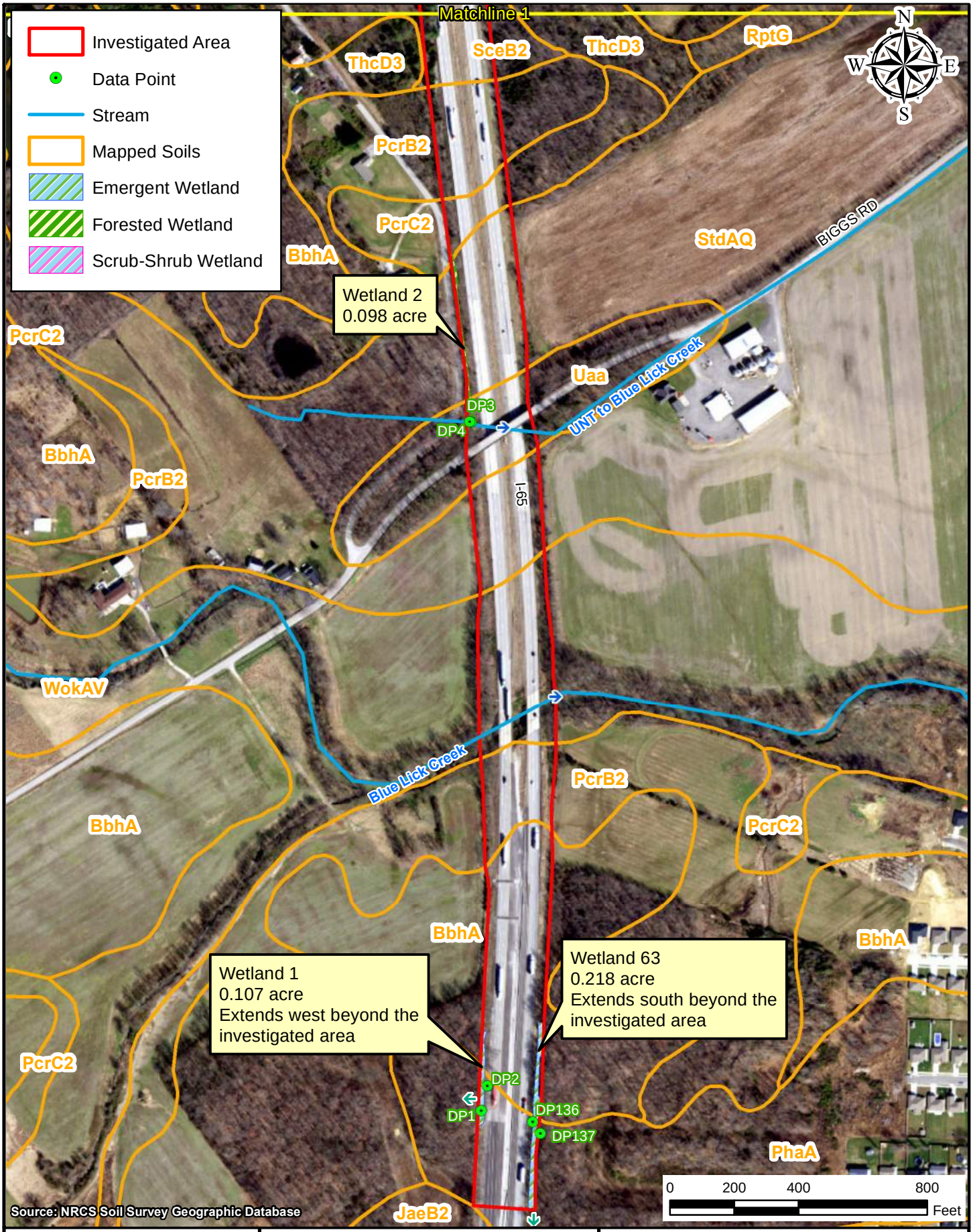
Matchline Key for Figures 3, 4, & 5

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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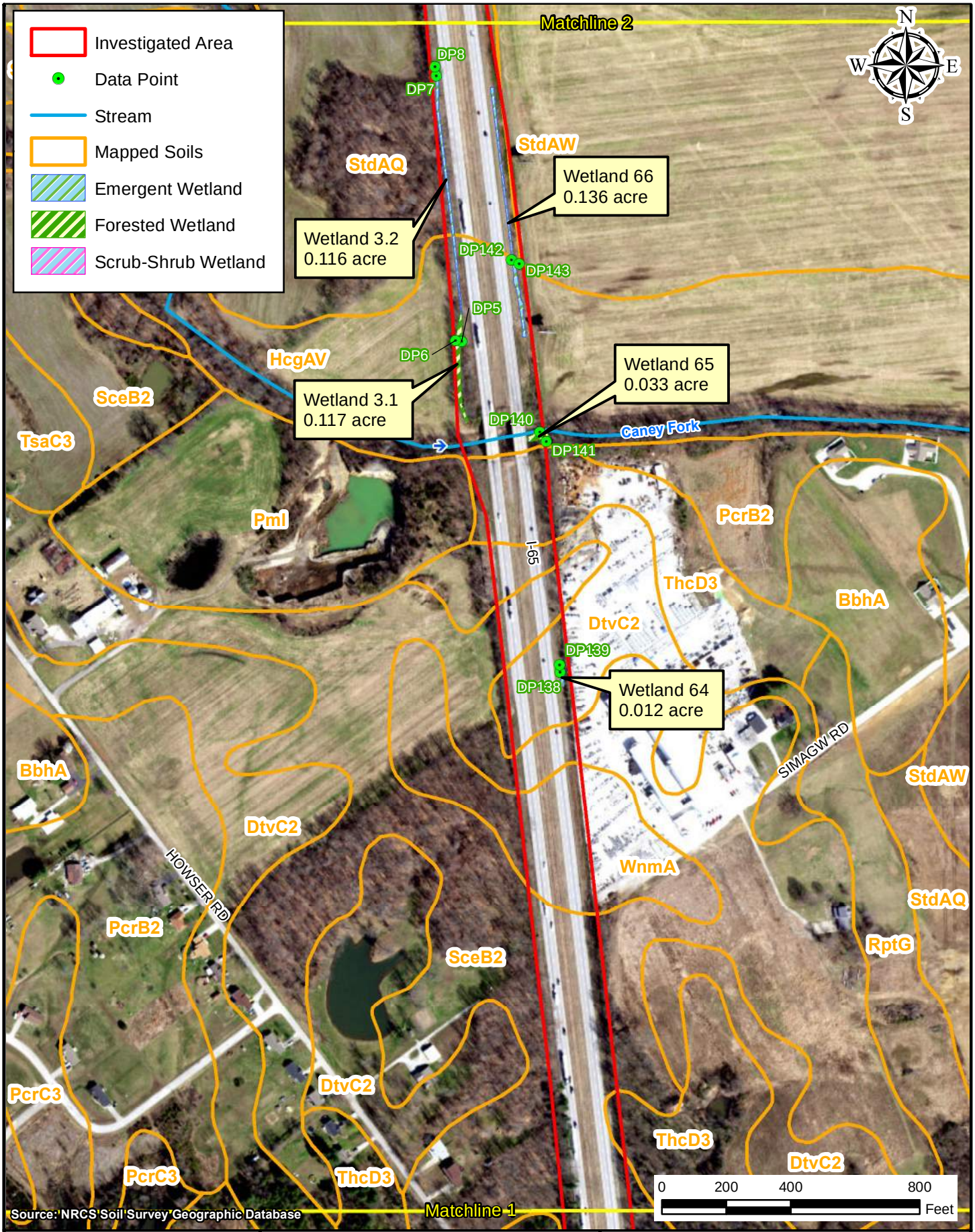
AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 1 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1 Appendix D



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 2 of 21

INDOT Seymour District
185 Agrico Lane
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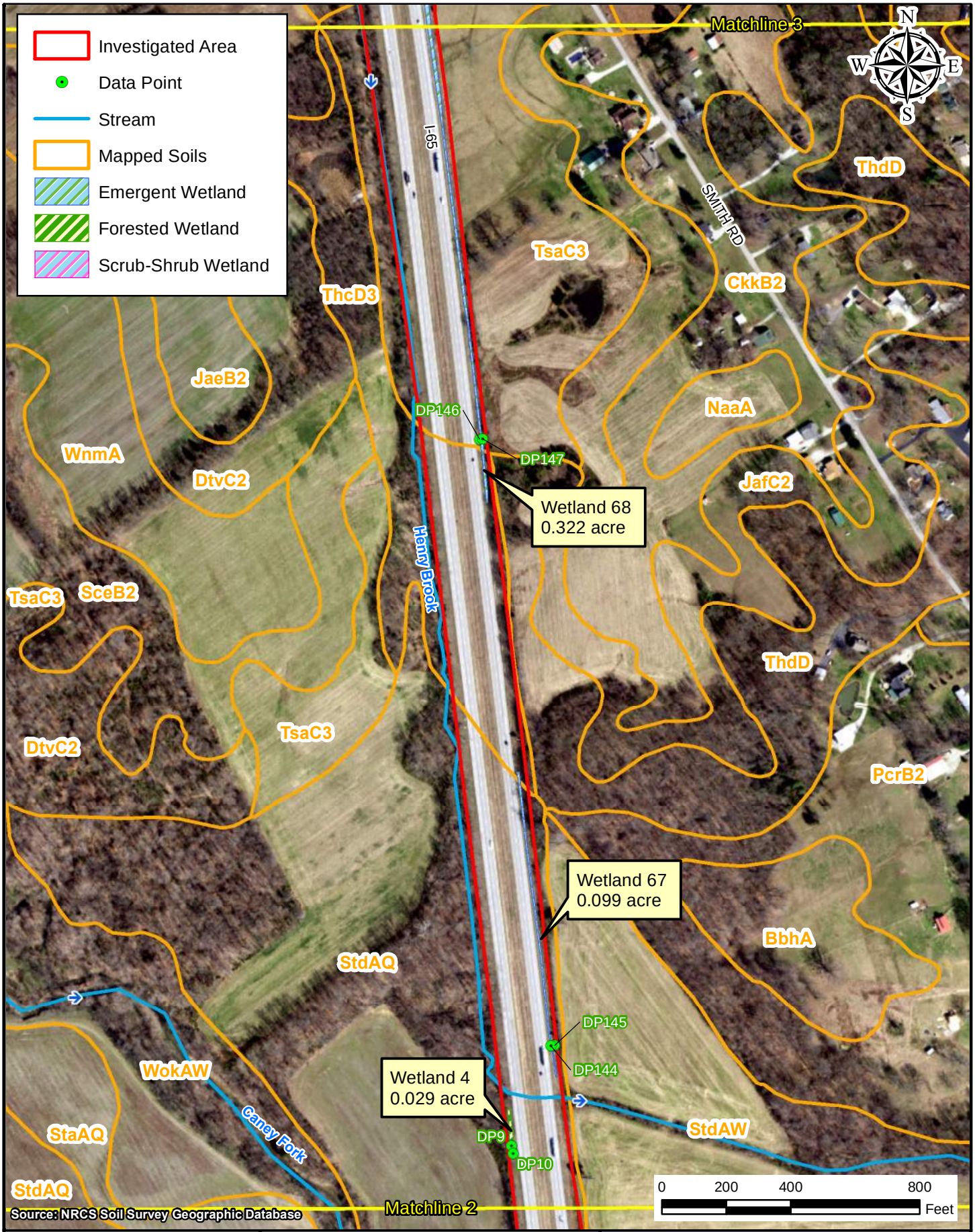
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

Appendix D



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 3 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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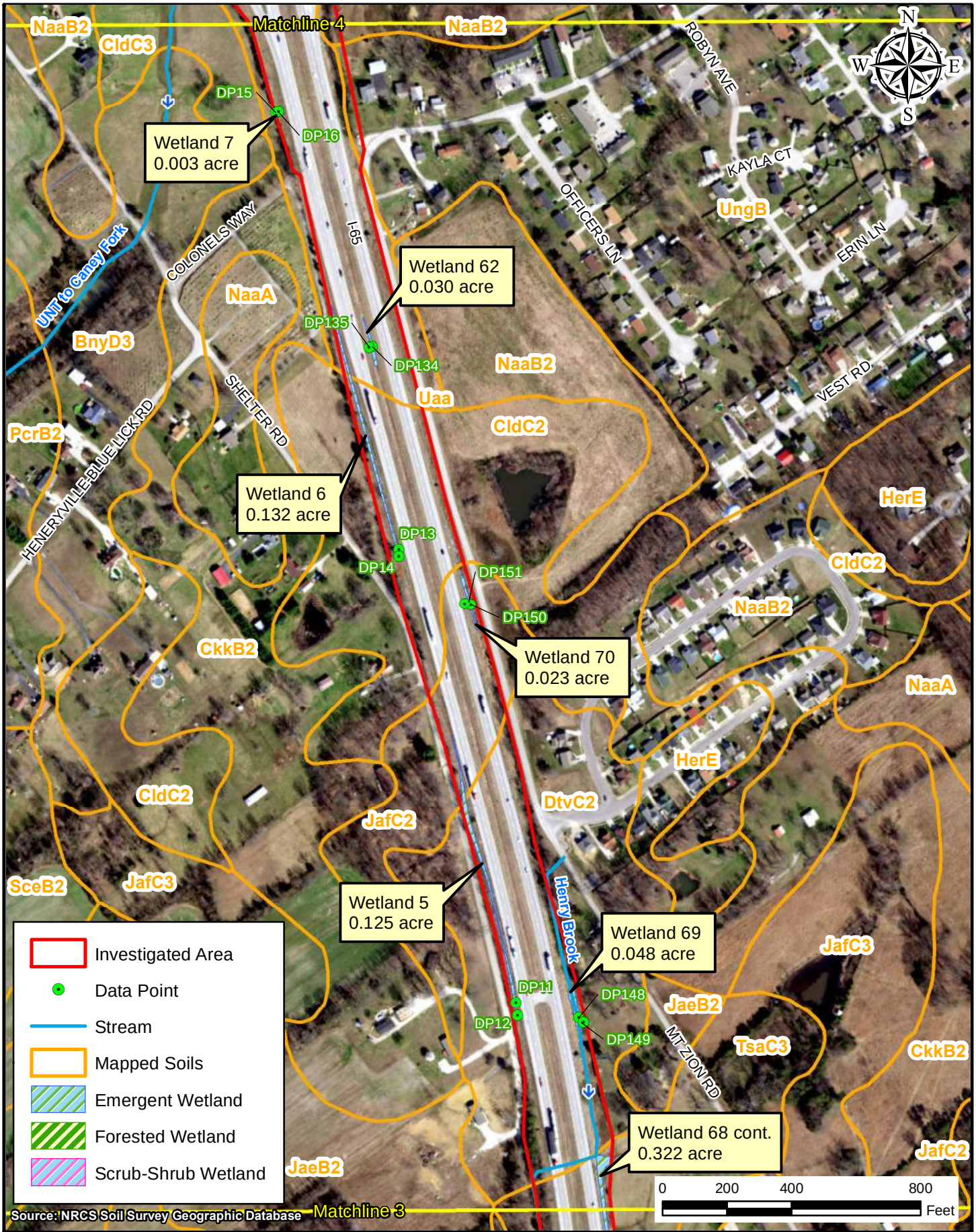
Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

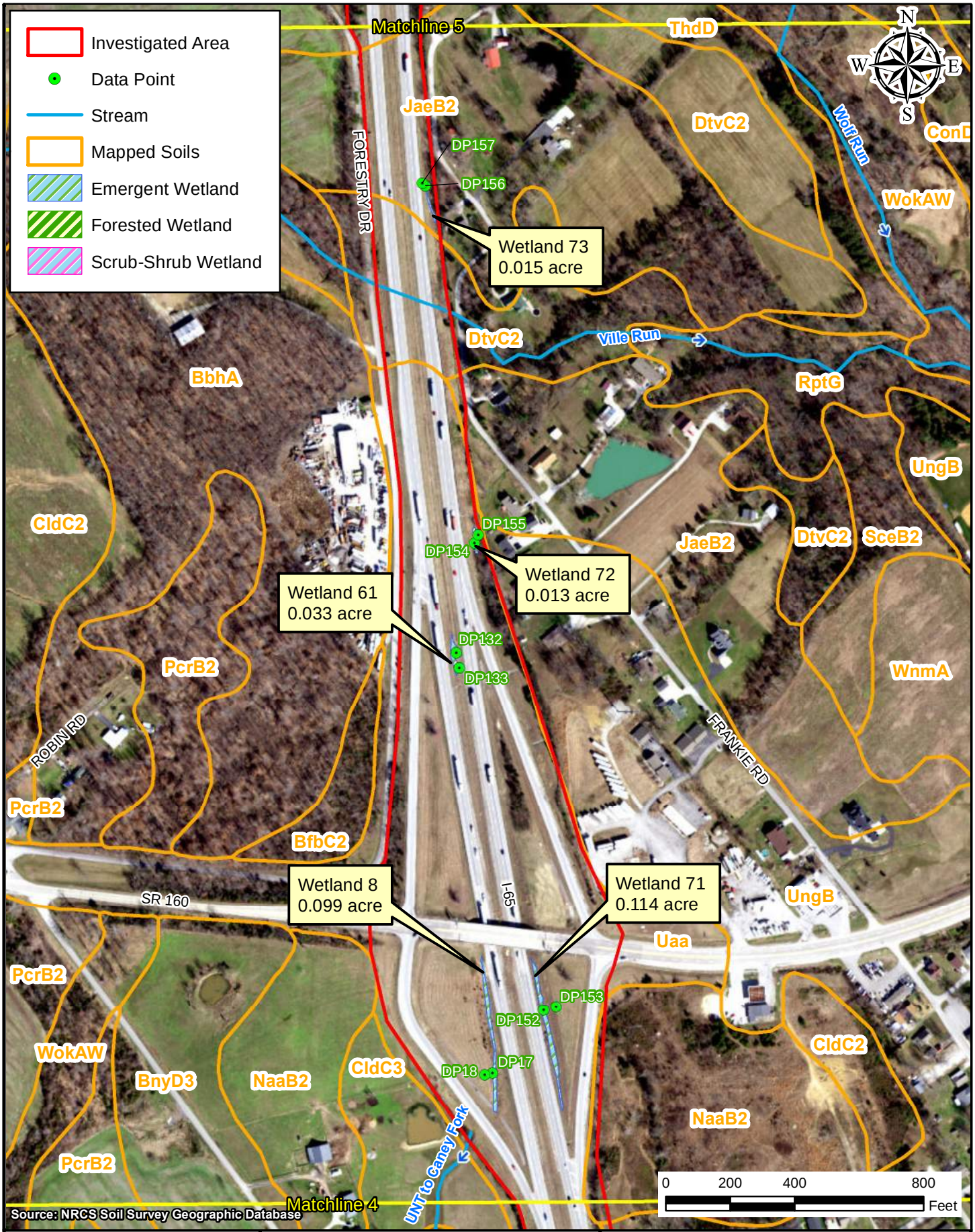
Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 4 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 5 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
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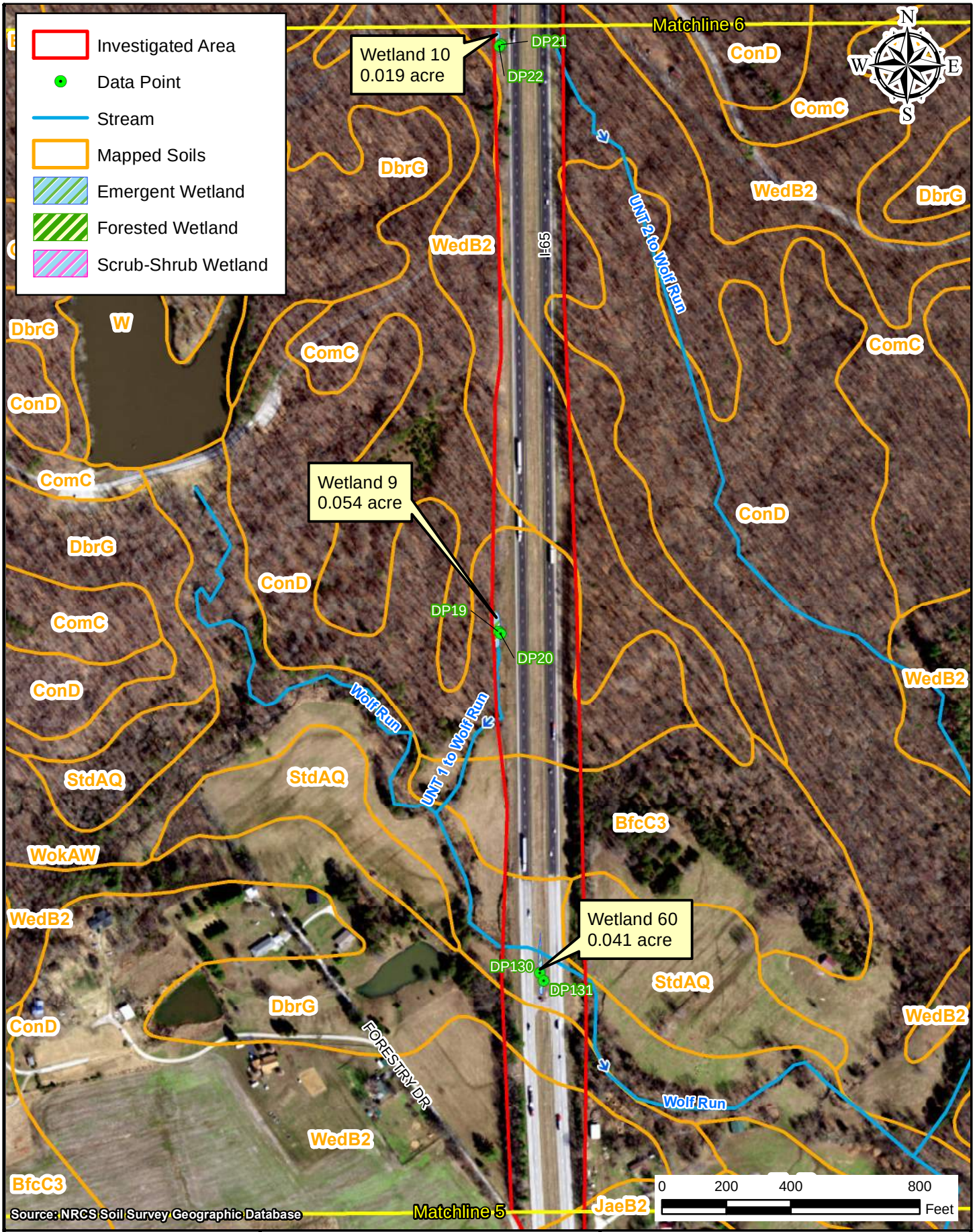
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 6 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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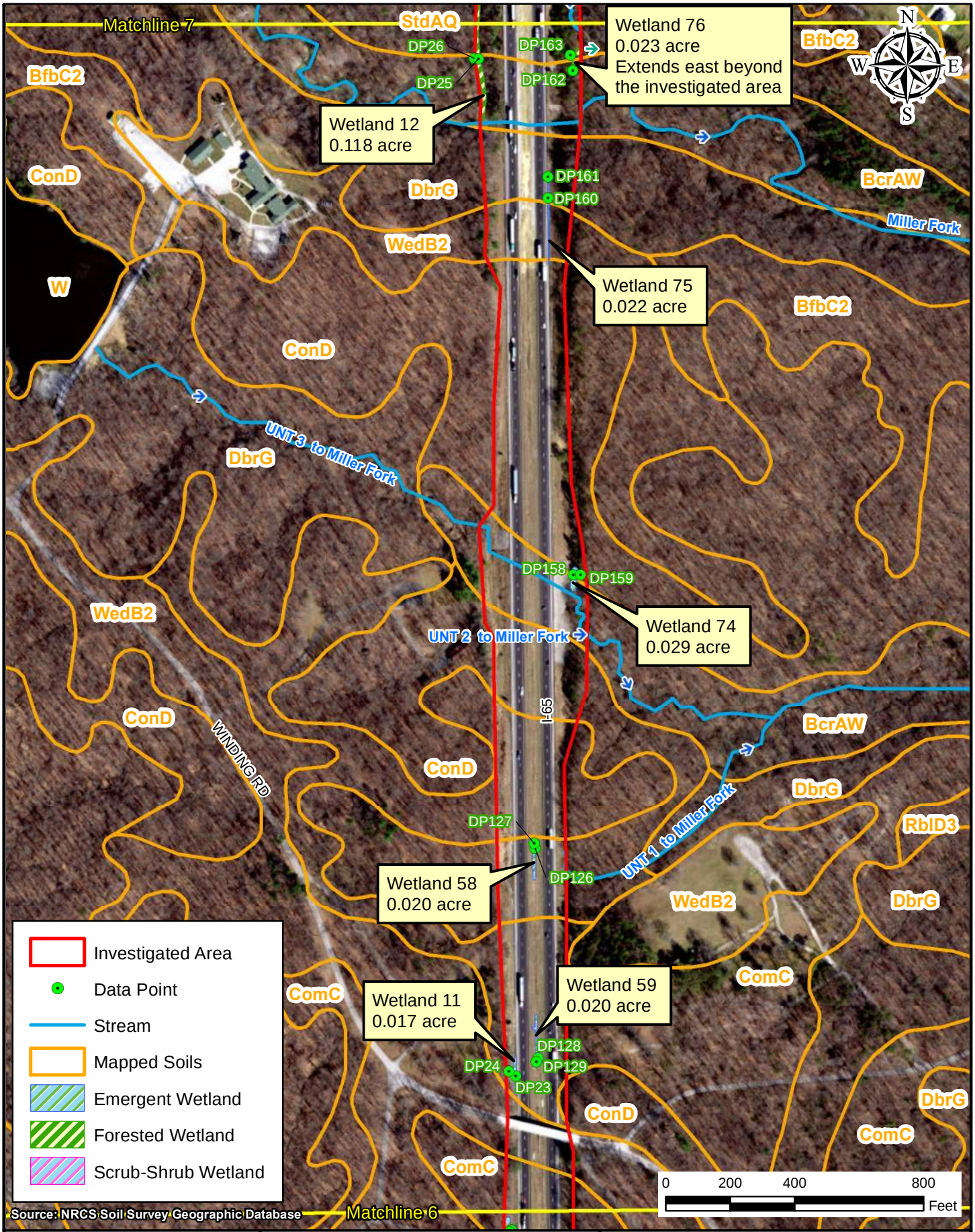
Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 7 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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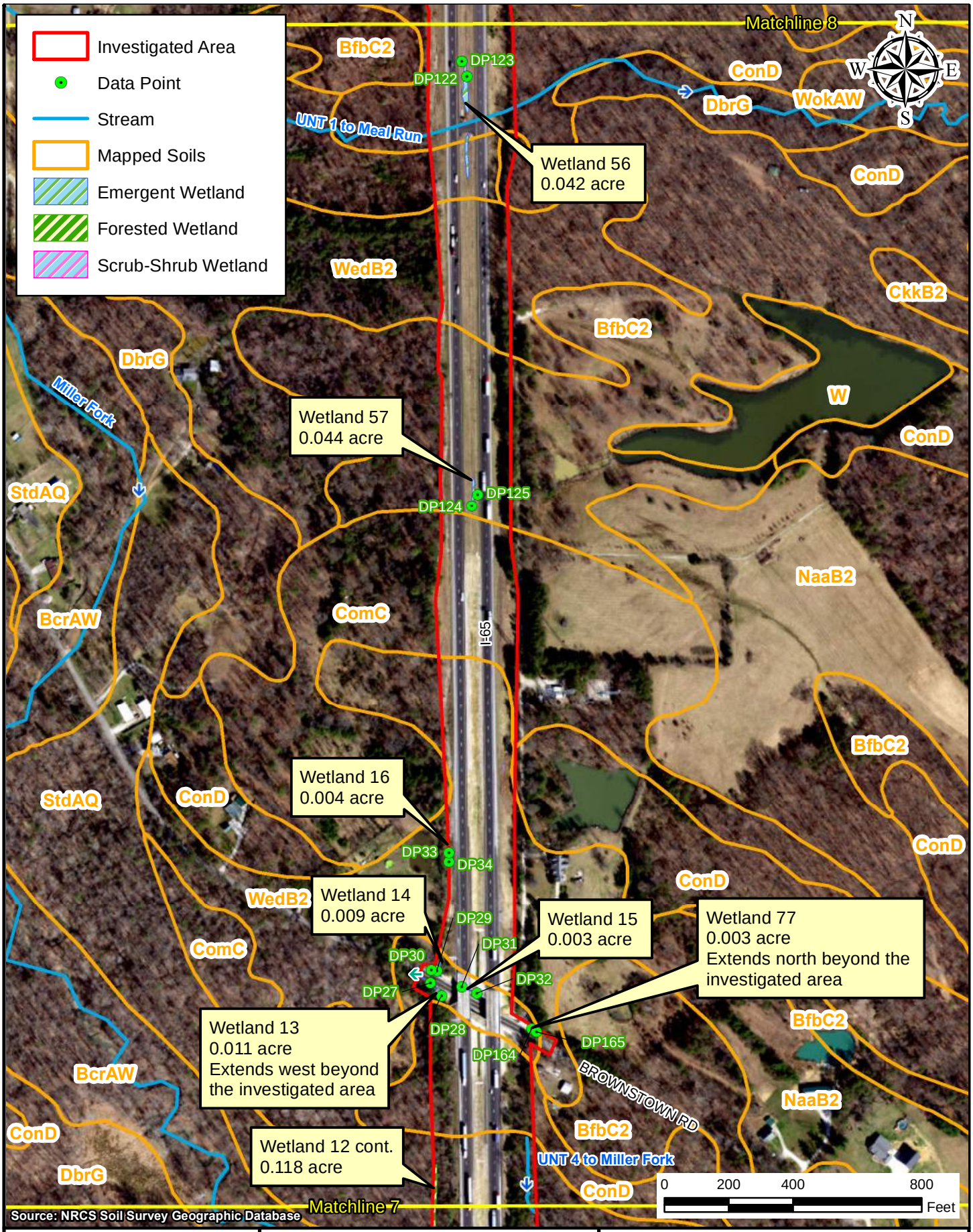
Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 8 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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Date: 11/12/2020 State: Indiana

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Appendix D

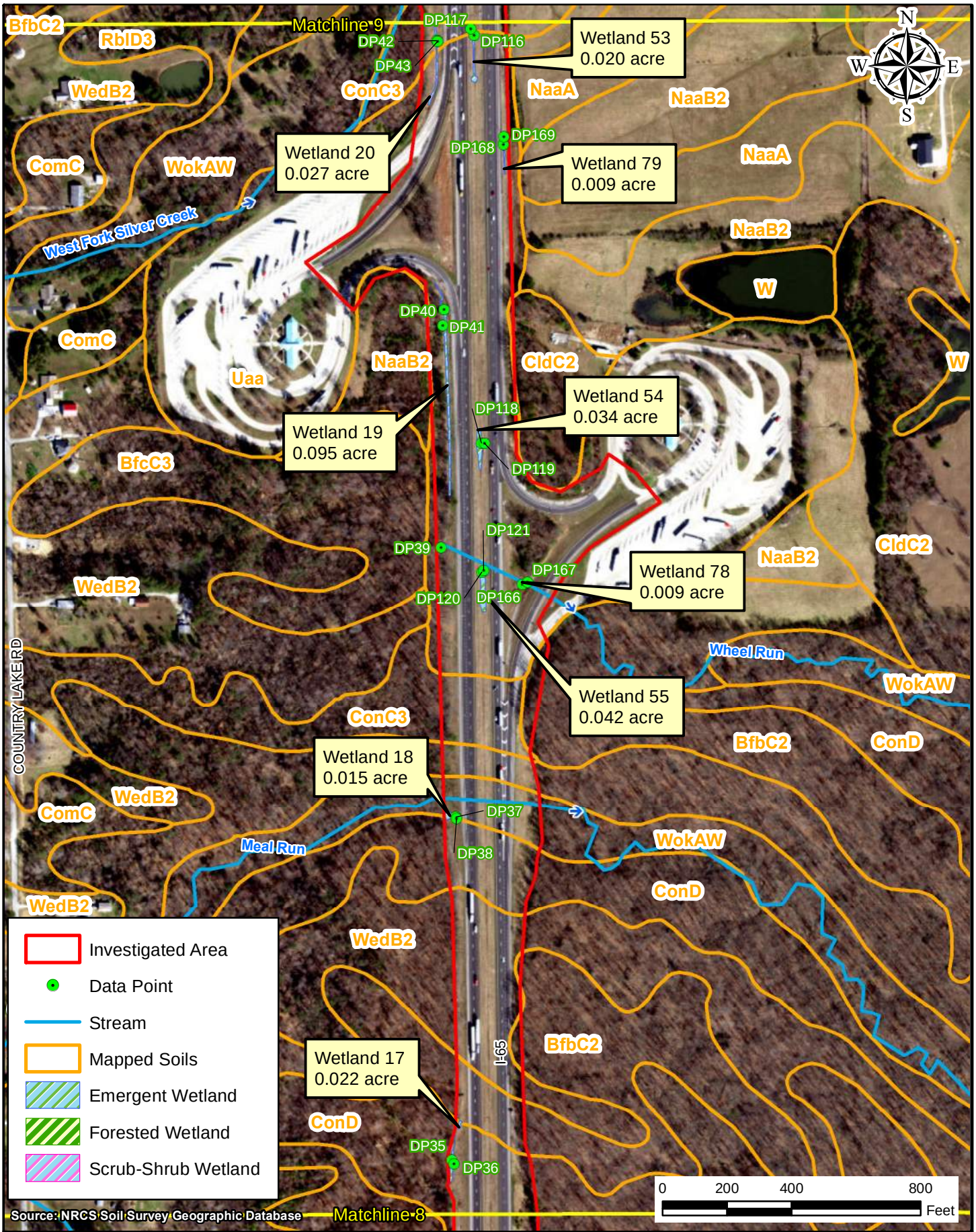

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 9 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
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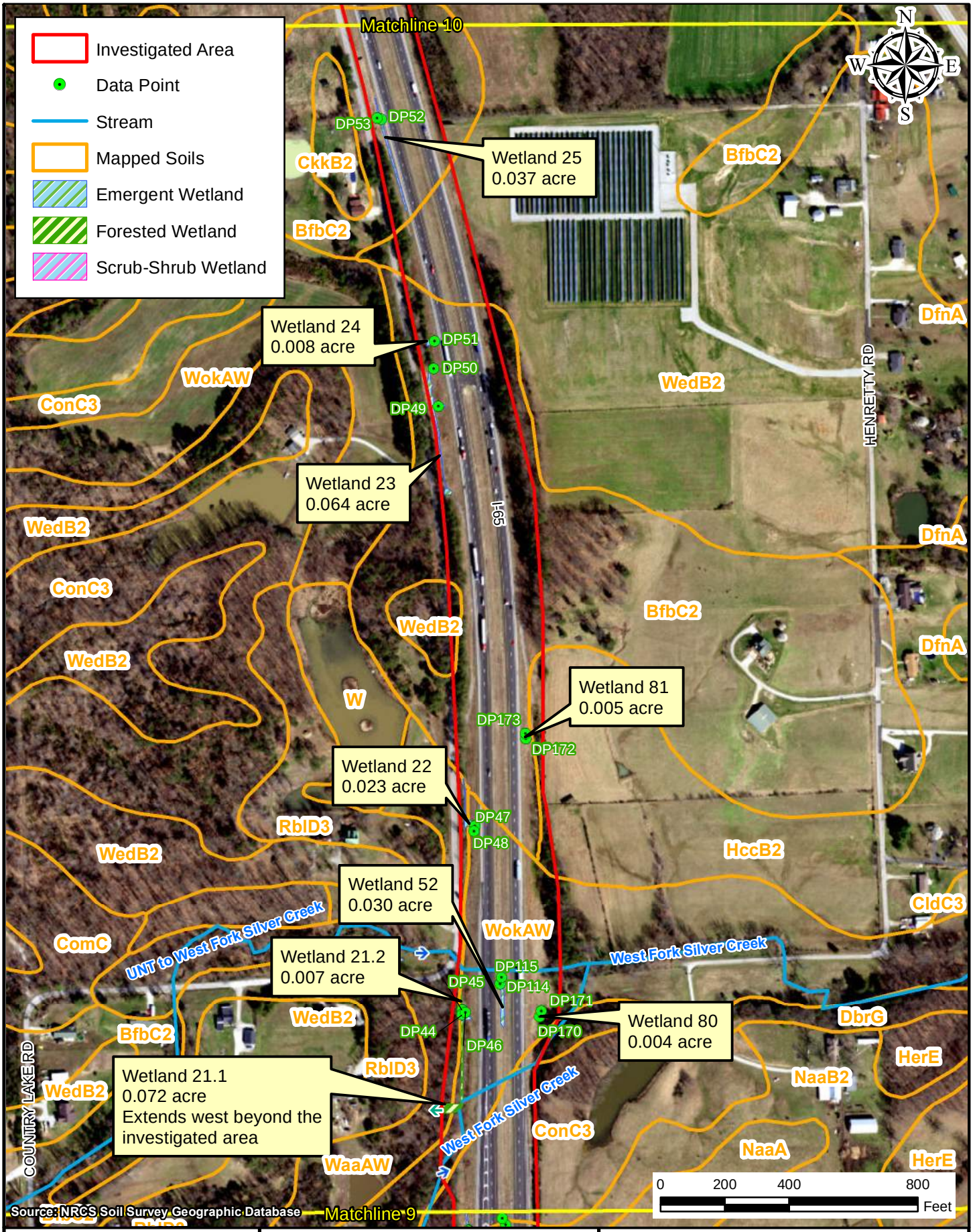
Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 10 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Des. No. 1700135
Location: Scottsburg and Henryville
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Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

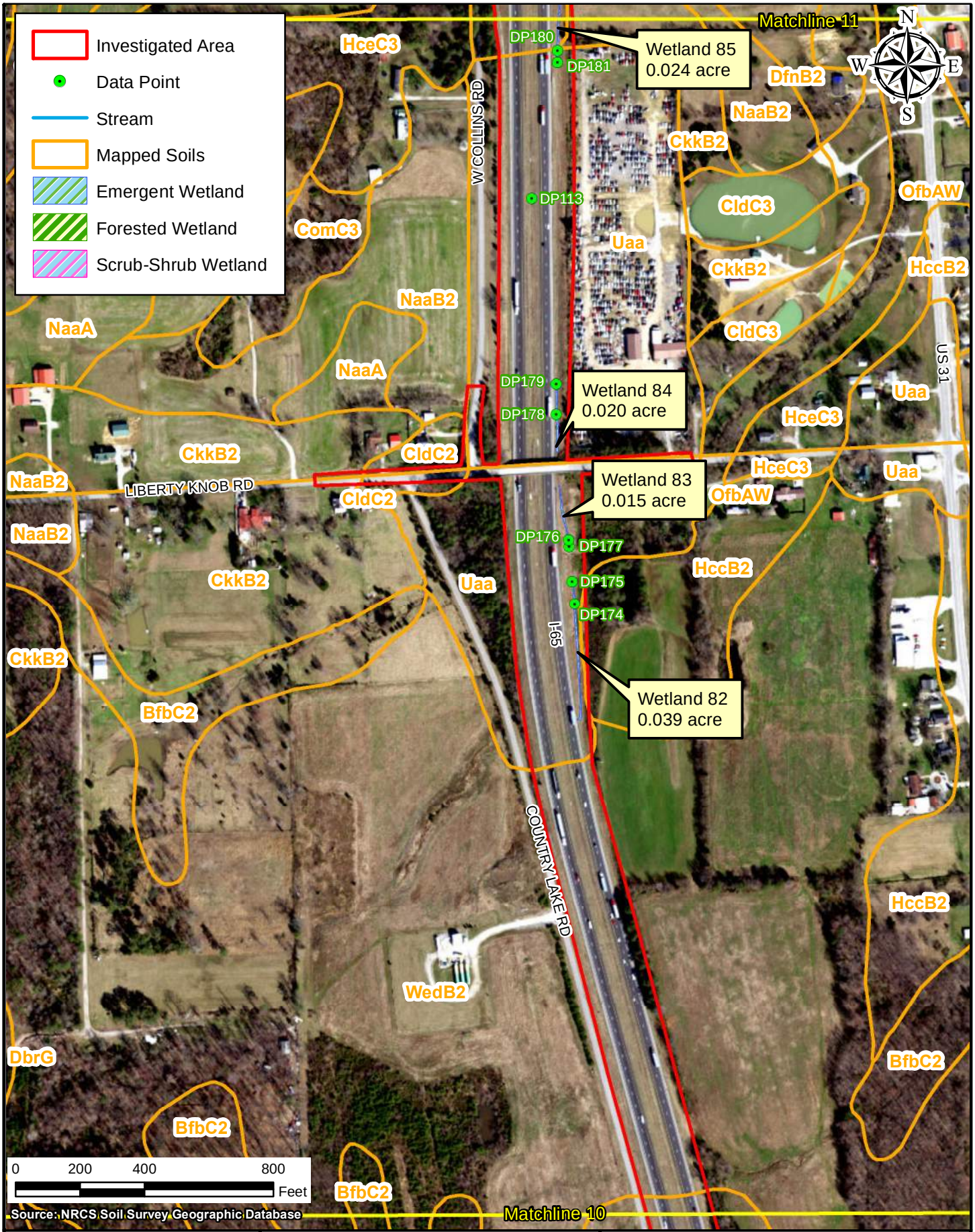

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 11 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
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Appendix D

Attachment 14-1

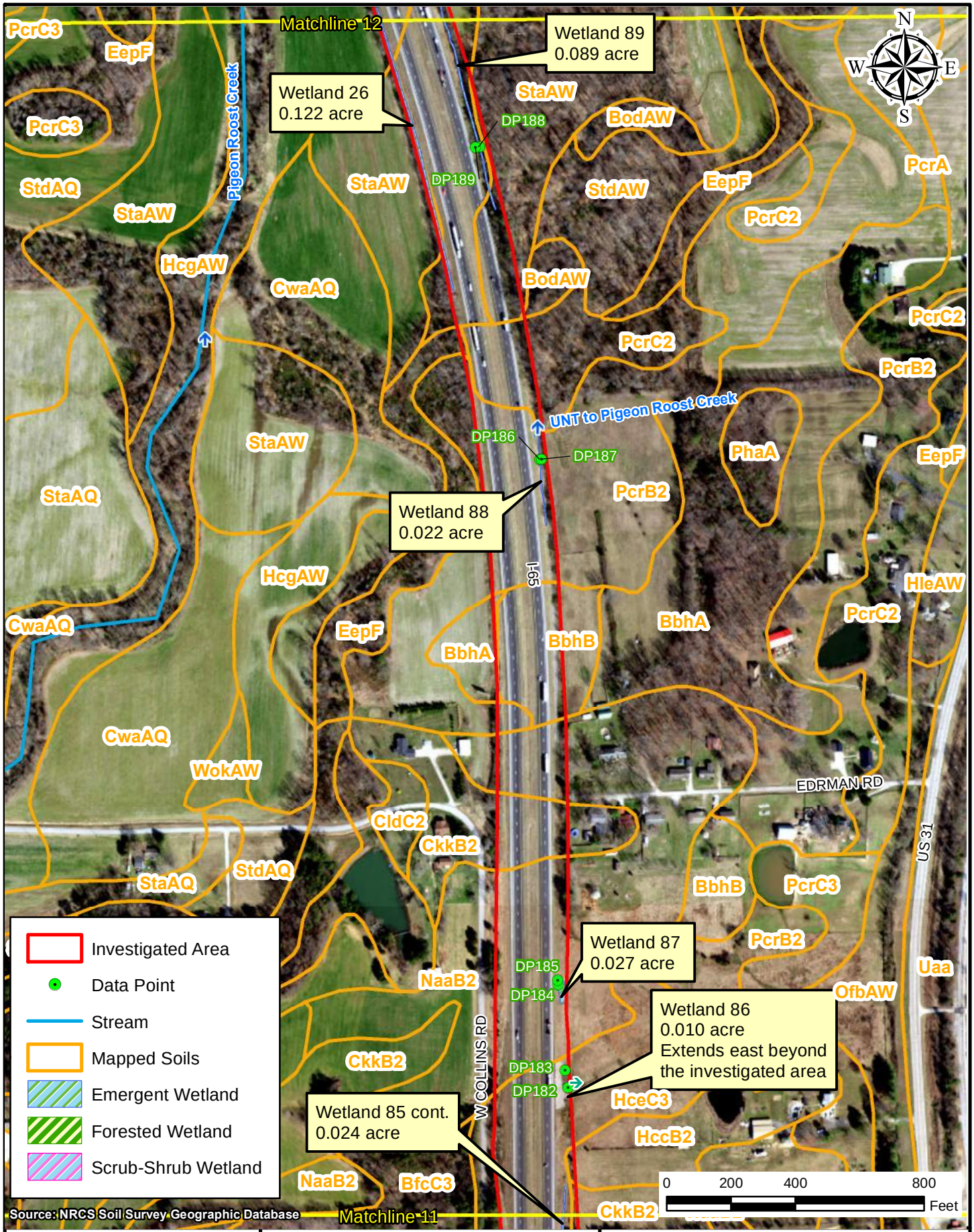

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 12 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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Attachment 14-1

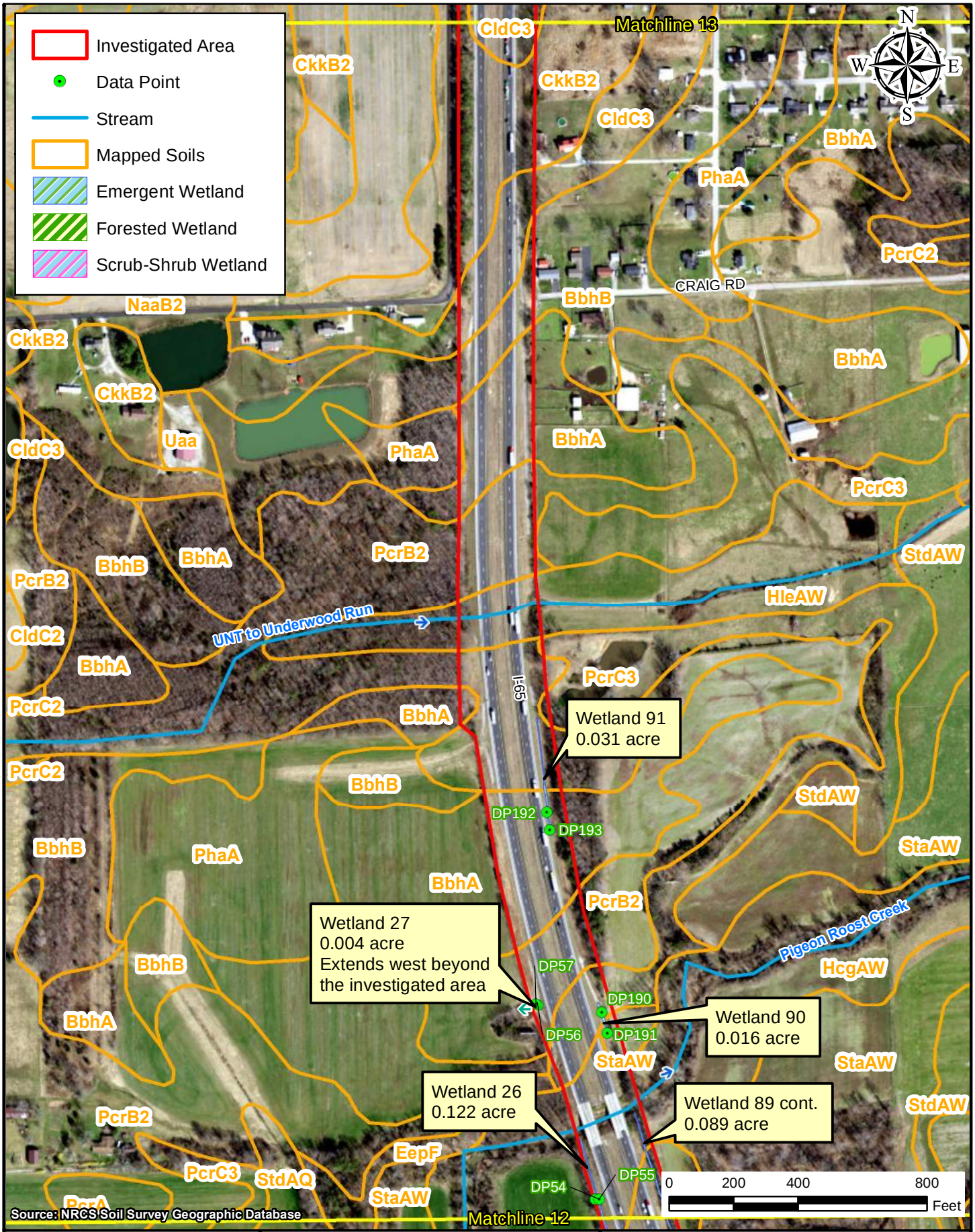

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 13 of 21

INDOT Seymour District
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Location: Scottsburg and Henryville
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Appendix D

Attachment 14-1

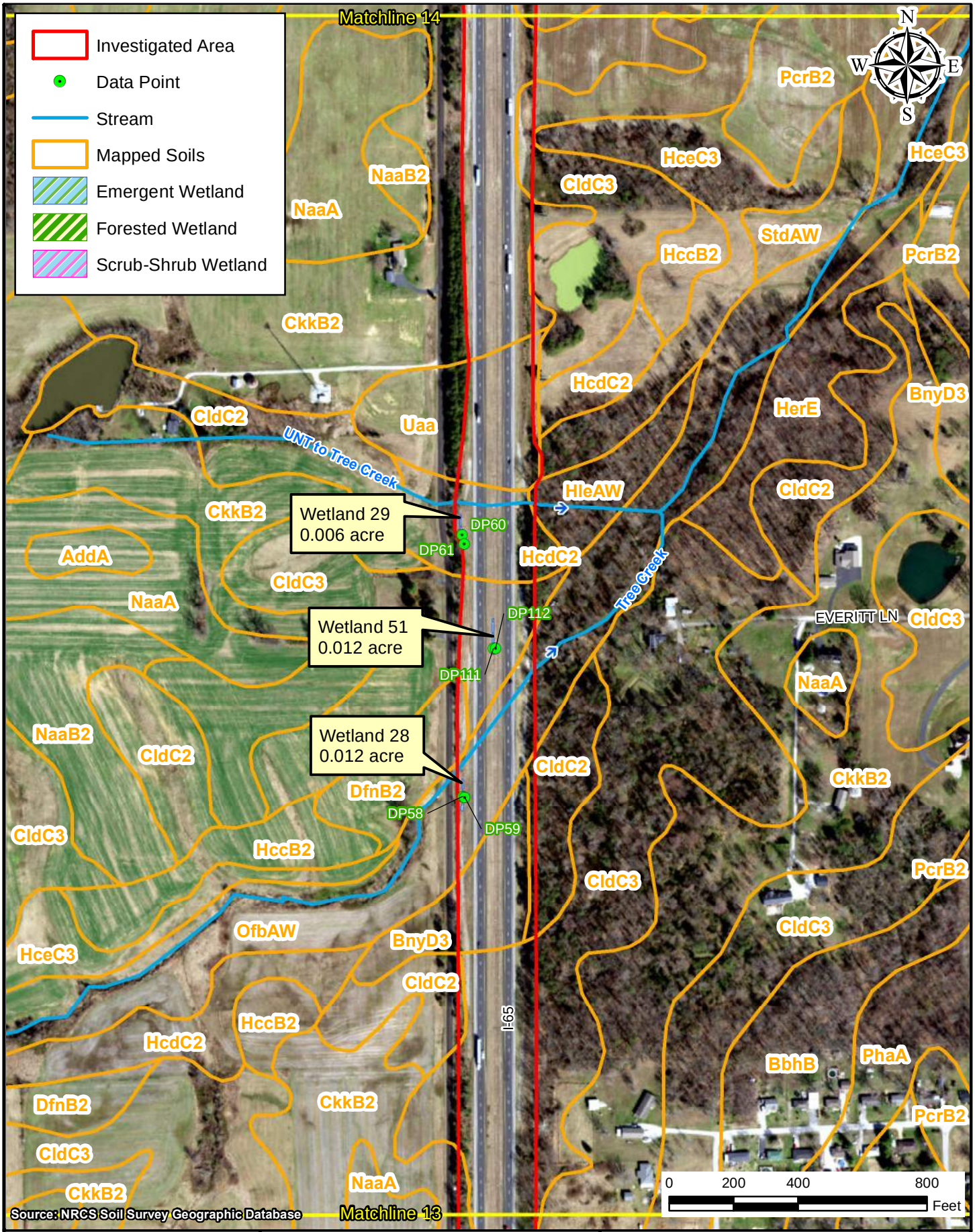

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 14 of 21

INDOT Seymour District
185 Agrico Lane
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Location: Scottsburg and Henryville
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County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

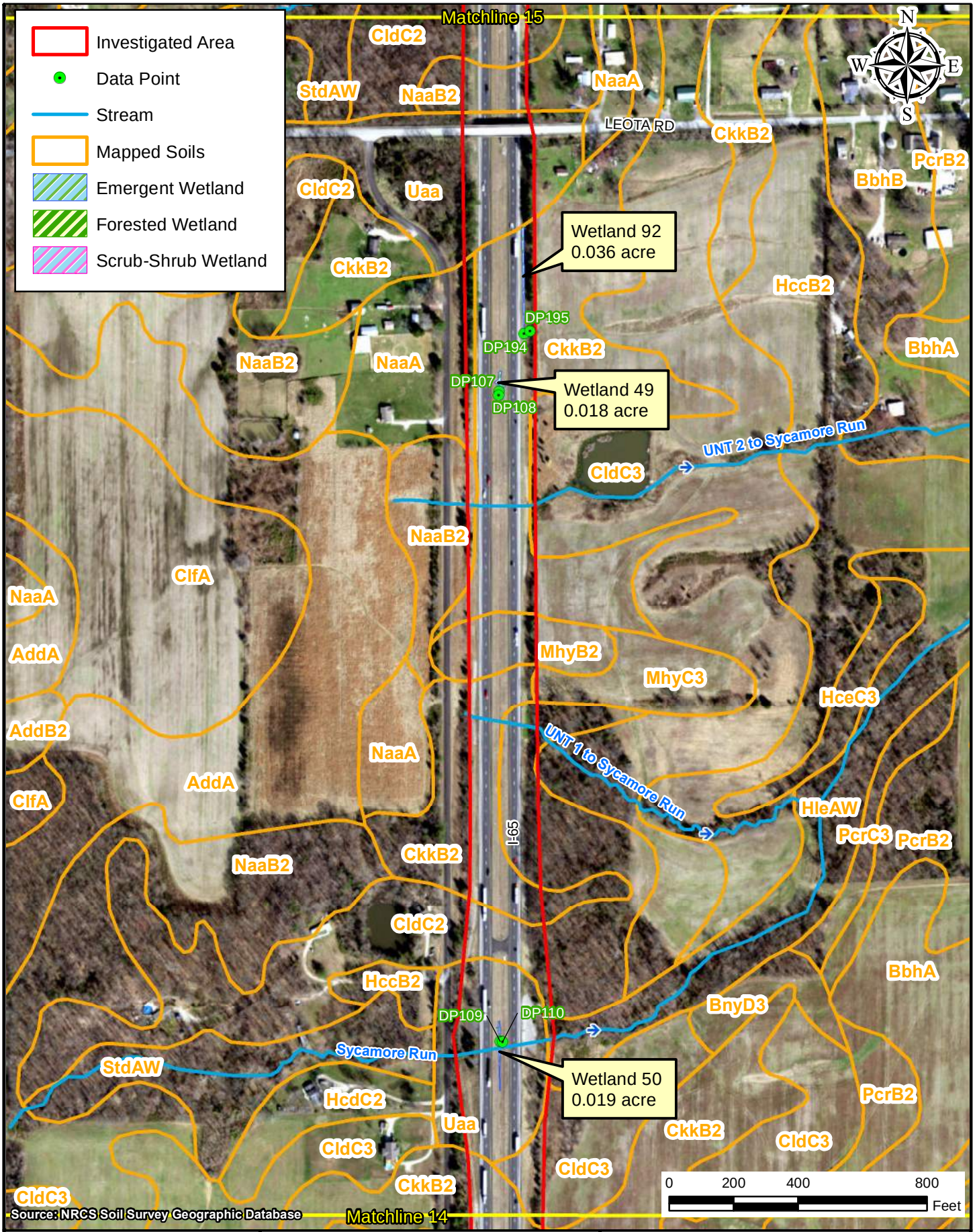

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Figure 3: Clark & Scott County Mapped Soils - SSURGO - Map 15 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Location: Scottsburg and Henryville
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County: Clark and Scott Counties
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Appendix D

Attachment 14-1

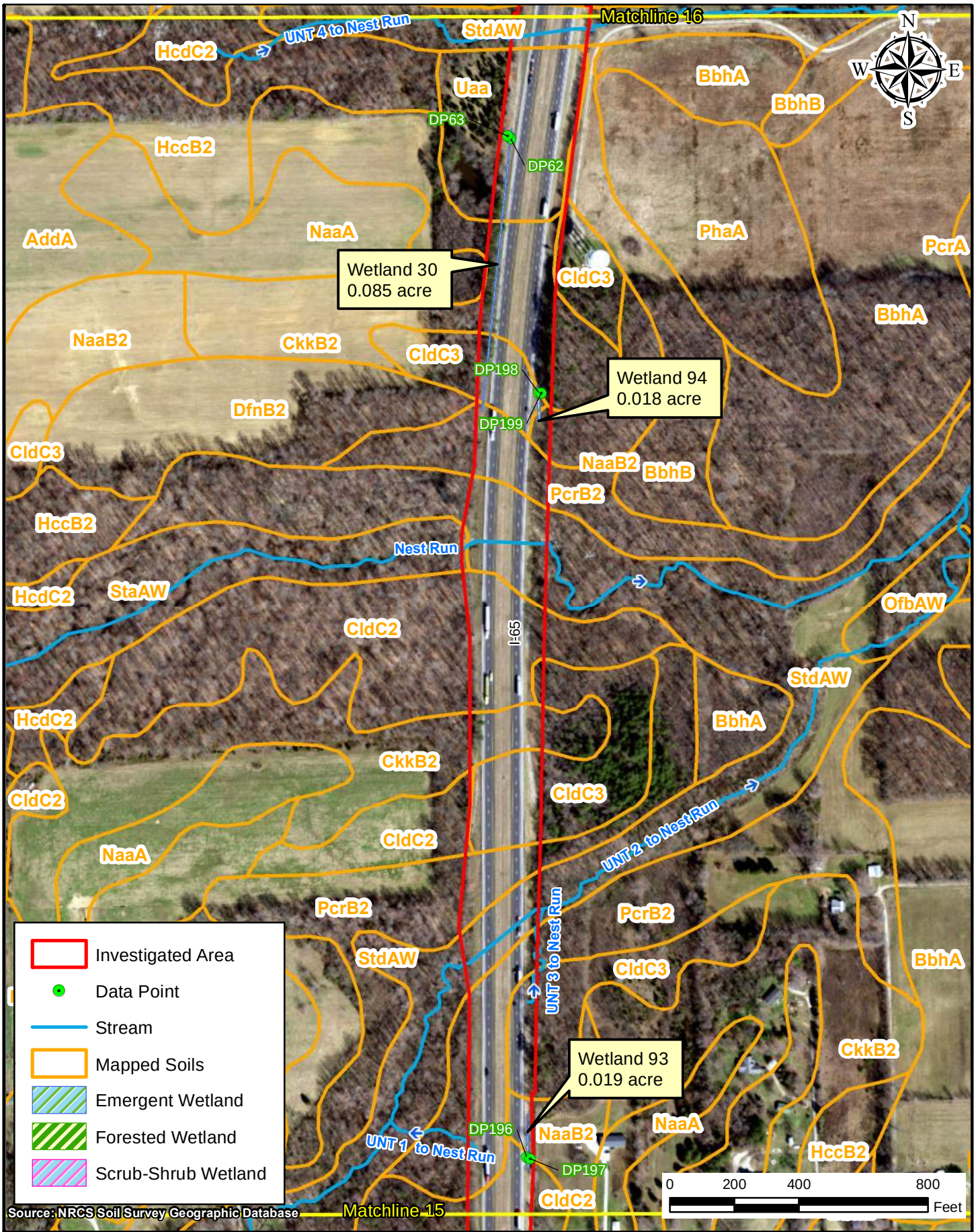

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Figure 4: Clark & Scott County
Mapped Soils - SSURGO - Map 16 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

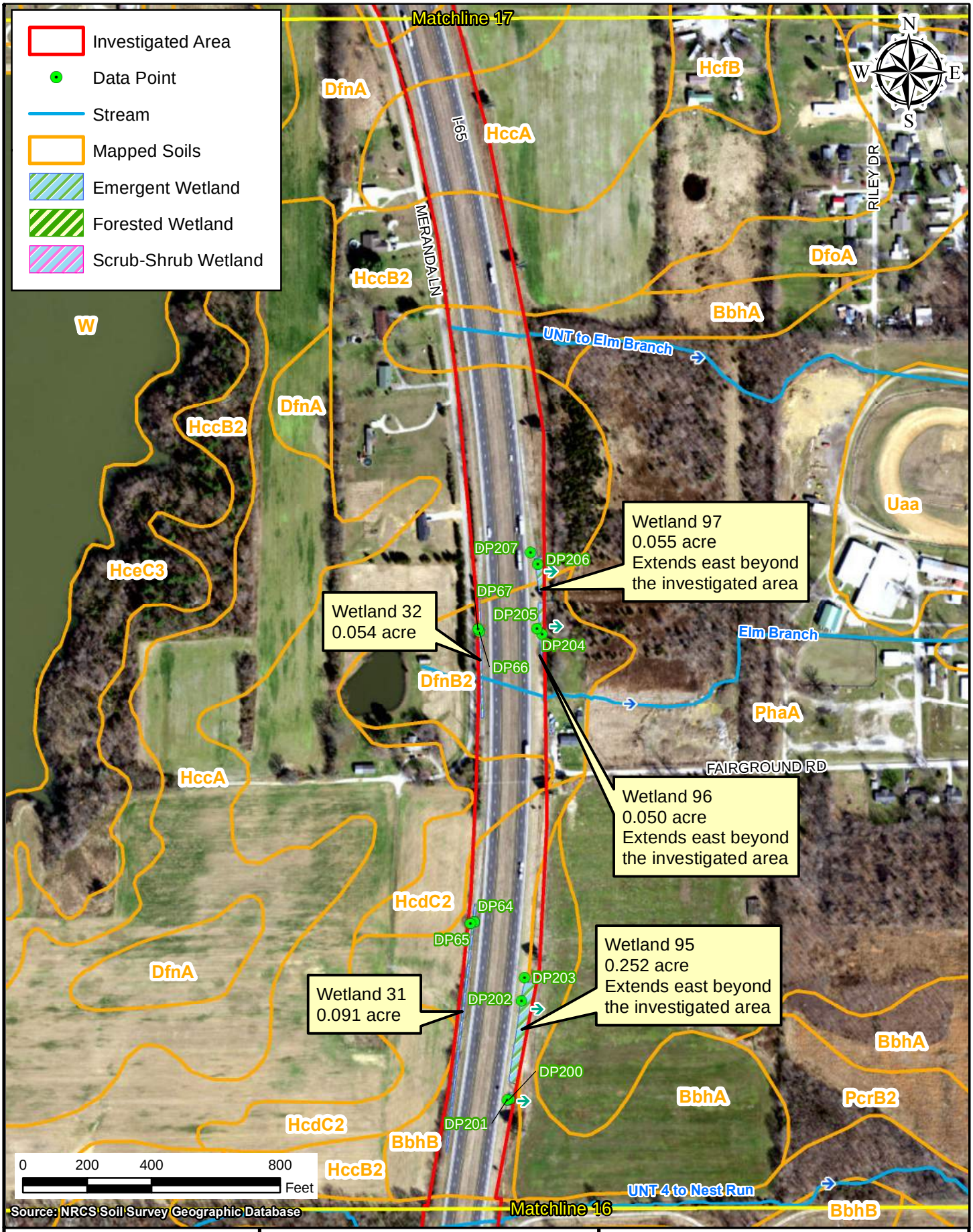

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 17 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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Appendix D

Attachment 14-1

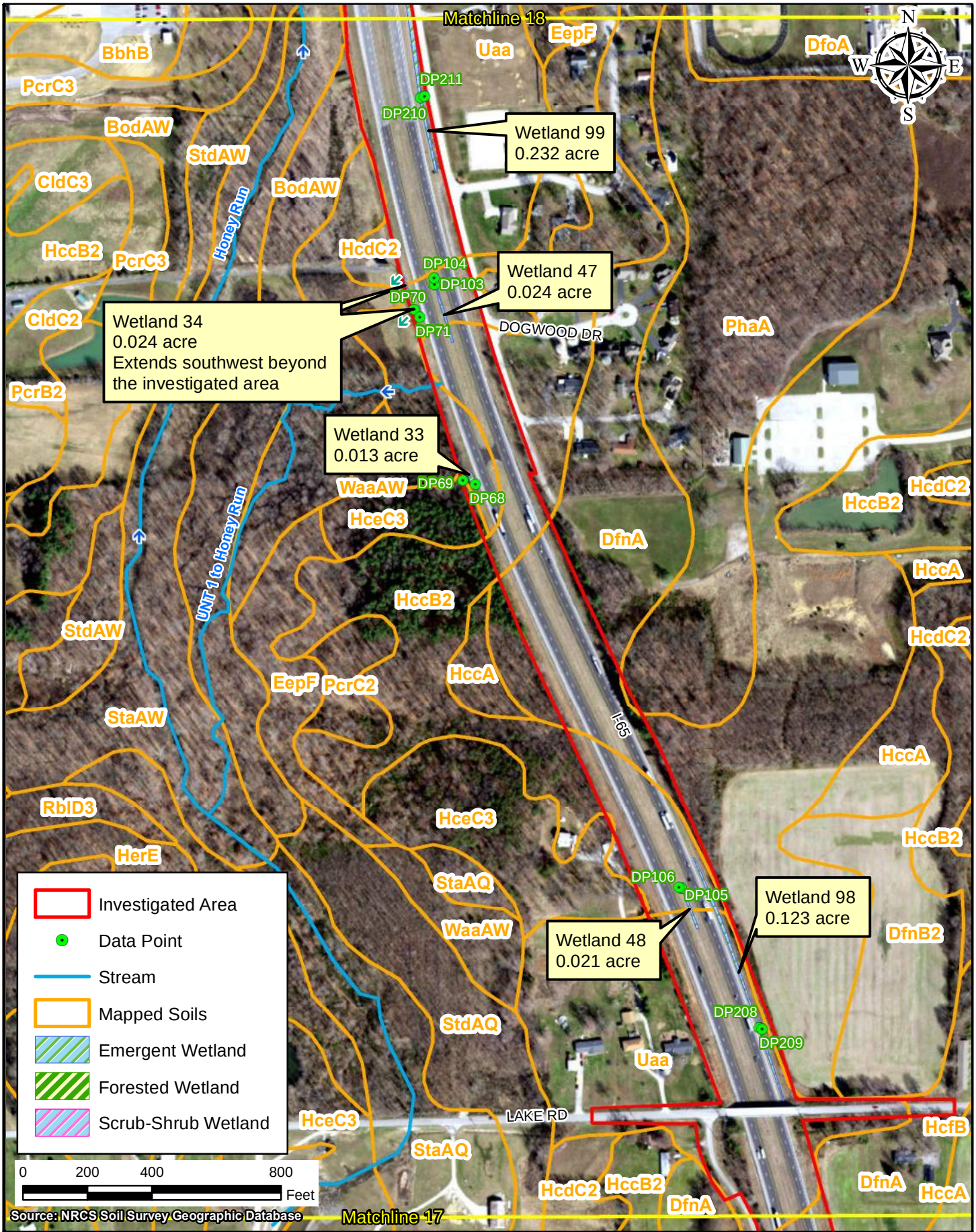

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 18 of 21

INDOT Seymour District
185 Agrico Lane
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I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

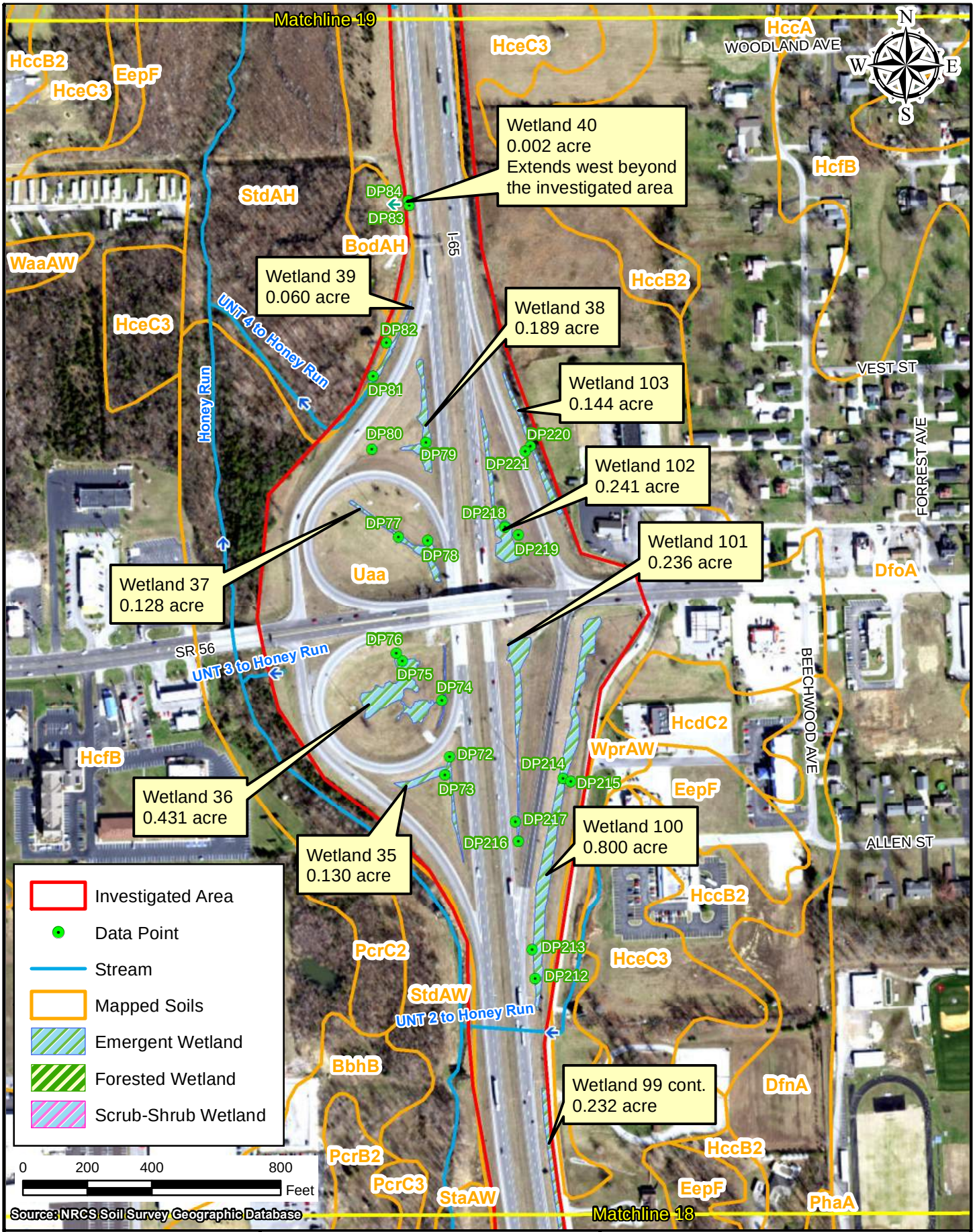

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Figure 3: Clark & Scott County
Mapped Soils - SSURGO - Map 19 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

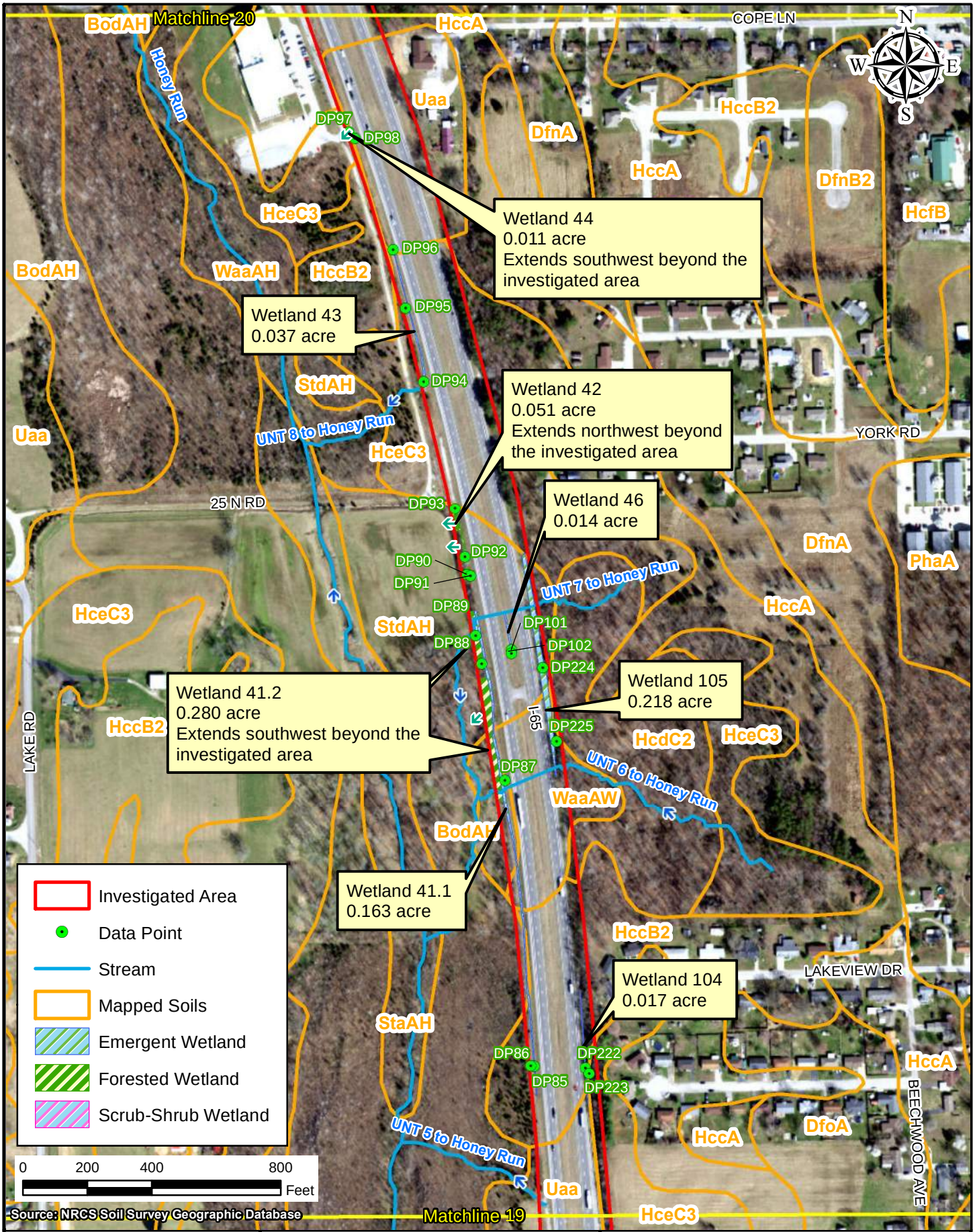

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Figure 3: Clark & Scott County Mapped Soils - SSURGO - Map 20 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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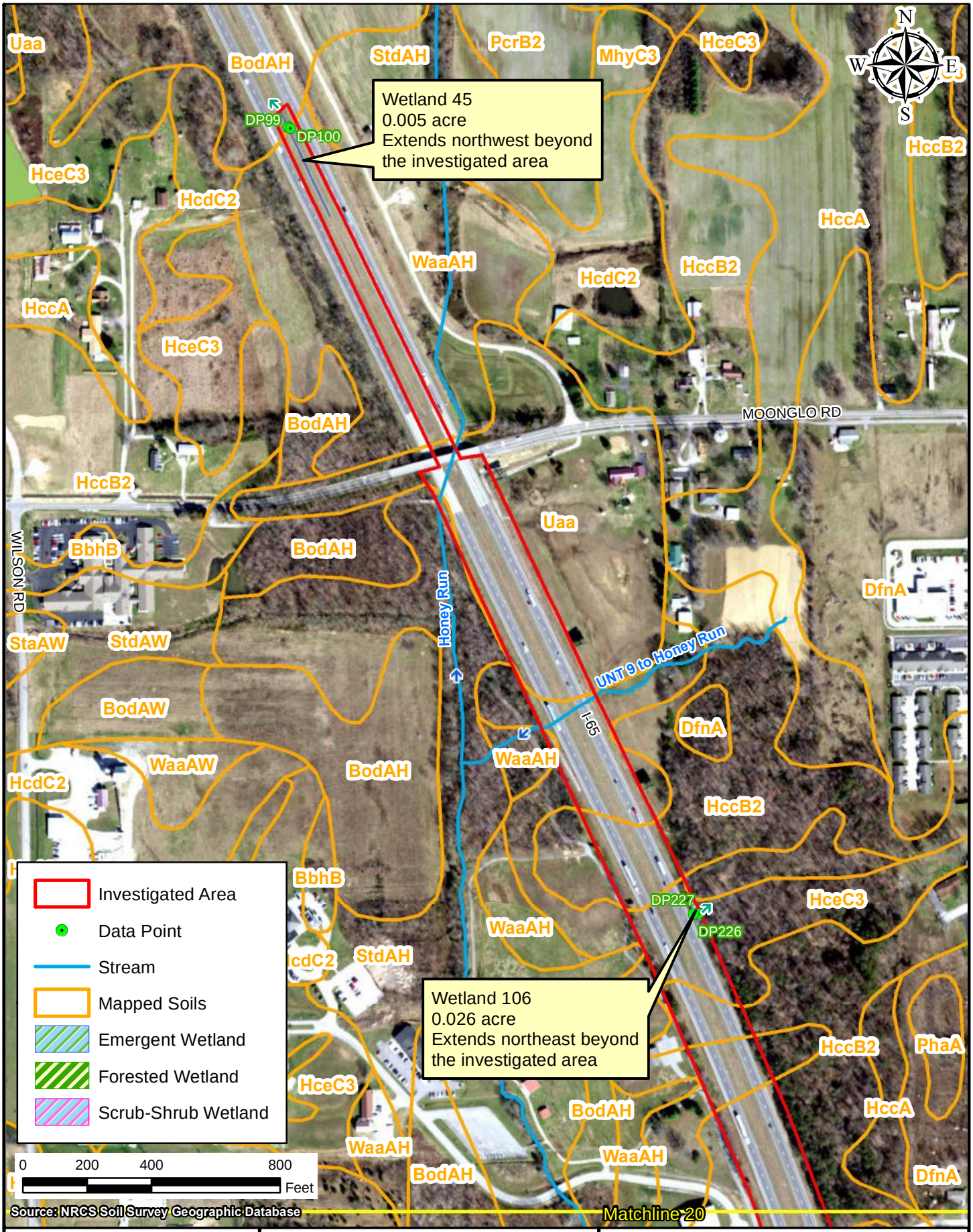
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 3: Clark & Scott County Mapped Soils - SSURGO - Map 21 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BbhA	Bartle silt loam, 0 to 2 percent slopes	10	3.7	0.8%
BcrAW	Beanblossom silt loam, 1 to 3 percent slopes, occasionally flooded, very brief duration	0	3.0	0.7%
BfbC2	Blocher, soft bedrock substratum-Weddel silt loams, 6 to 12 percent slopes, eroded	0	16.7	3.8%
BfcC3	Blocher, soft bedrock substratum-Weddel complex, 6 to 12 percent slopes, severely eroded	0	2.8	0.6%
CkkB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded	0	0.1	0.0%
CldC2	Blocher-Cincinnati silt loams, 6 to 12 percent slopes, eroded	0	3.9	0.9%
ComC	Coolville silt loam, 6 to 12 percent slopes	0	13.0	2.9%
ConC3	Coolville-Rarden complex, 6 to 12 percent slopes, severely eroded	0	3.8	0.9%
ConD	Coolville-Rarden complex, 12 to 18 percent slopes	0	18.8	4.2%
DbrG	Deam silty clay loam, 20 to 55 percent slopes	0	2.7	0.6%
DtvC2	Deputy-Trappist silt loams, 6 to 12 percent slopes, eroded	0	10.6	2.4%
HccB2	Haubstadt silt loam, 2 to 6 percent slopes, eroded	0	0.6	0.1%
HcgAV	Haymond silt loam, 0 to 2 percent slopes, frequently flooded, very brief duration	0	3.7	0.8%
JaeB2	Jennings silt loam, 2 to 6 percent slopes, eroded	0	2.6	0.6%

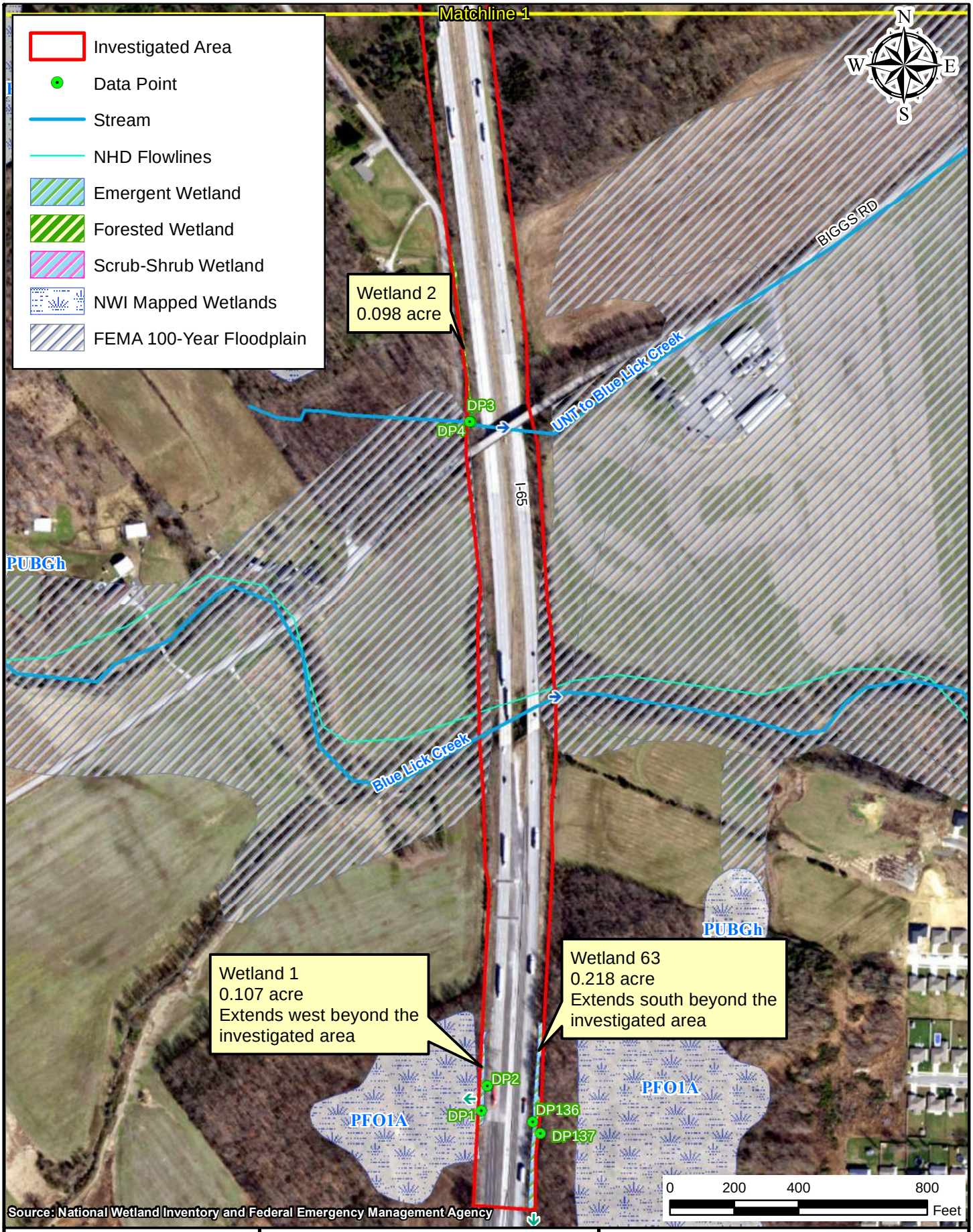
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
JafC2	Jennings-Blocher, hard bedrock substratum, silt loams, 6 to 12 percent slopes, eroded	0	2.2	0.5%
NaaB2	Nabb silt loam, 2 to 6 percent slopes, eroded	0	0.6	0.1%
PcrB2	Pekin silt loam, 2 to 6 percent slopes, eroded	0	2.7	0.6%
PcrC2	Pekin silt loam, 6 to 12 percent slopes, eroded	0	0.6	0.1%
PhaA	Peoga silt loam, 0 to 1 percent slopes	93	1.5	0.3%
Pml	Pits, quarry	0	0.0	0.0%
SceB2	Scottsburg silt loam, 2 to 4 percent slopes, eroded	0	6.8	1.5%
StdAQ	Stendal silt loam, 0 to 2 percent slopes, rarely flooded	5	15.9	3.6%
StdAW	Stendal silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	7	0.1	0.0%
ThcD3	Trappist-Rohan complex, 12 to 25 percent slopes, severely eroded	0	5.7	1.3%
TsaC3	Trappist-Deputy complex, 6 to 12 percent slopes, severely eroded	0	7.0	1.6%
Uaa	Udorthents, cut and filled	0	53.7	12.1%
UngB	Urban land-Udarents, fragipan substratum, complex, till plain, 0 to 12 percent slopes	0	0.3	0.1%
WaaAW	Wakeland silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	10	0.7	0.2%
WedB2	Weddel silt loam, 2 to 6 percent slopes, eroded	0	24.5	5.5%
WnmA	Whitcomb silt loam, 0 to 2 percent slopes	3	1.9	0.4%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
WokAV	Wilbur silt loam, 0 to 2 percent slopes, frequently flooded, very brief duration	0	2.4	0.5%
WokAW	Wilbur silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	0	8.5	1.9%
Subtotals for Soil Survey Area			**221.2**	**49.9%**
Totals for Area of Interest			**443.7**	**100.0%**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BbhA	Bartle silt loam, 0 to 2 percent slopes	10	5.7	1.3%
BbhB	Bartle silt loam, 2 to 4 percent slopes	5	8.6	1.9%
BnyD3	Bonnell clay loam, 12 to 22 percent slopes, severely eroded	0	2.0	0.4%
BodAH	Bonnie silt loam, 0 to 1 percent slopes, frequently flooded, brief duration	95	0.6	0.1%
BodAW	Bonnie silt loam, 0 to 1 percent slopes, occasionally flooded, very brief duration	95	0.0	0.0%
CkkB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded	0	19.4	4.4%
CldC2	Blocher-Cincinnati silt loams, 6 to 12 percent slopes, eroded	0	6.2	1.4%
CldC3	Cincinnati-Blocher silt loams, 6 to 12 percent slopes, severely eroded	0	12.8	2.9%
DfnA	Dubois silt loam, 0 to 2 percent slopes	5	5.3	1.2%
DfnB2	Dubois silt loam, 2 to 6 percent slopes, eroded	3	2.7	0.6%
EepF	Elkinsville silt loam, 18 to 35 percent slopes	0	0.0	0.0%
HccA	Haubstadt silt loam, 0 to 2 percent slopes	0	1.8	0.4%
HccB2	Haubstadt silt loam, 2 to 6 percent slopes, eroded	0	18.5	4.2%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HcdC2	Haubstadt-Shircliff silt loams, 6 to 15 percent slopes, eroded	0	4.3	1.0%
HceC3	Haubstadt-Shircliff complex, 6 to 15 percent slopes, severely eroded	0	12.1	2.7%
HcgAW	Haymond silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	0	2.2	0.5%
HleAW	Holton silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	5	1.2	0.3%
MhyB2	Medora silt loam, 2 to 6 percent slopes, eroded	0	0.9	0.2%
MhyC3	Medora silt loam, 6 to 12 percent slopes, severely eroded	0	0.0	0.0%
NaaA	Nabb silt loam, 0 to 2 percent slopes	0	0.4	0.1%
NaaB2	Nabb silt loam, 2 to 6 percent slopes, eroded	0	5.7	1.3%
OfbAW	Oldenburg loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	0	2.1	0.5%
PcrB2	Pekin silt loam, 2 to 6 percent slopes, eroded	0	12.3	2.8%
PcrC2	Pekin silt loam, 6 to 12 percent slopes, eroded	0	1.2	0.3%
PcrC3	Pekin silt loam, 6 to 12 percent slopes, severely eroded	0	1.1	0.2%
PhaA	Peoga silt loam, 0 to 1 percent slopes	93	0.1	0.0%
StaAW	Steff silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	0	1.4	0.3%
StdAH	Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	7	3.3	0.7%
StdAW	Stendal silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	7	7.5	1.7%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Uaa	Udorthents, cut and filled	0	78.9	17.8%
WaaAH	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	10	1.6	0.4%
WaaAW	Wakeland silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	10	2.4	0.5%
WprAW	Wirt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	0	0.3	0.1%
Subtotals for Soil Survey Area			**222.5**	**50.1%**
Totals for Area of Interest			**443.7**	**100.0%**



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AMERICAN STRUCTUREPOINT INC.

Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 1 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

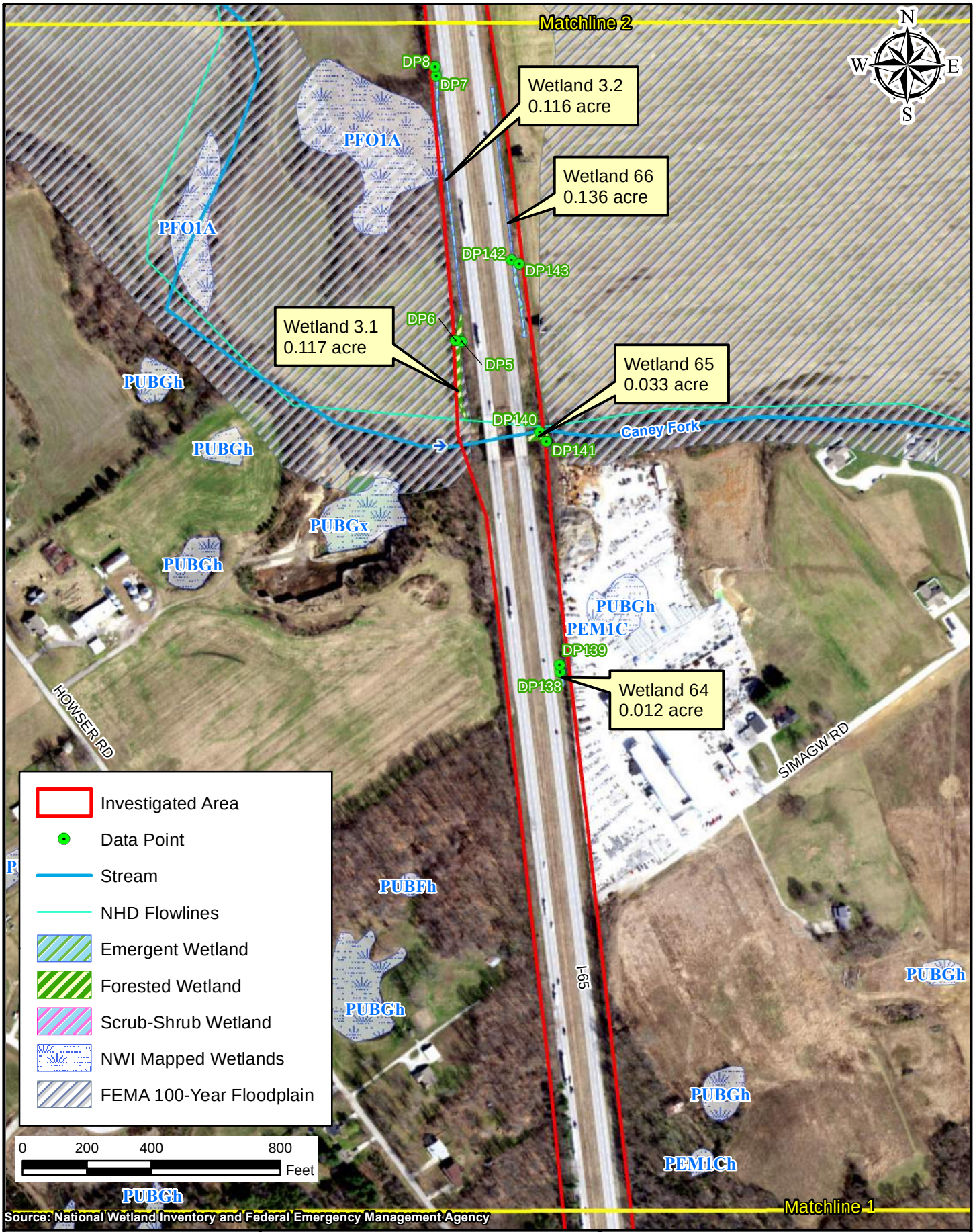

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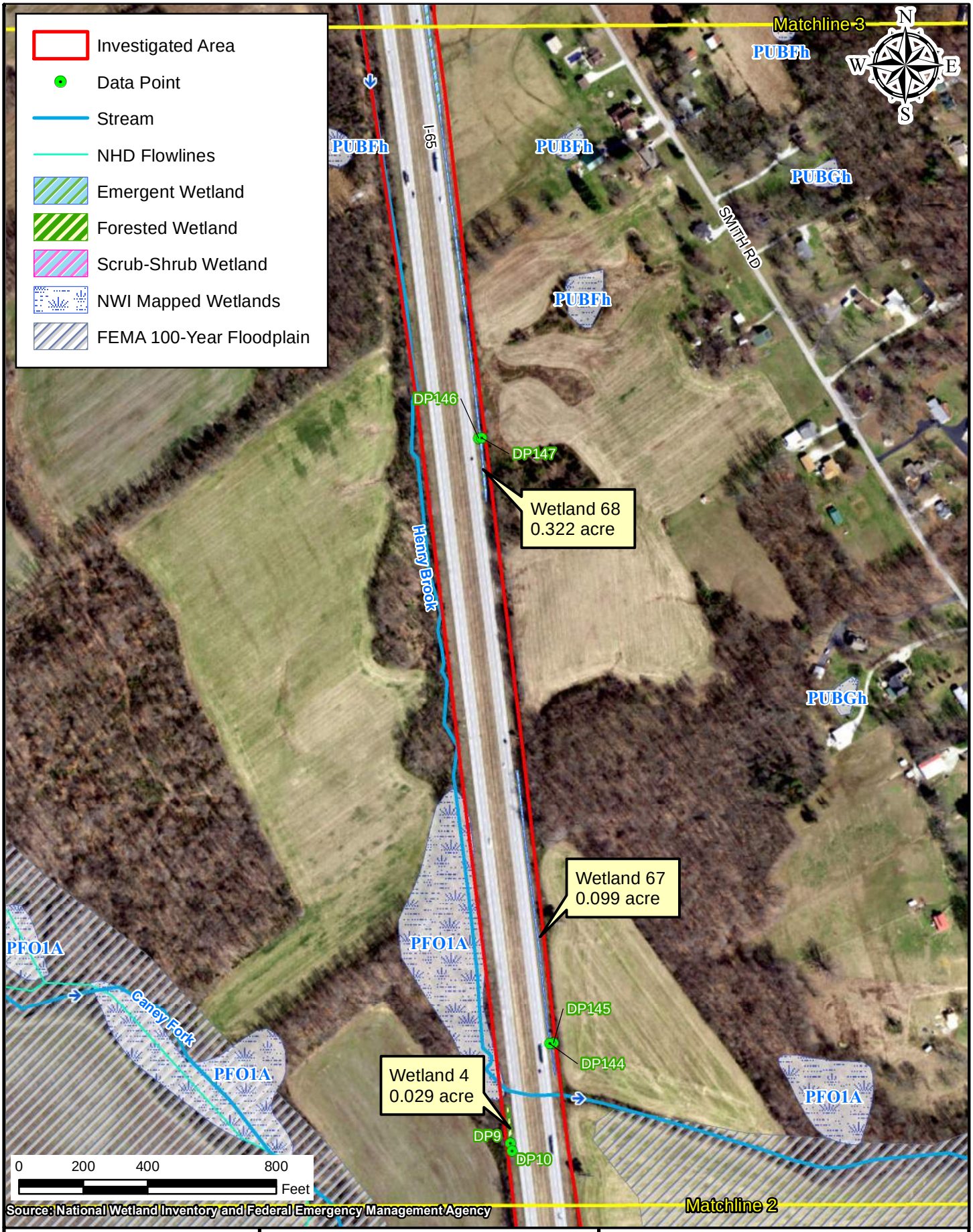
Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 2 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 3 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

Appendix D



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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 4 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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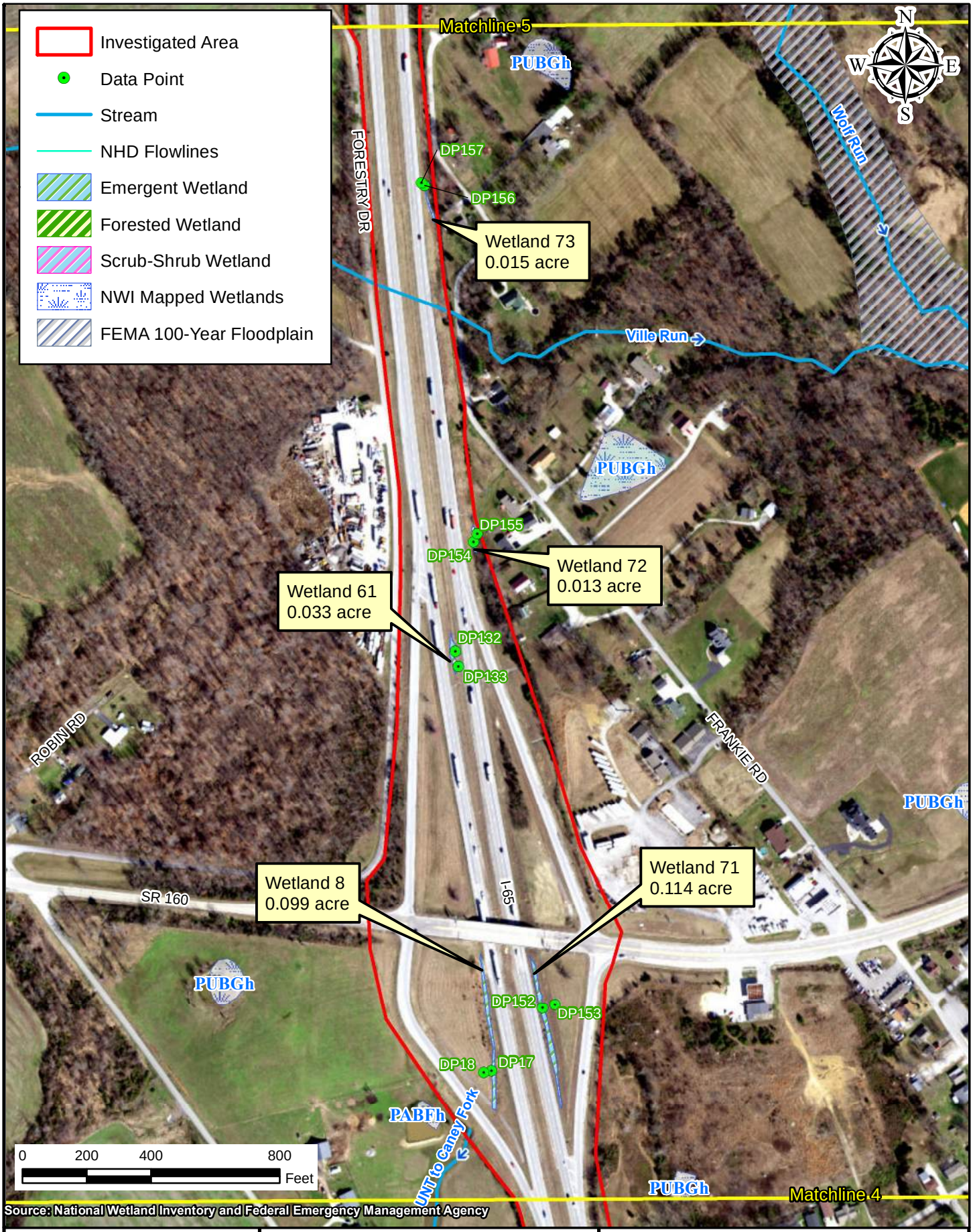

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 5 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1 Appendix D

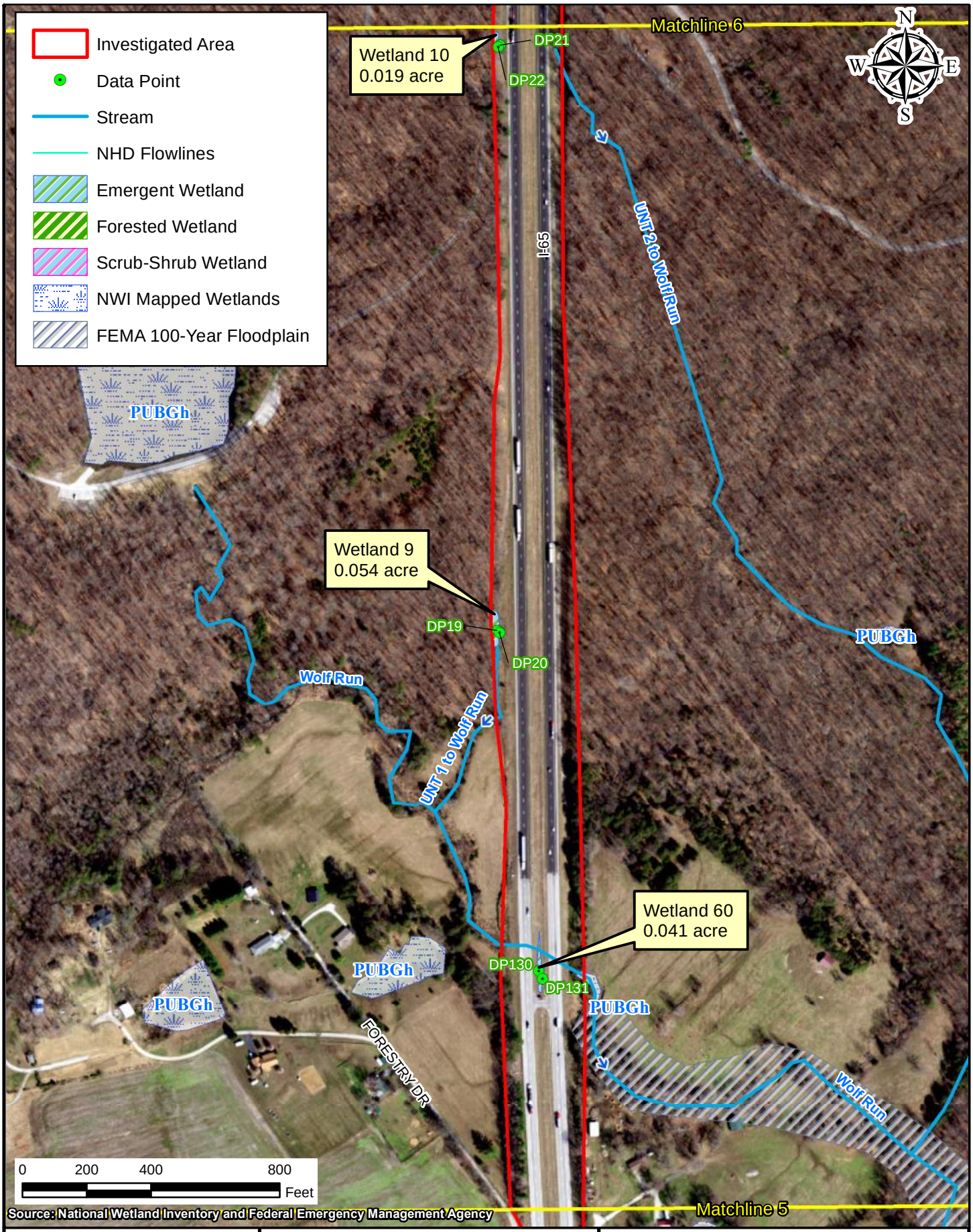

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 6 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

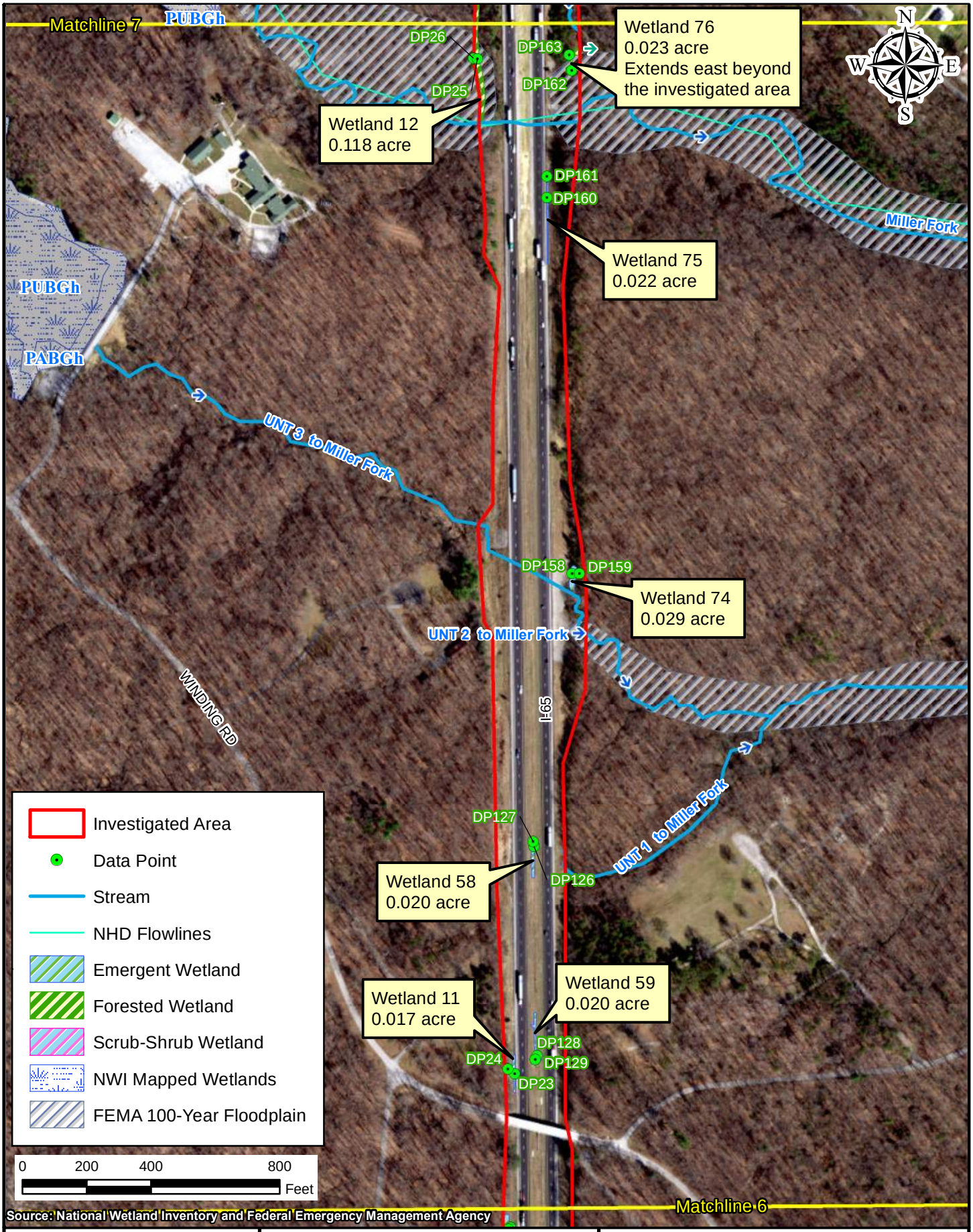

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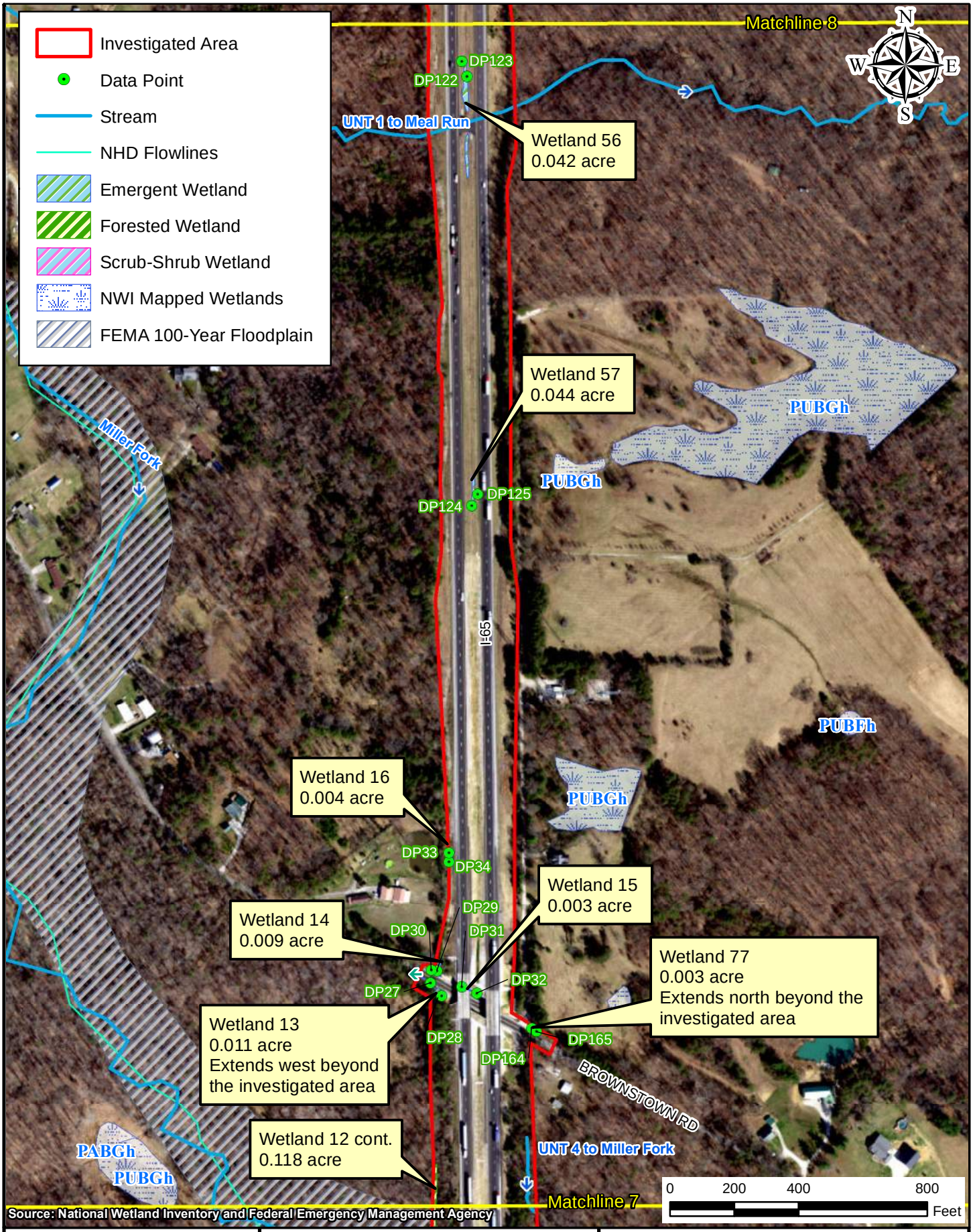
Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 7 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 8 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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Appendix D

Attachment 14-1

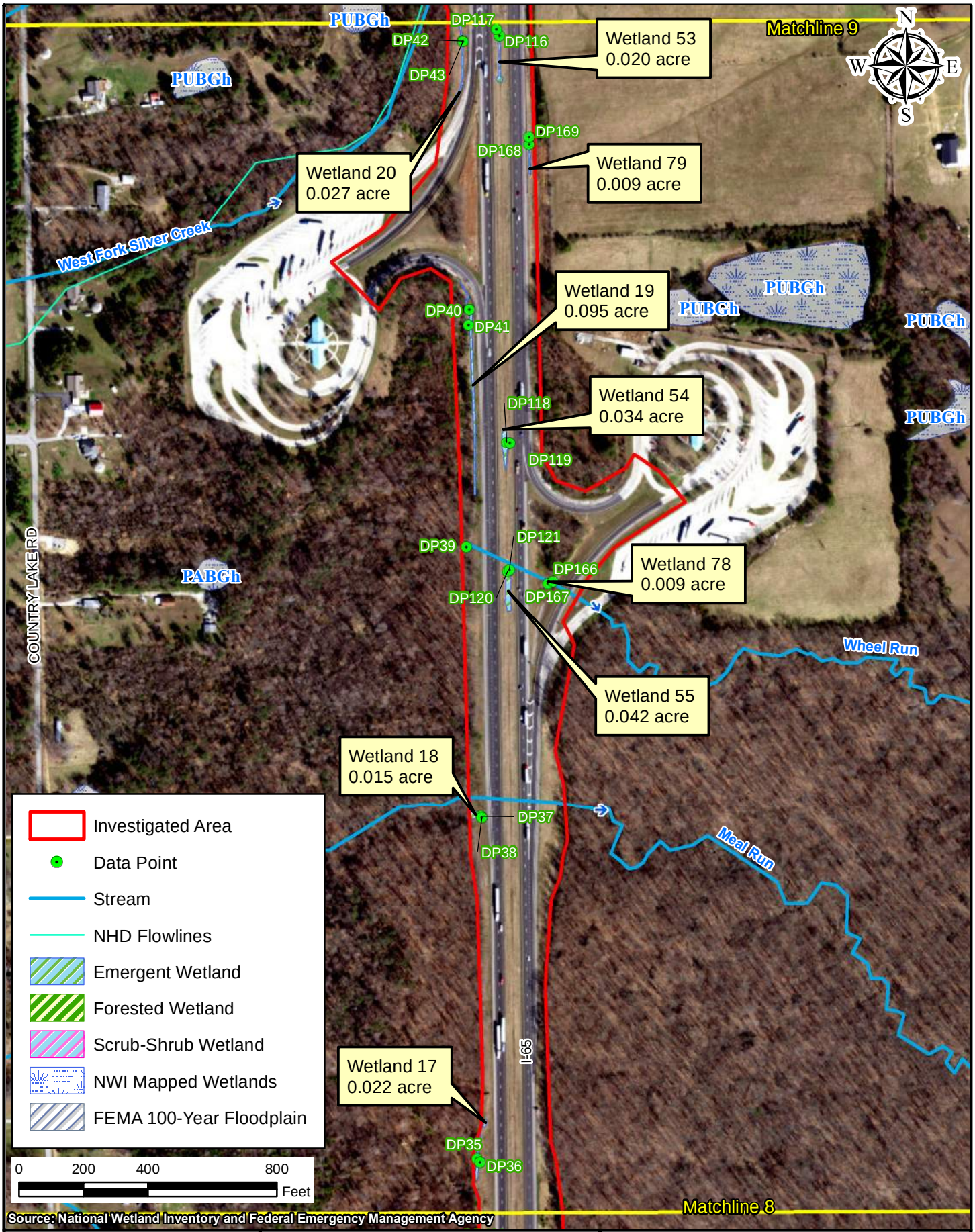

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 9 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

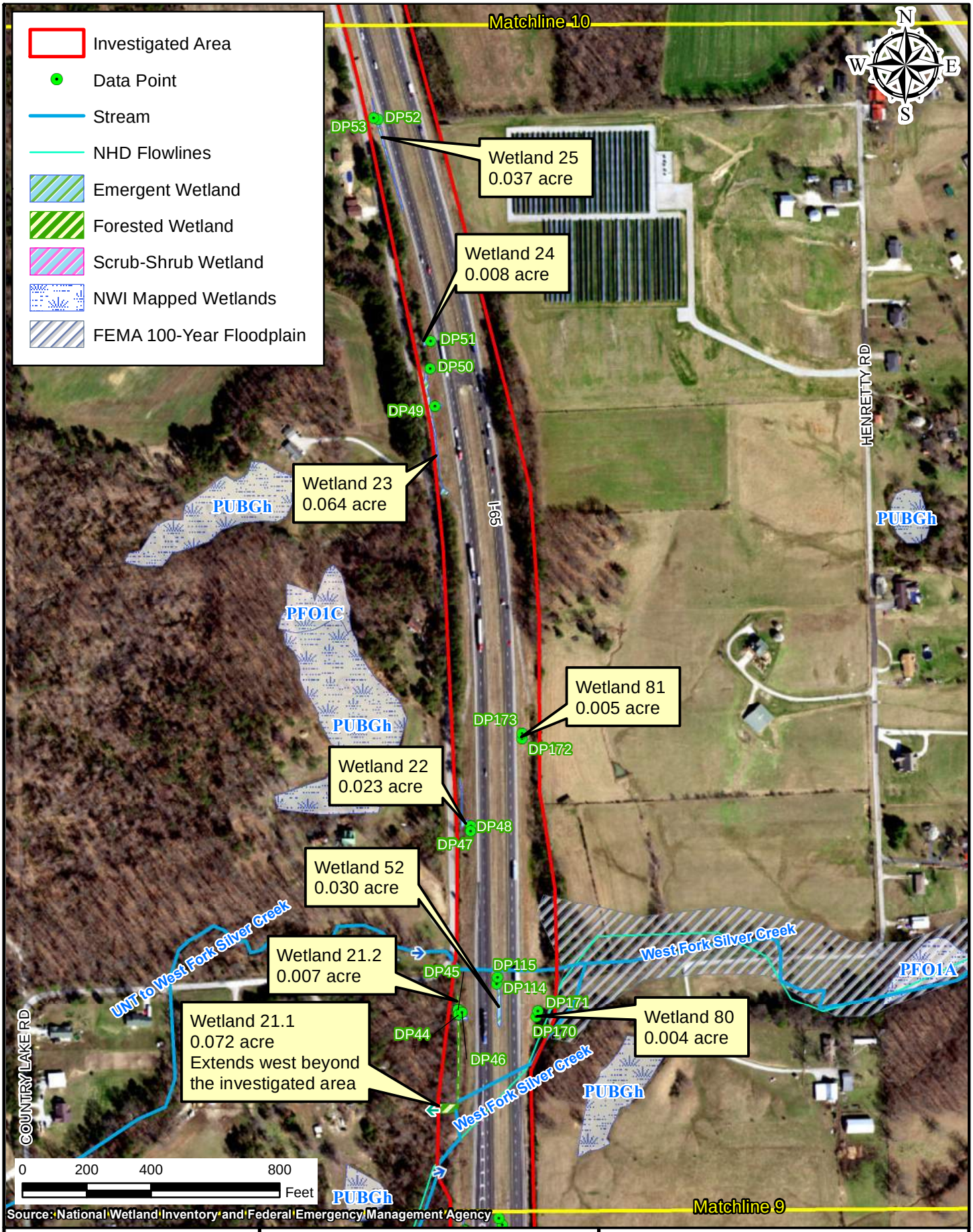

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 10 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

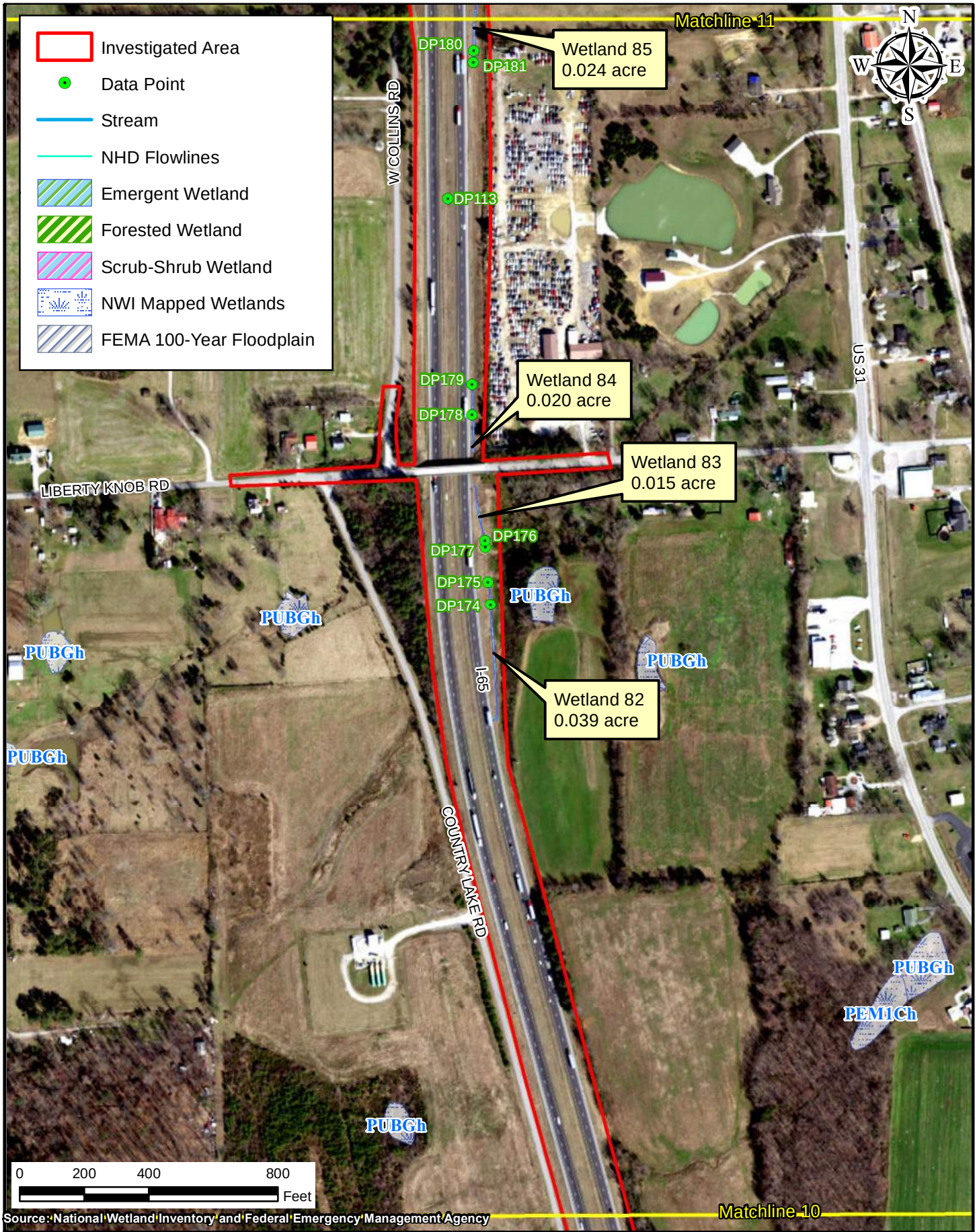

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 11 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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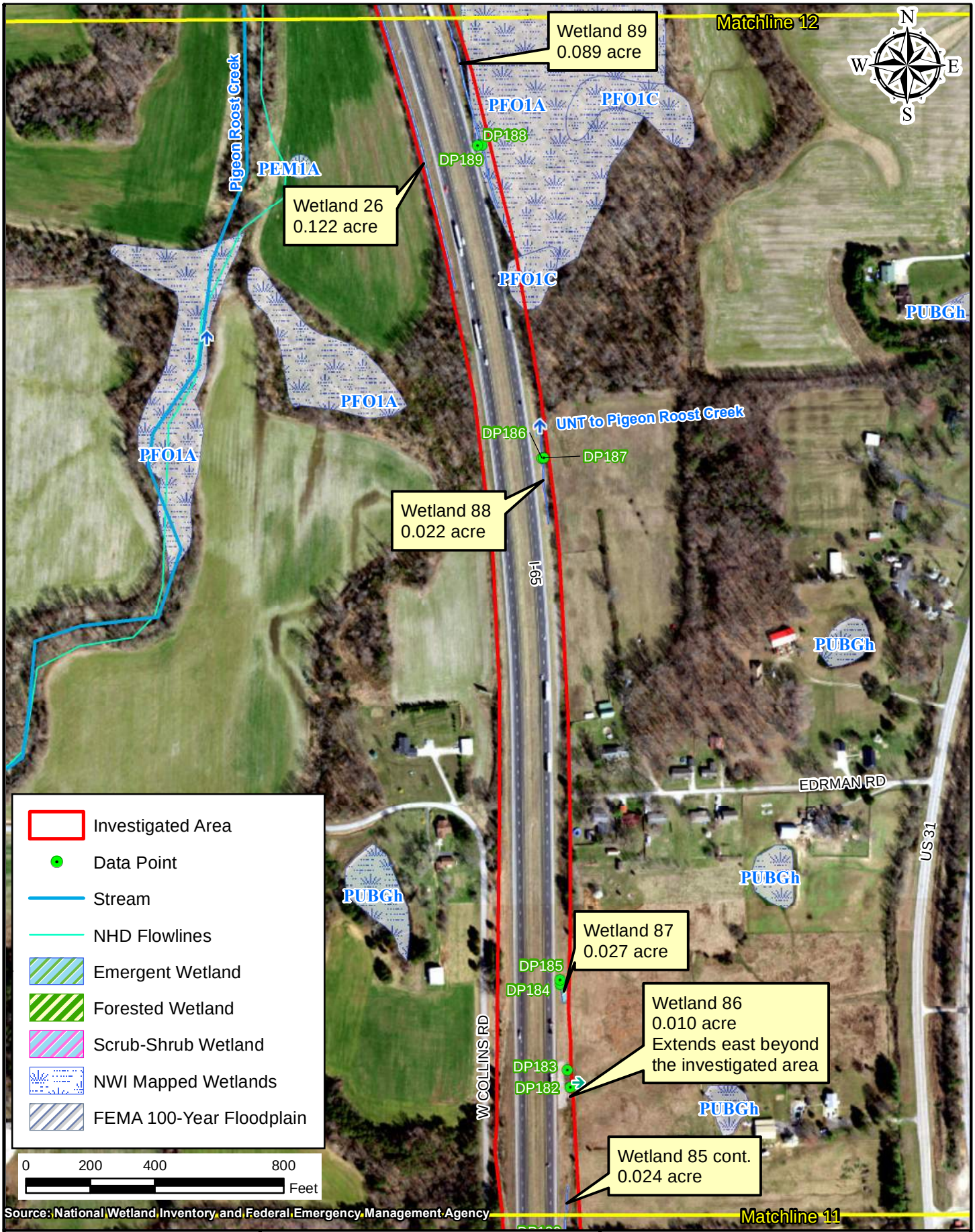

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 12 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Appendix D

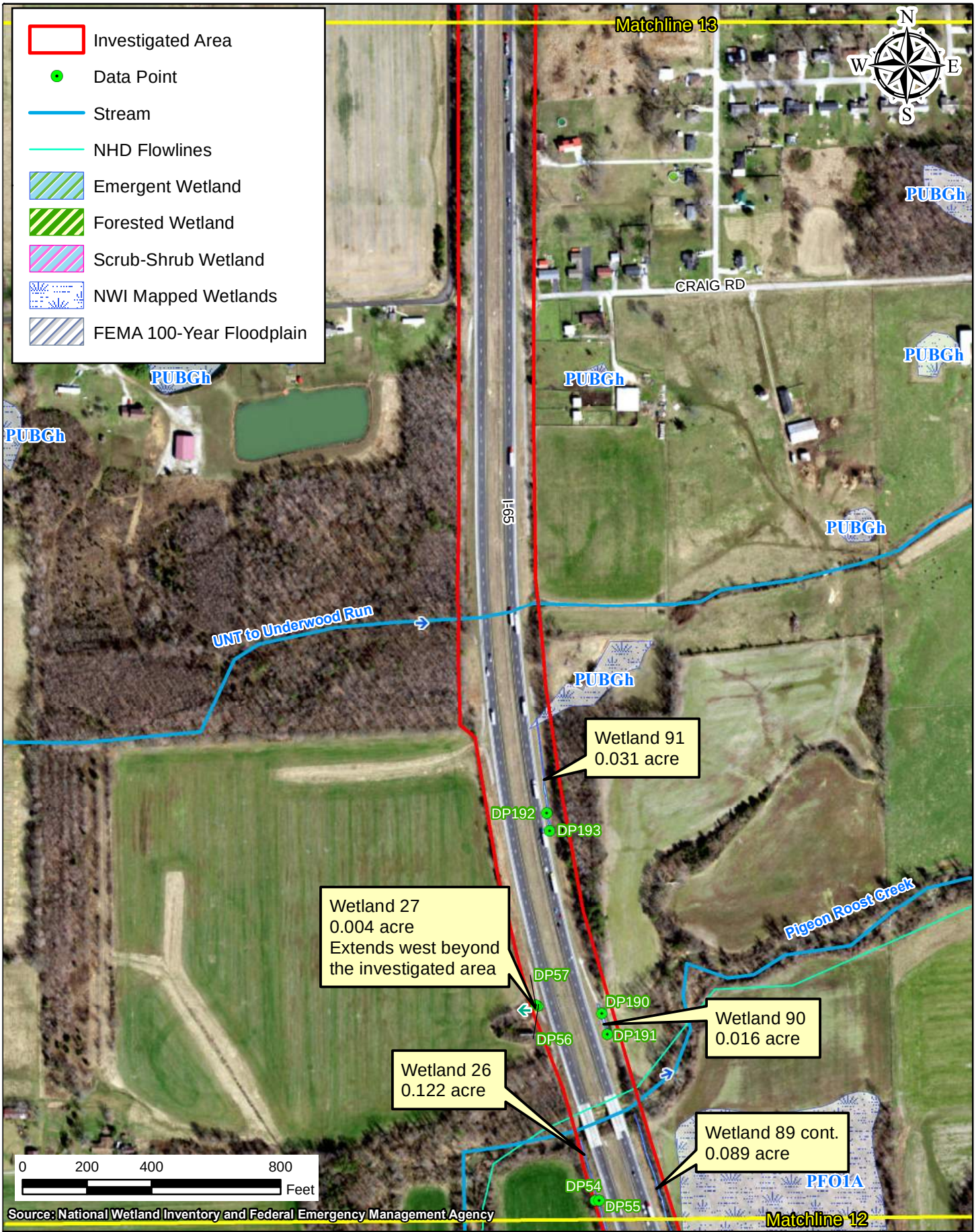

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 13 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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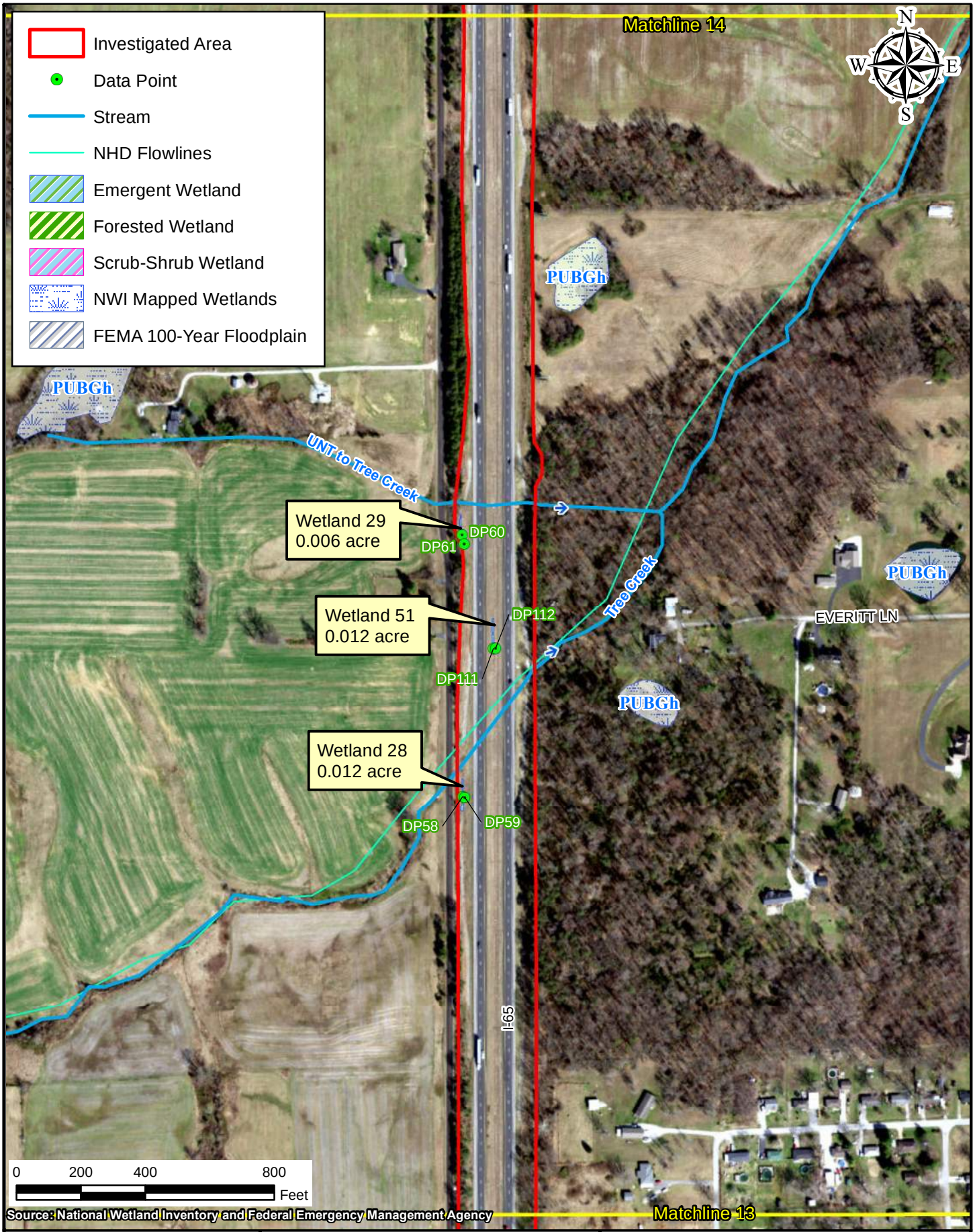

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AMERICAN STRUCTUREPOINT INC.

Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 14 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Date: 11/12/2020 State: Indiana

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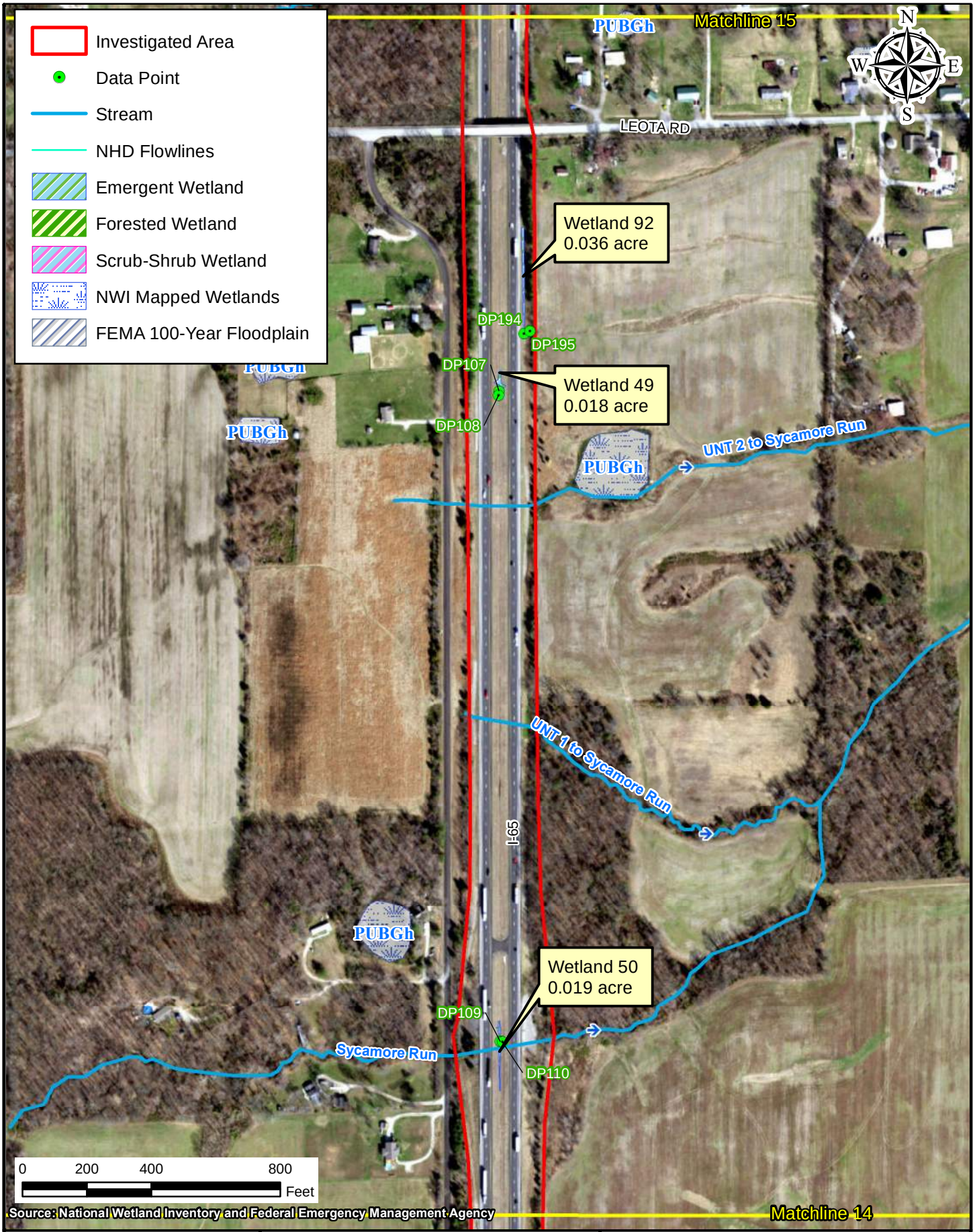

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Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 15 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
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Location: Scottsburg and Henryville
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County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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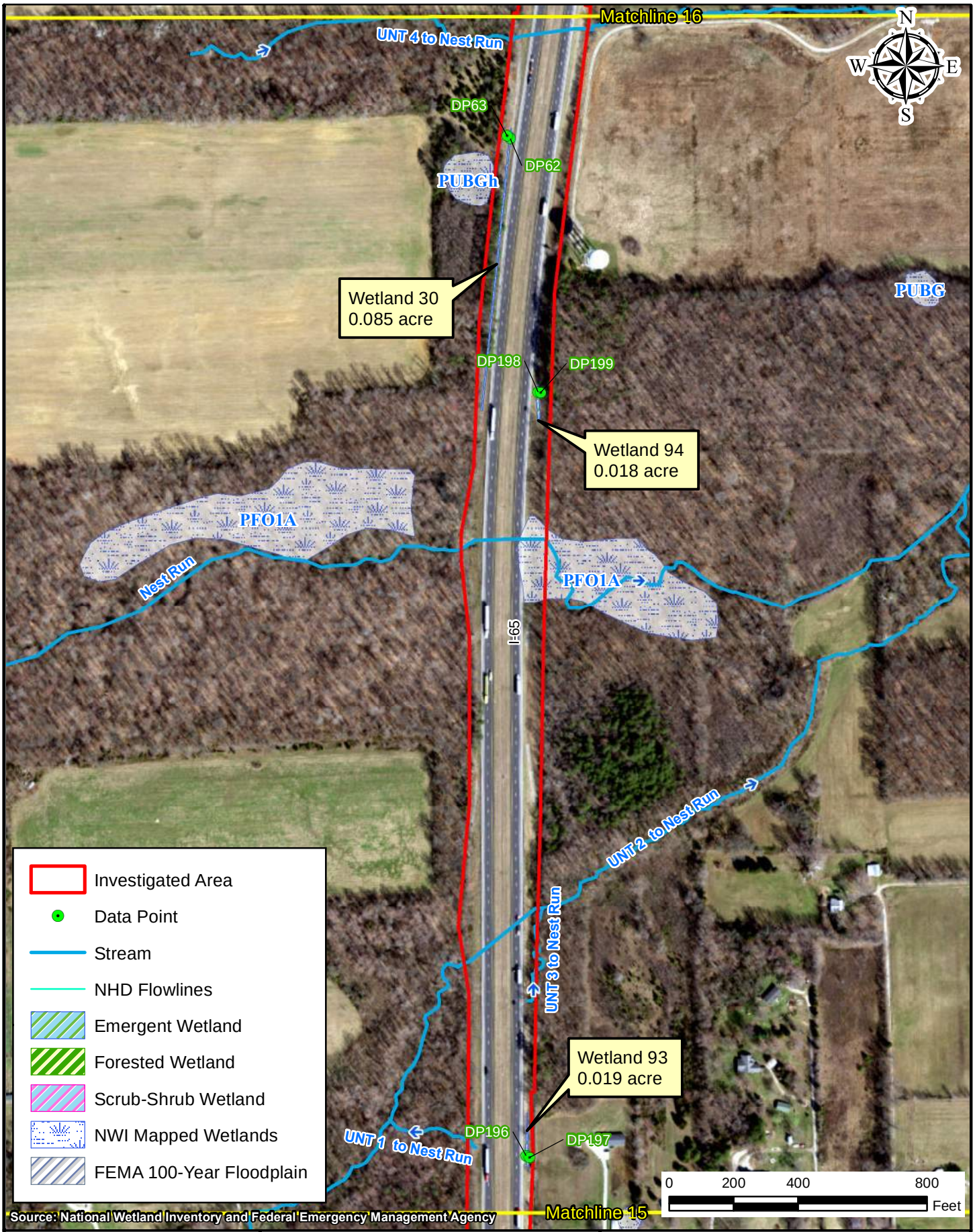
Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

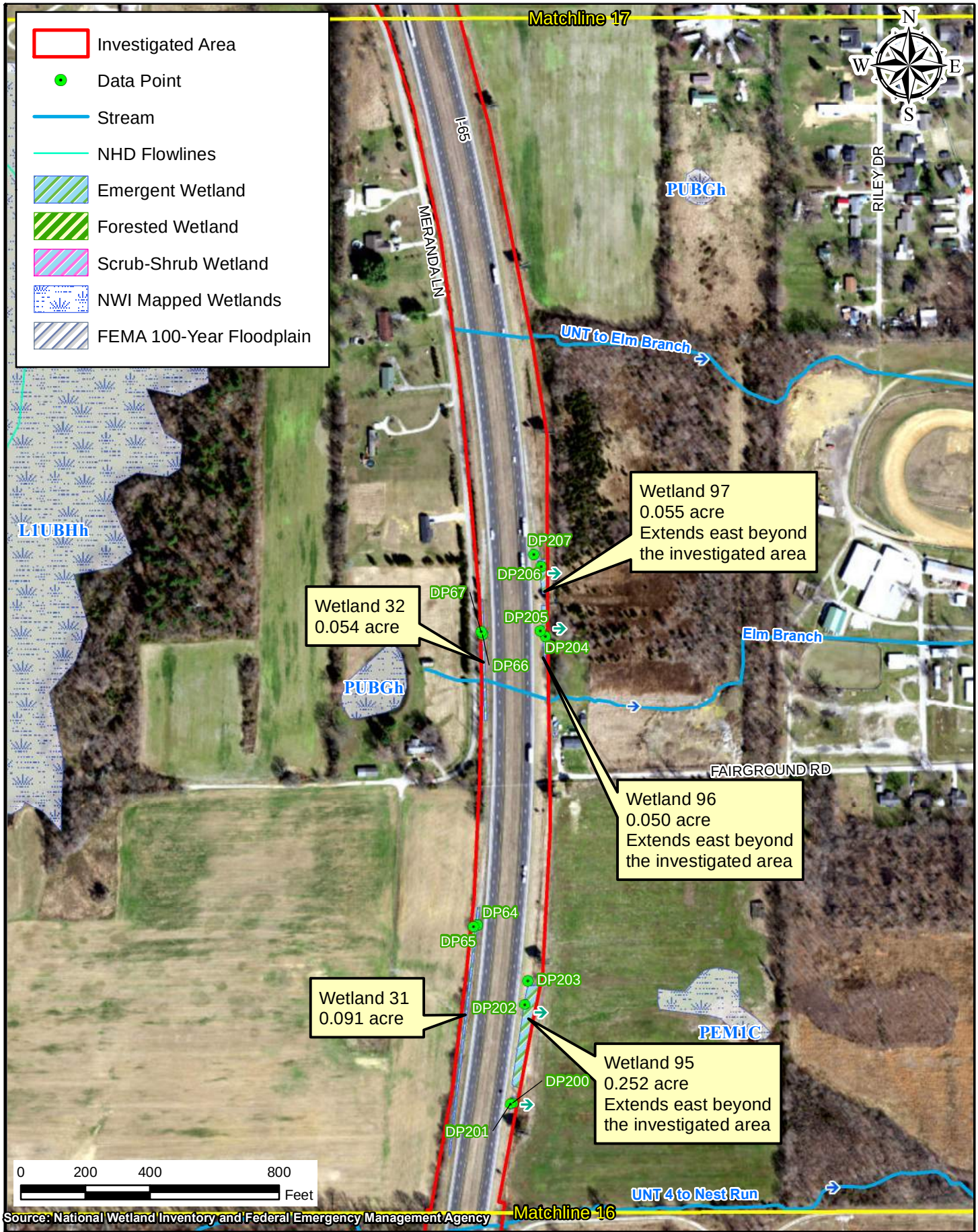
Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 16 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 17 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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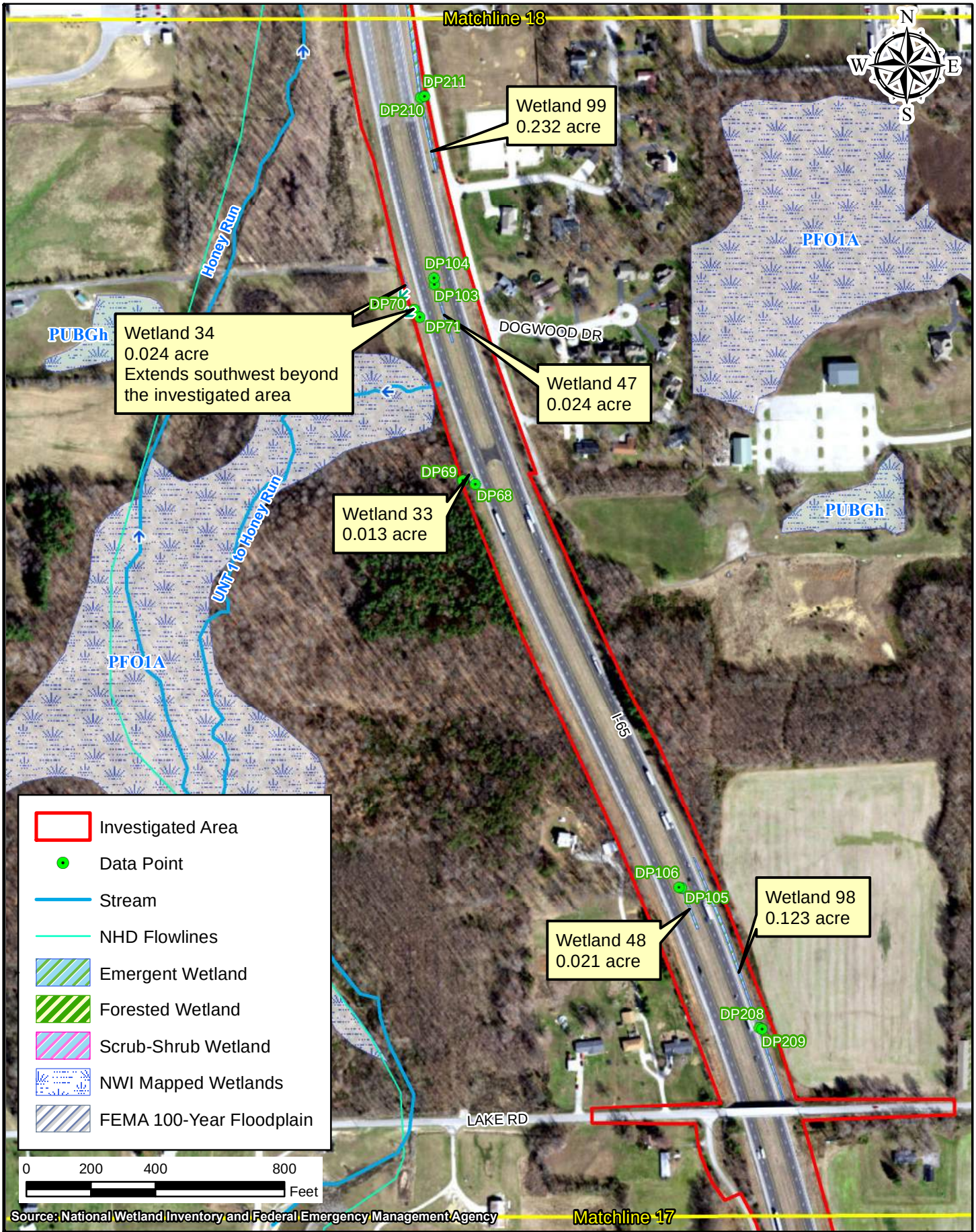
Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

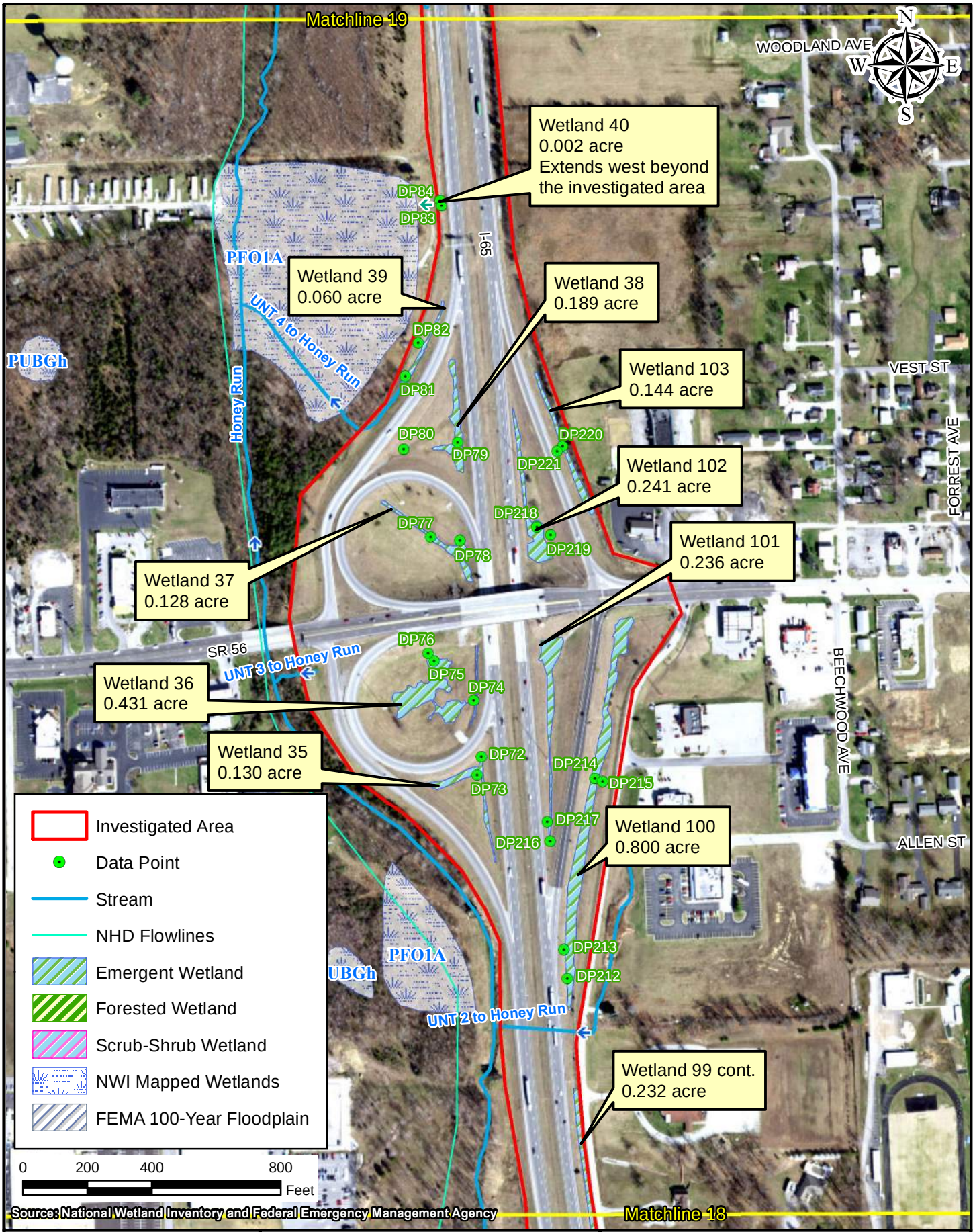
Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 18 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 19 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

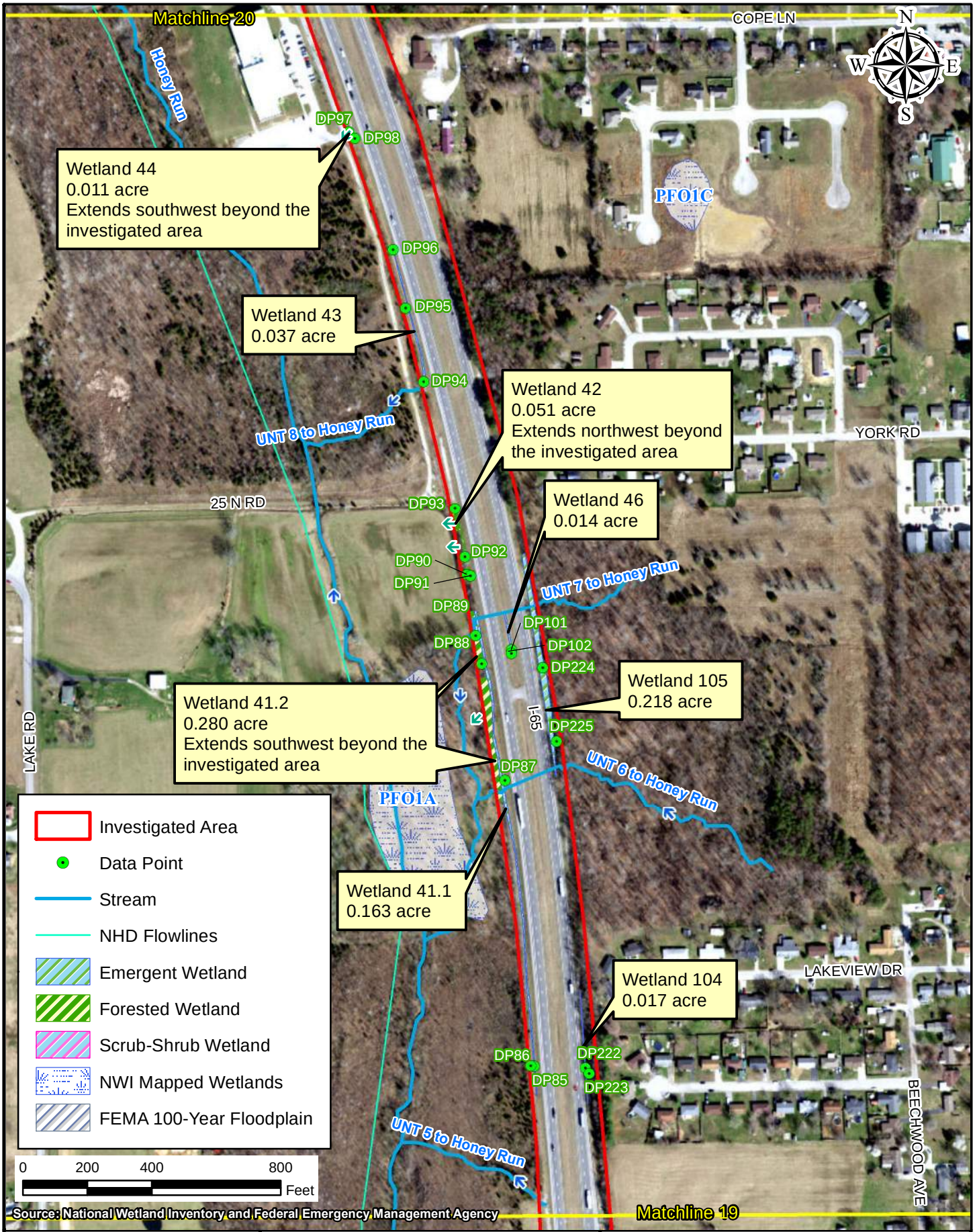

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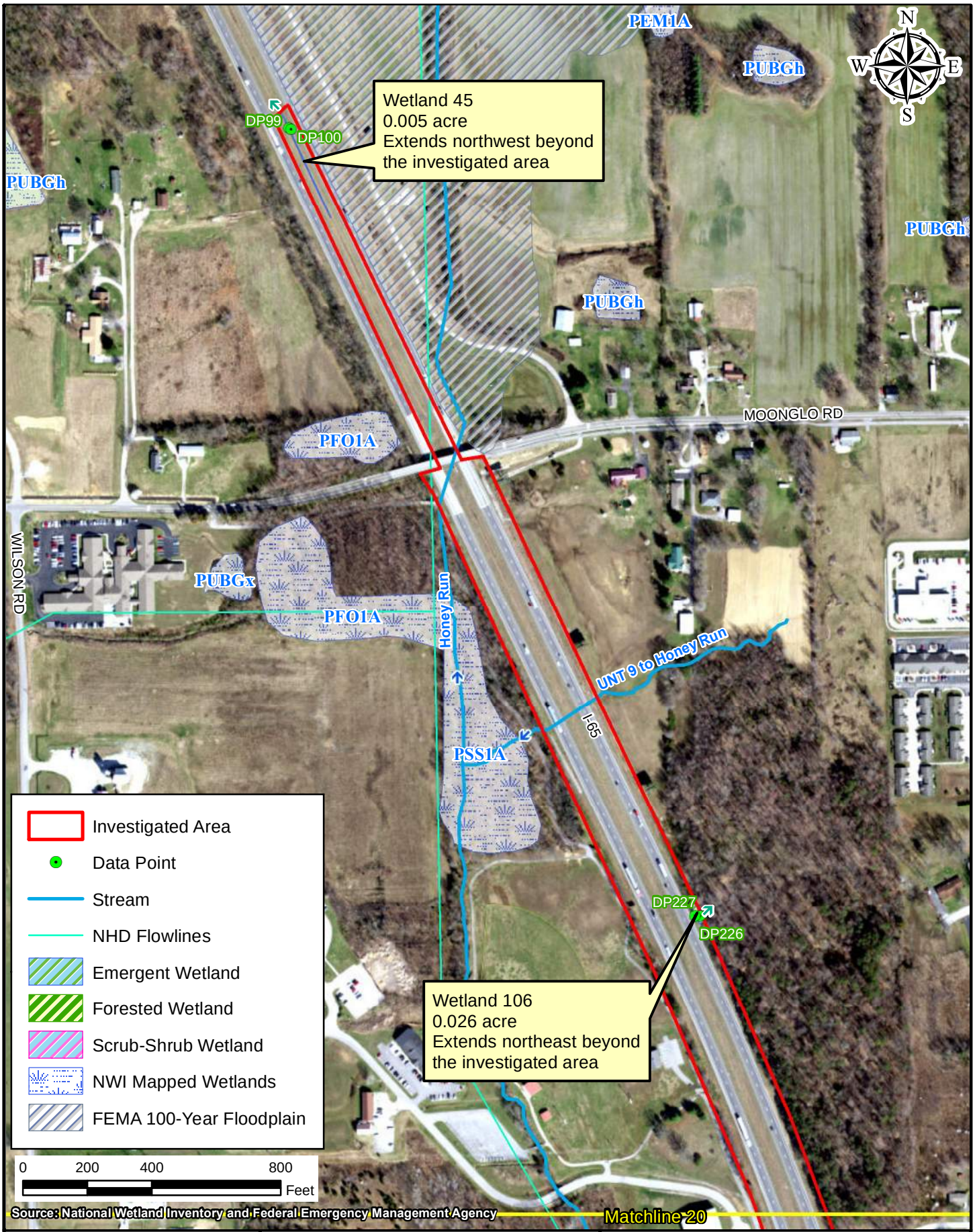
Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 20 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

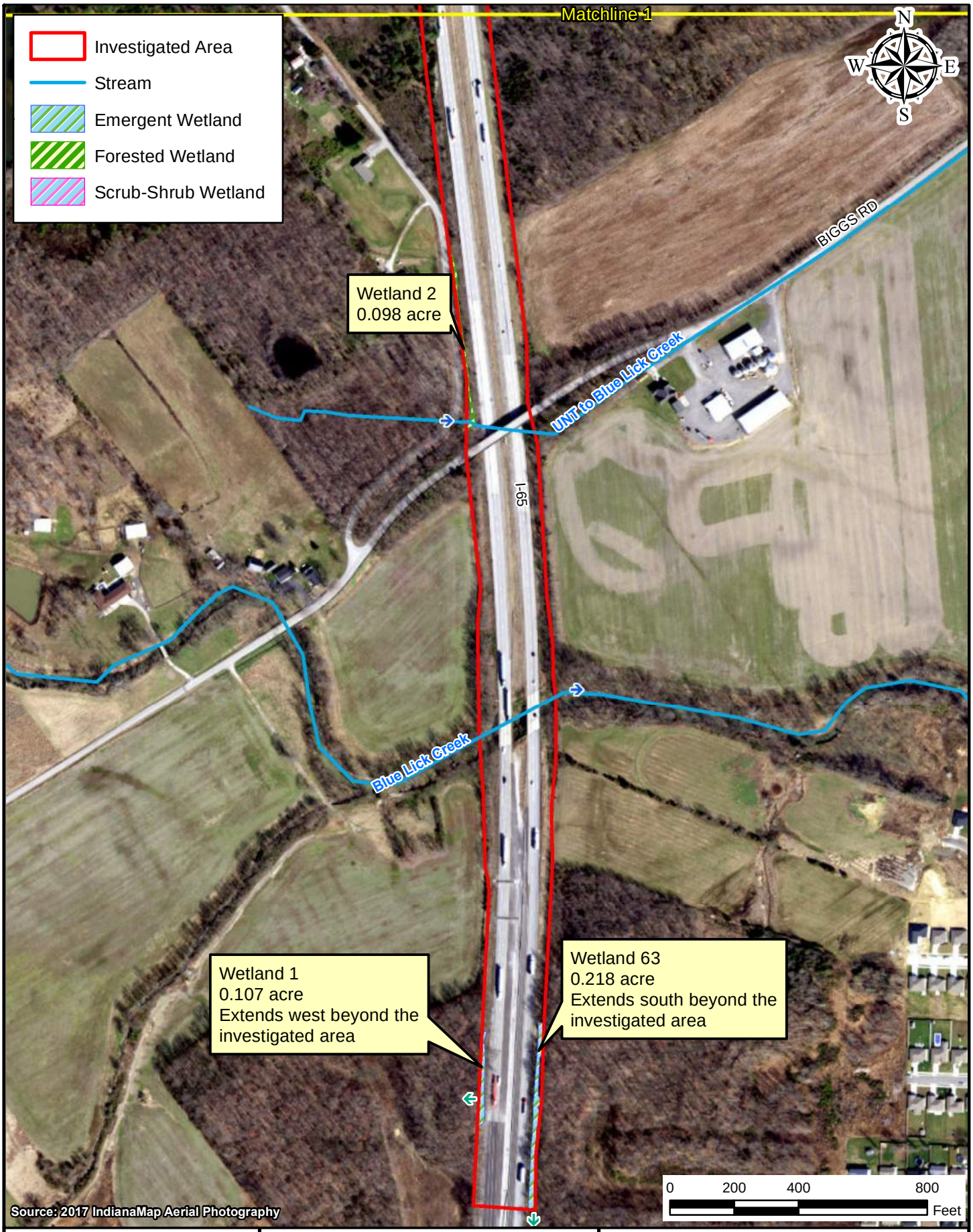
Figure 4: NWI Wetland & FEMA 100-Year Floodplain - Map 21 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

Appendix D



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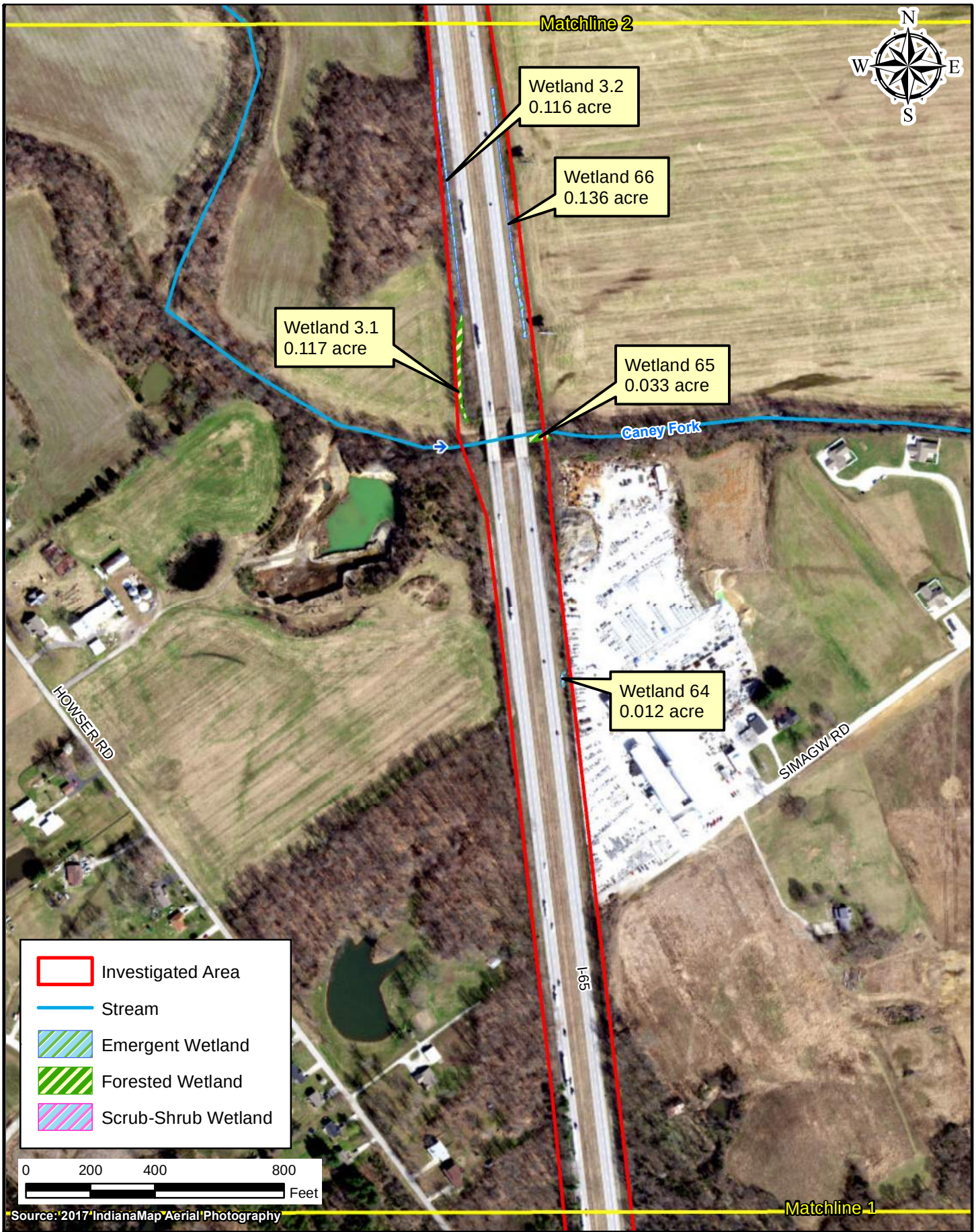
AMERICAN STRUCTUREPOINT INC.

Figure 5: 2017 Aerial Photography
Map 1 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 5: 2017 Aerial Photography
Map 2 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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Attachment 14-1

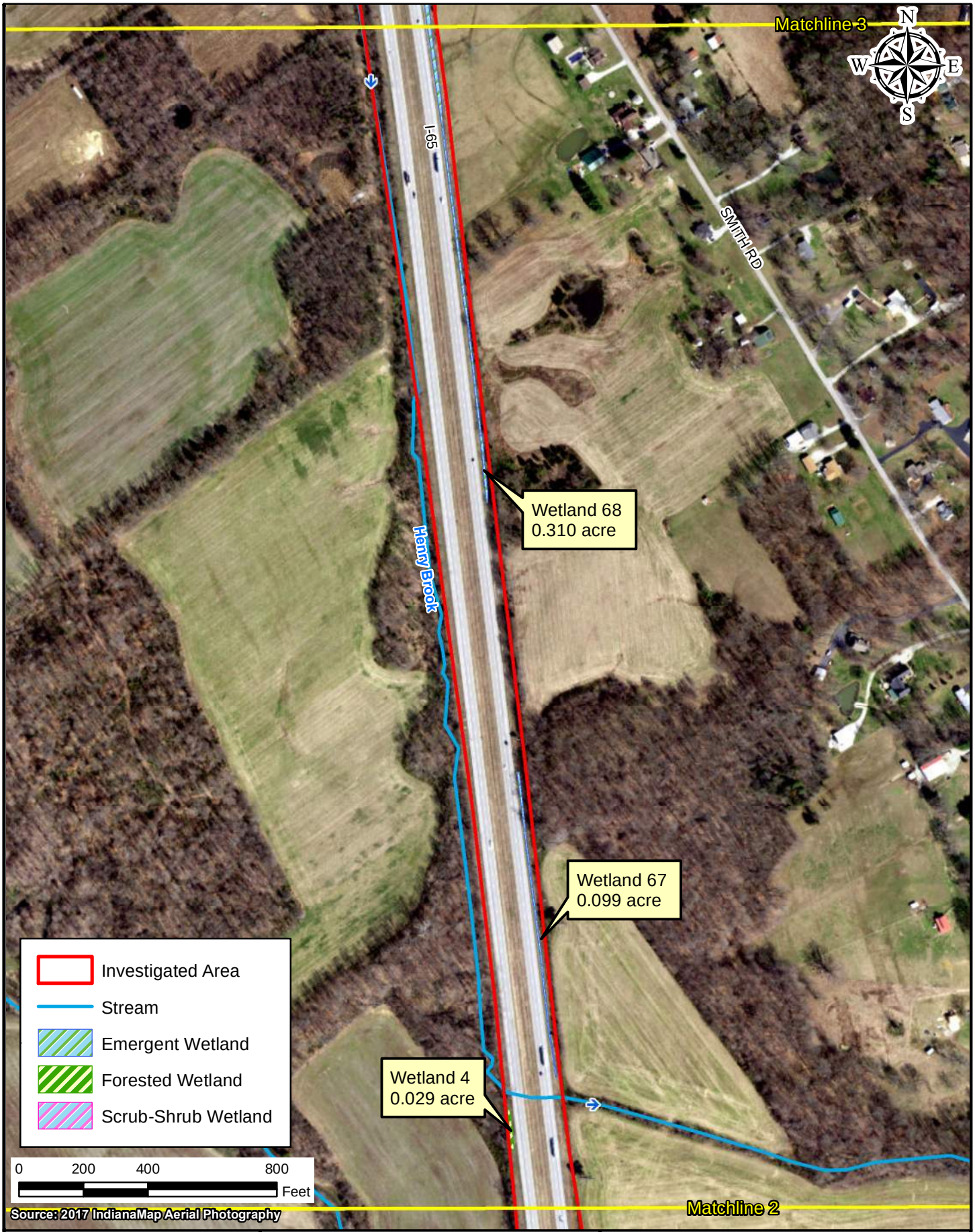

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Figure 5: 2017 Aerial Photography
Map 3 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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Attachment 14-1

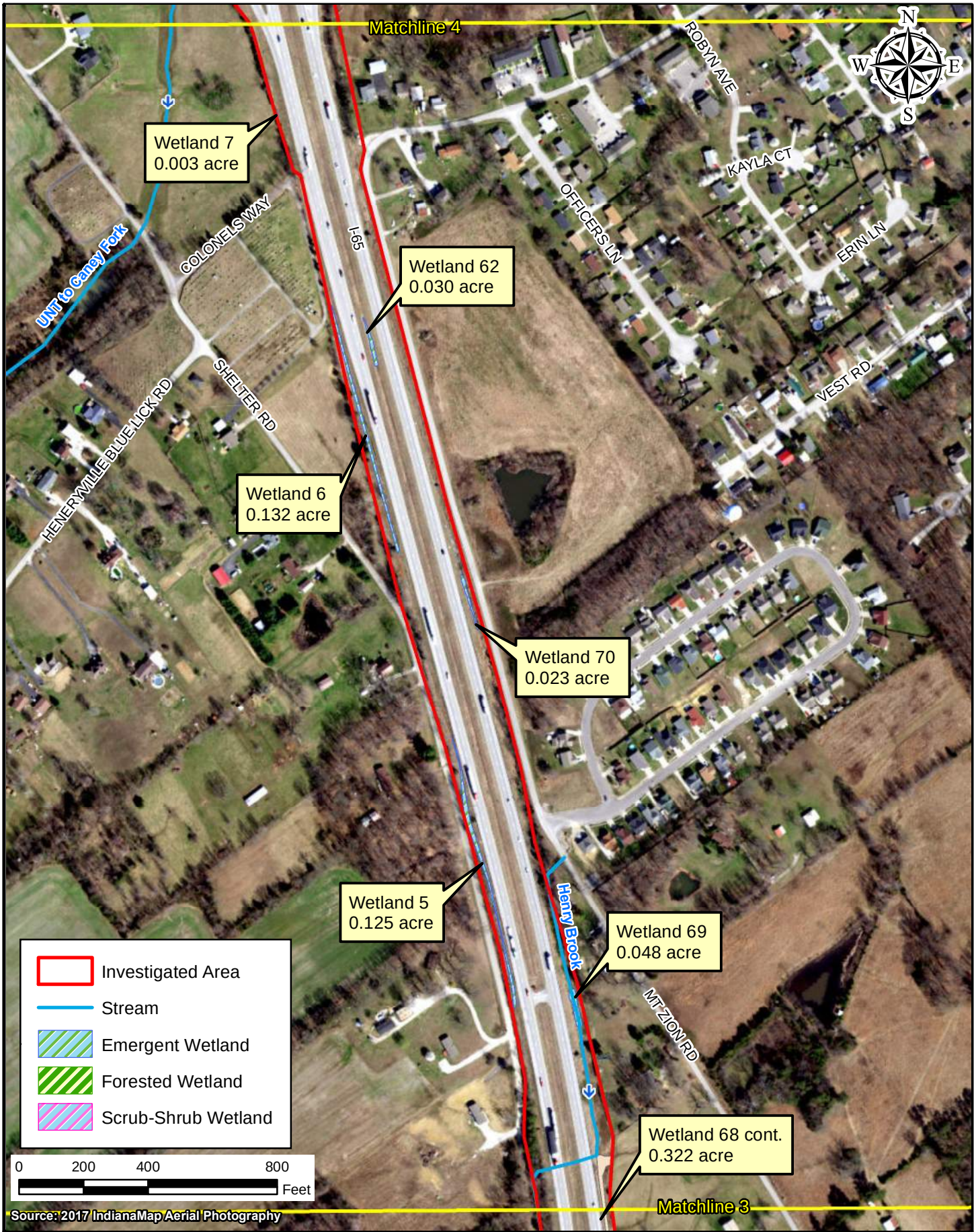

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Figure 5: 2017 Aerial Photography
Map 4 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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Attachment 14-1

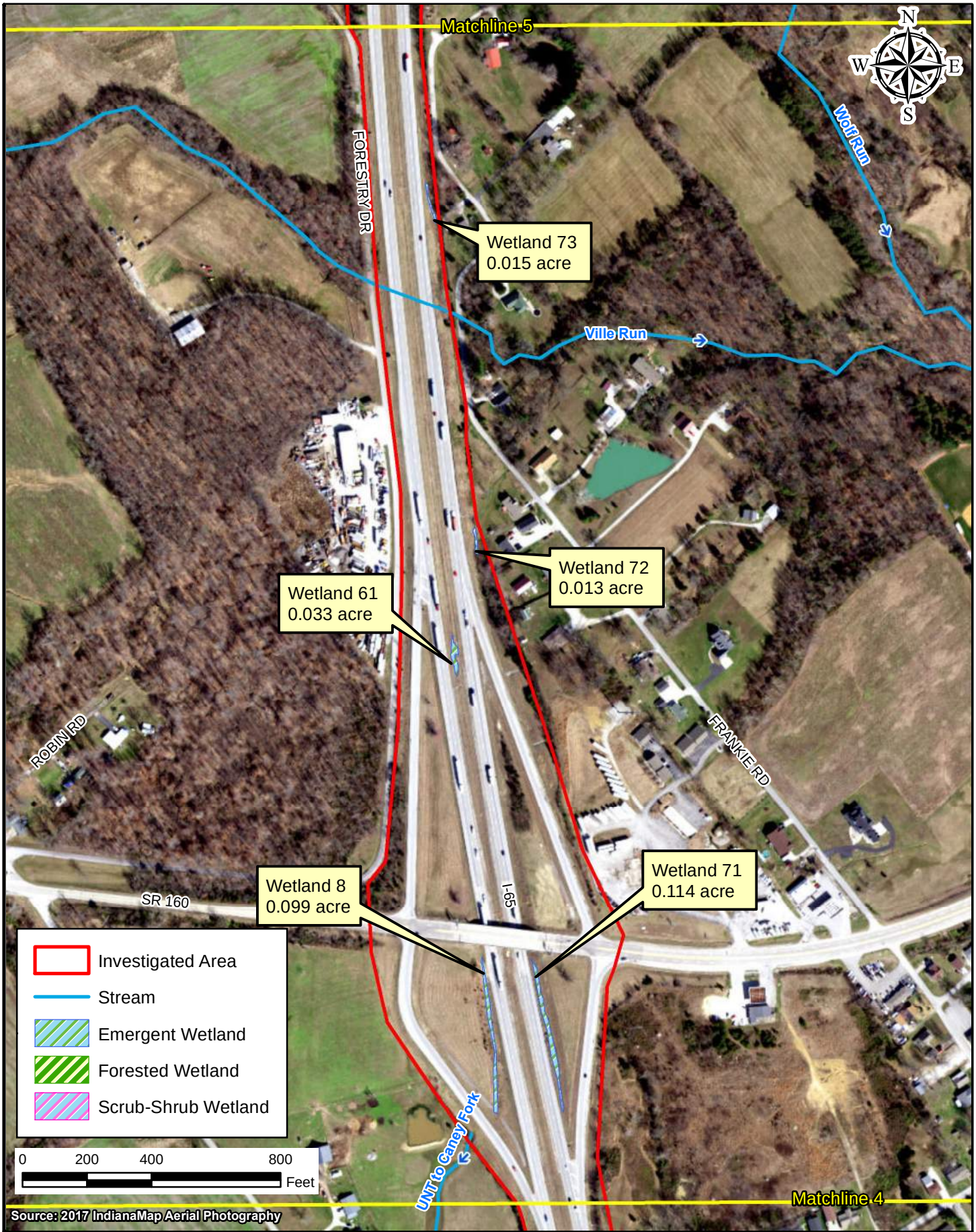

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Figure 5: 2017 Aerial Photography
Map 5 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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Appendix D

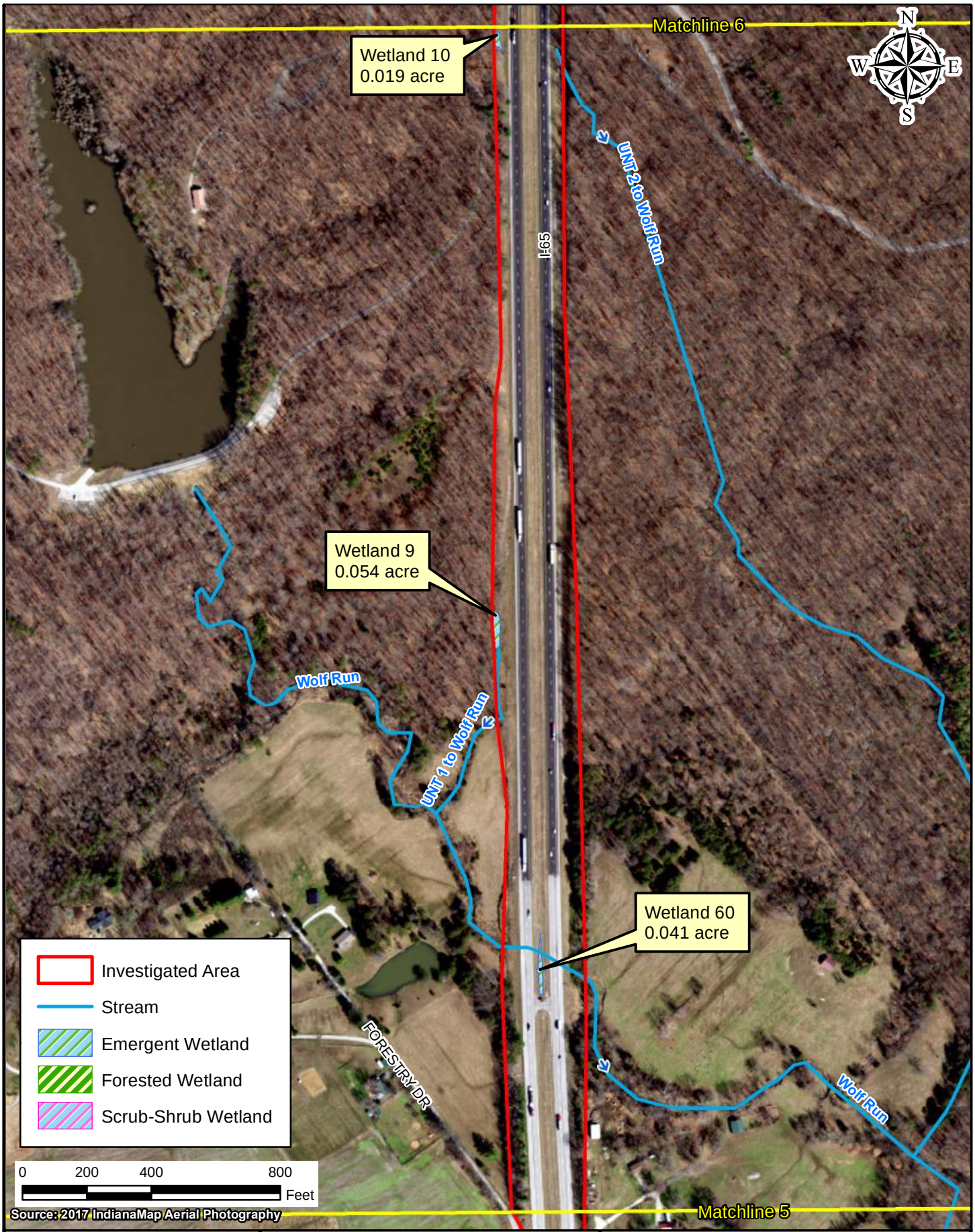

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Figure 5: 2017 Aerial Photography
Map 6 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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Attachment 14-1

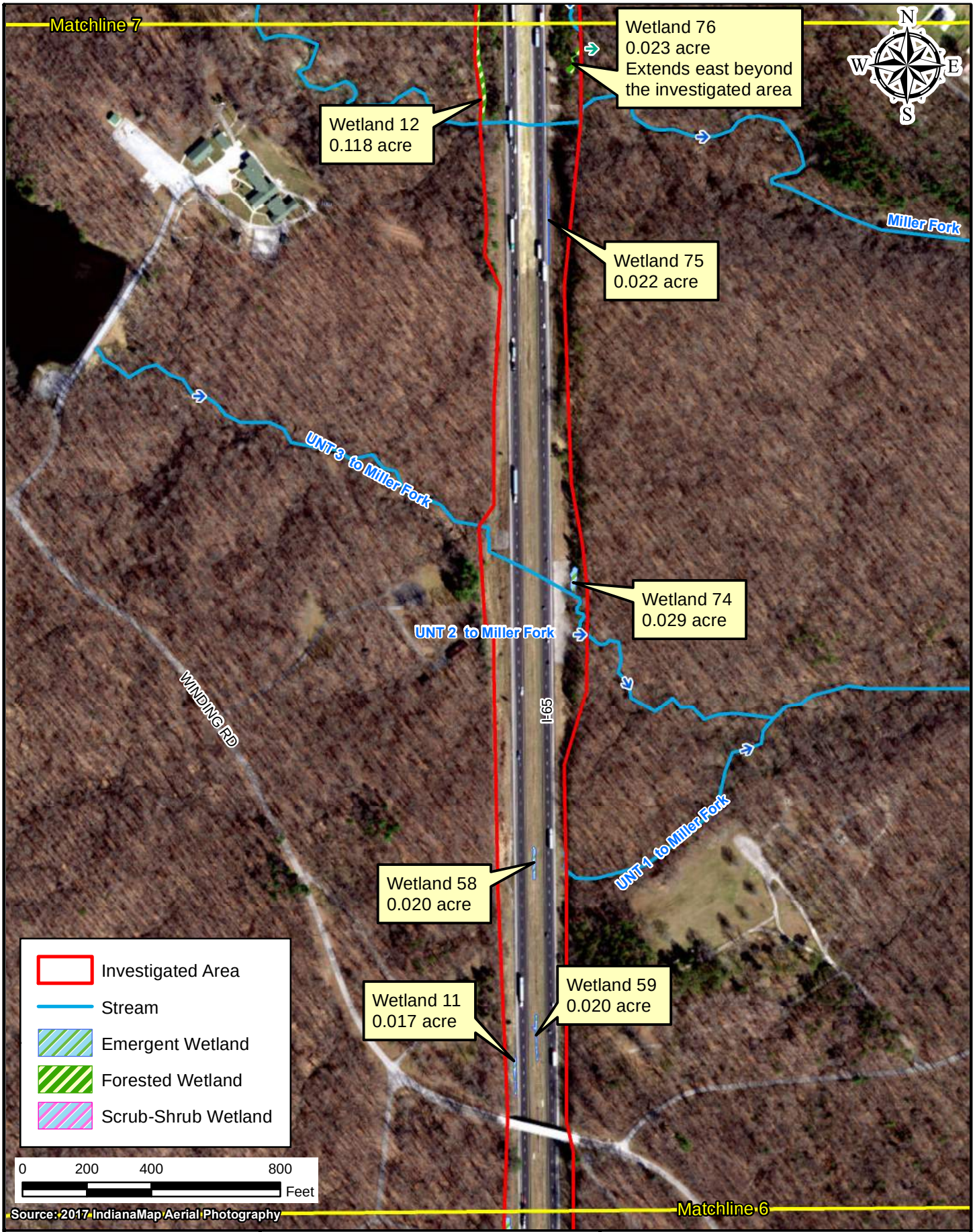

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Figure 5: 2017 Aerial Photography
Map 7 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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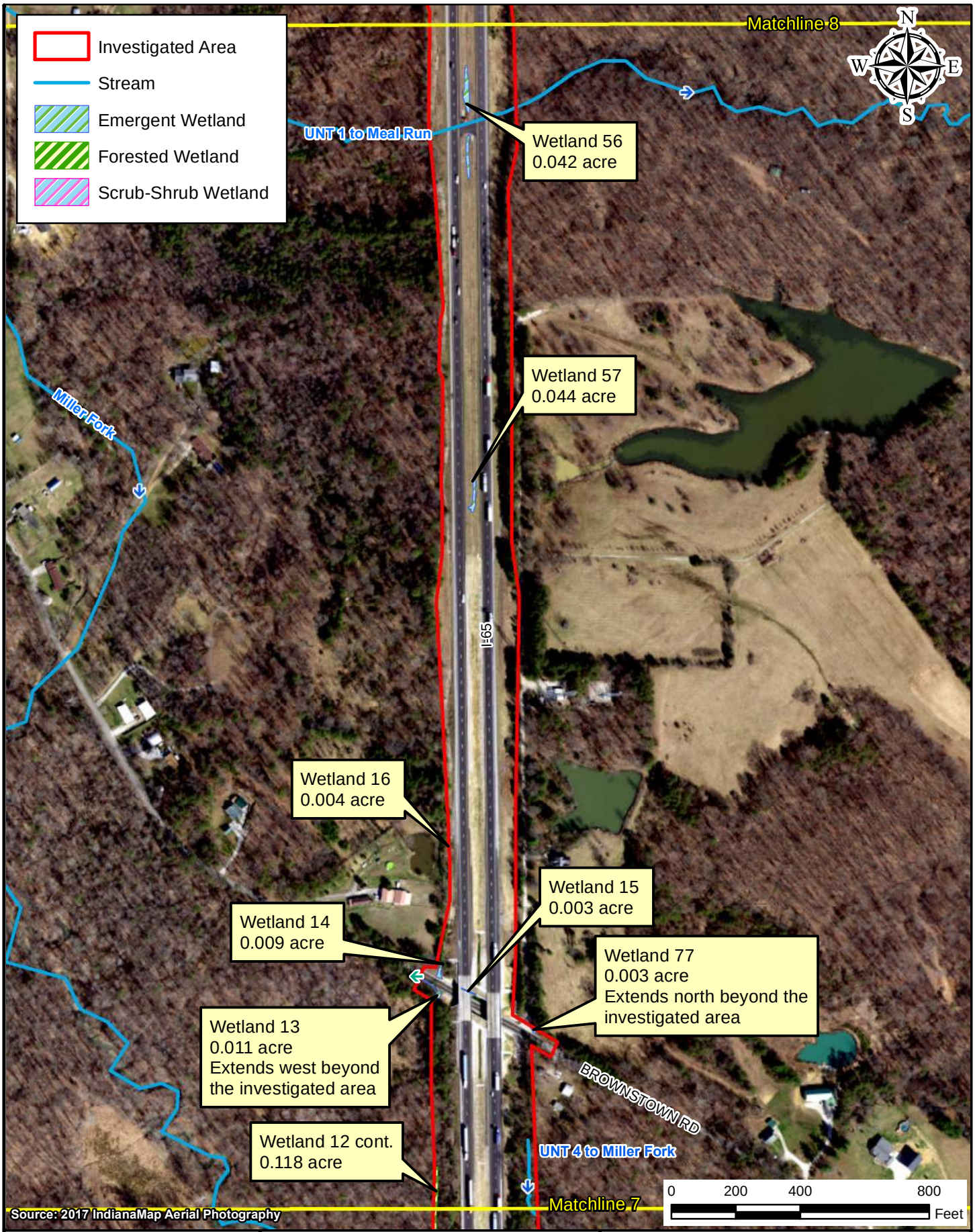

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Figure 5: 2017 Aerial Photography
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INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
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Date: 11/12/2020 State: Indiana

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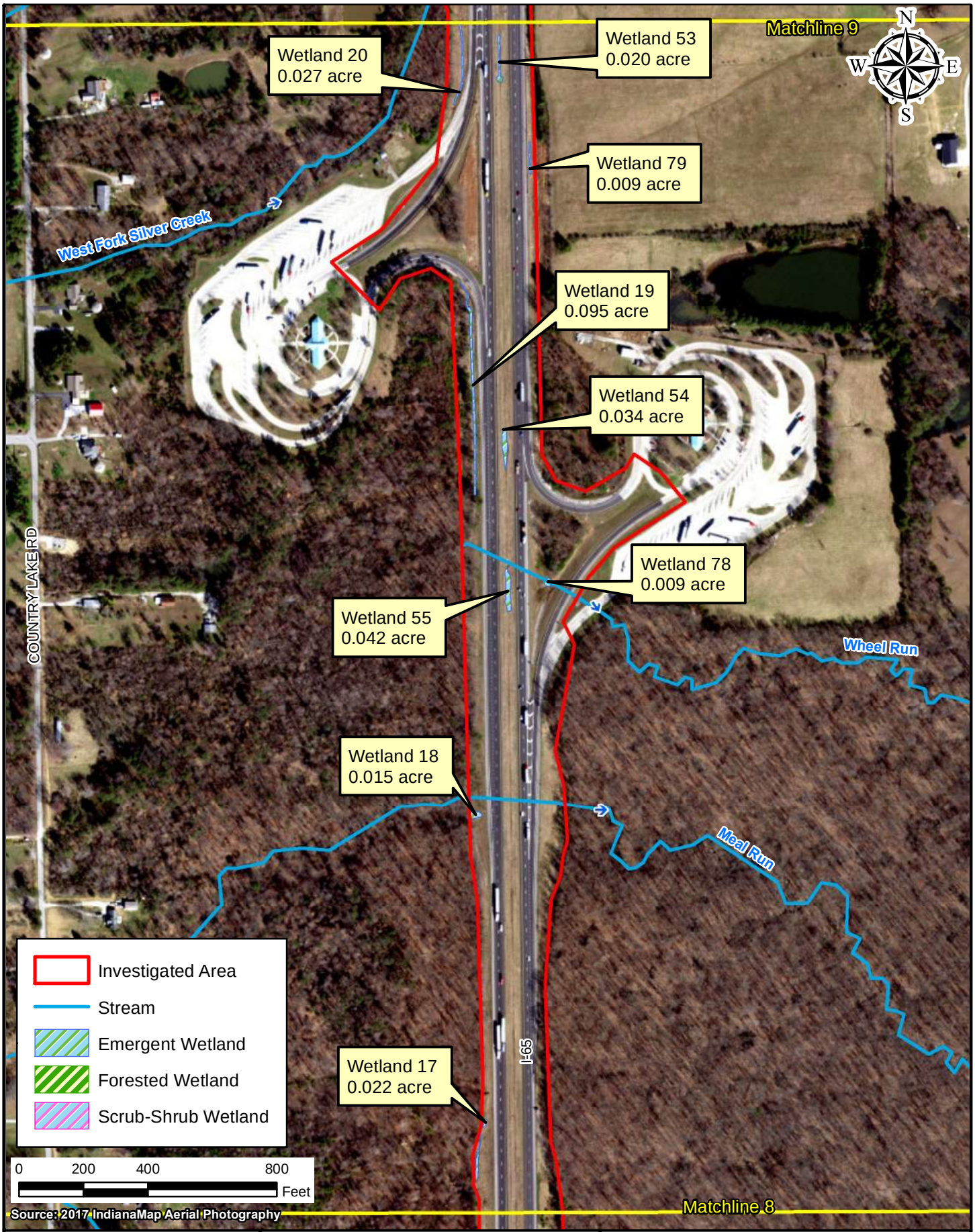

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Figure 5: 2017 Aerial Photography
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INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Des. No. 1700135
Location: Scottsburg and Henryville
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County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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Appendix D

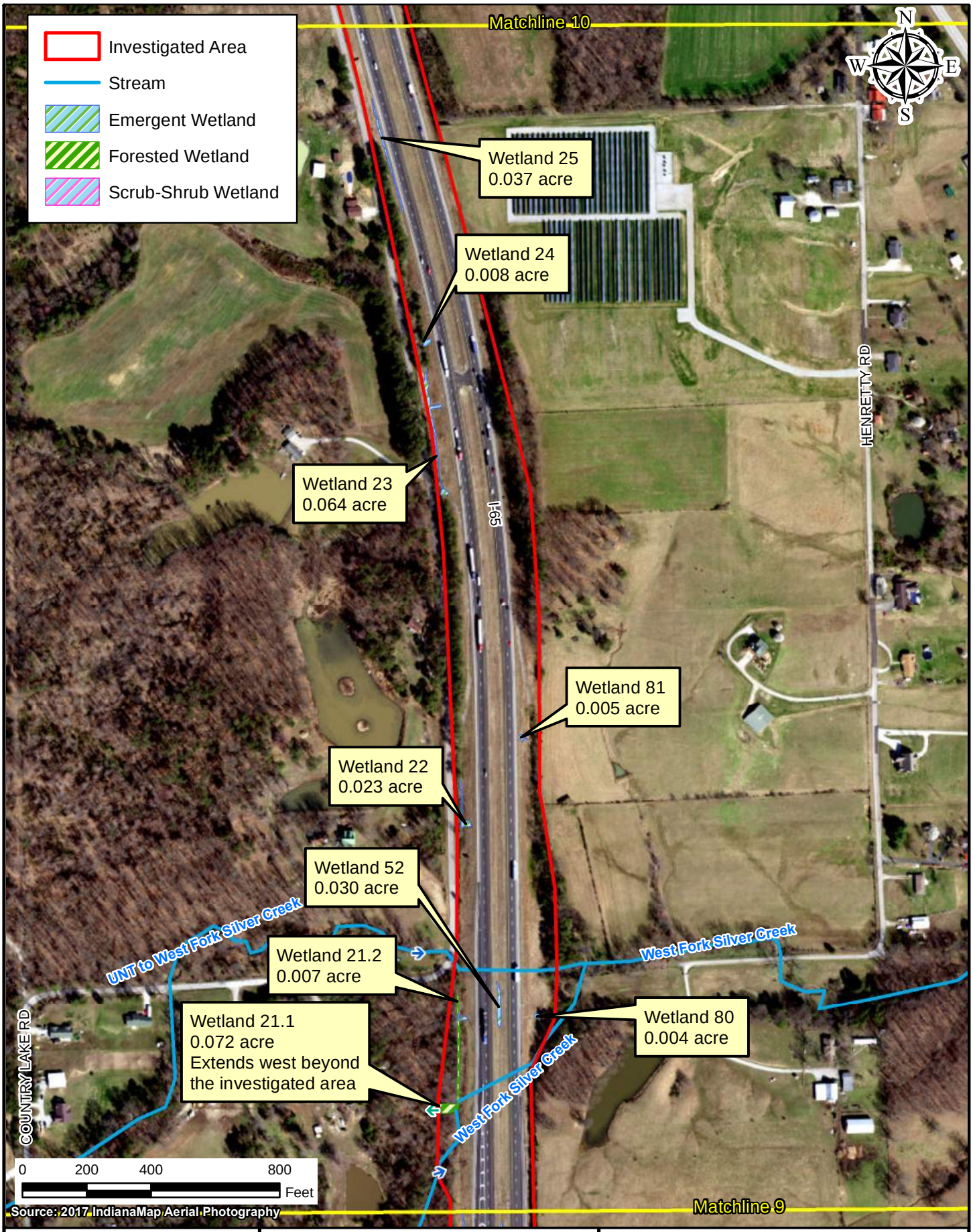

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Figure 5: 2017 Aerial Photography
Map 10 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

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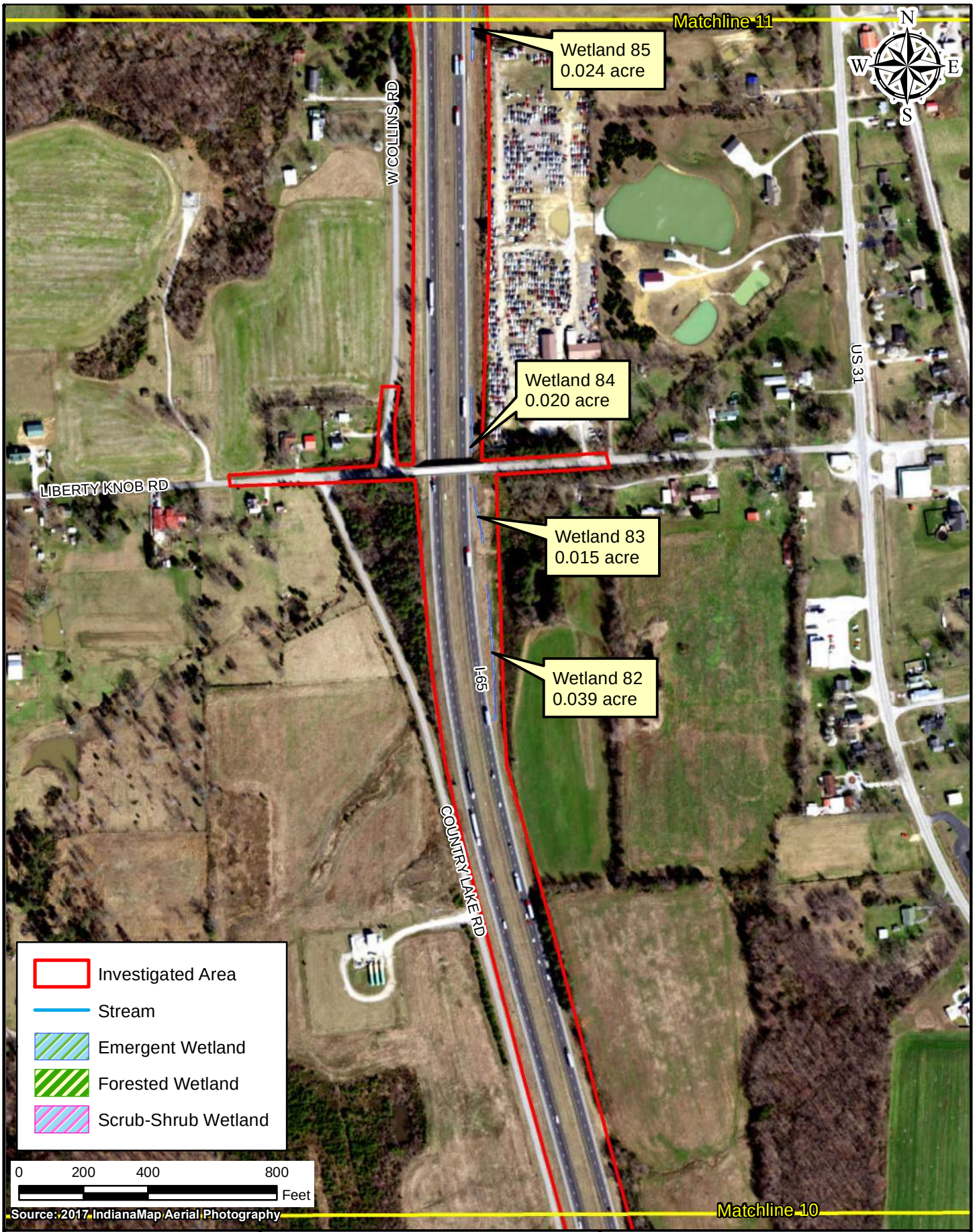

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Figure 5: 2017 Aerial Photography
Map 11 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

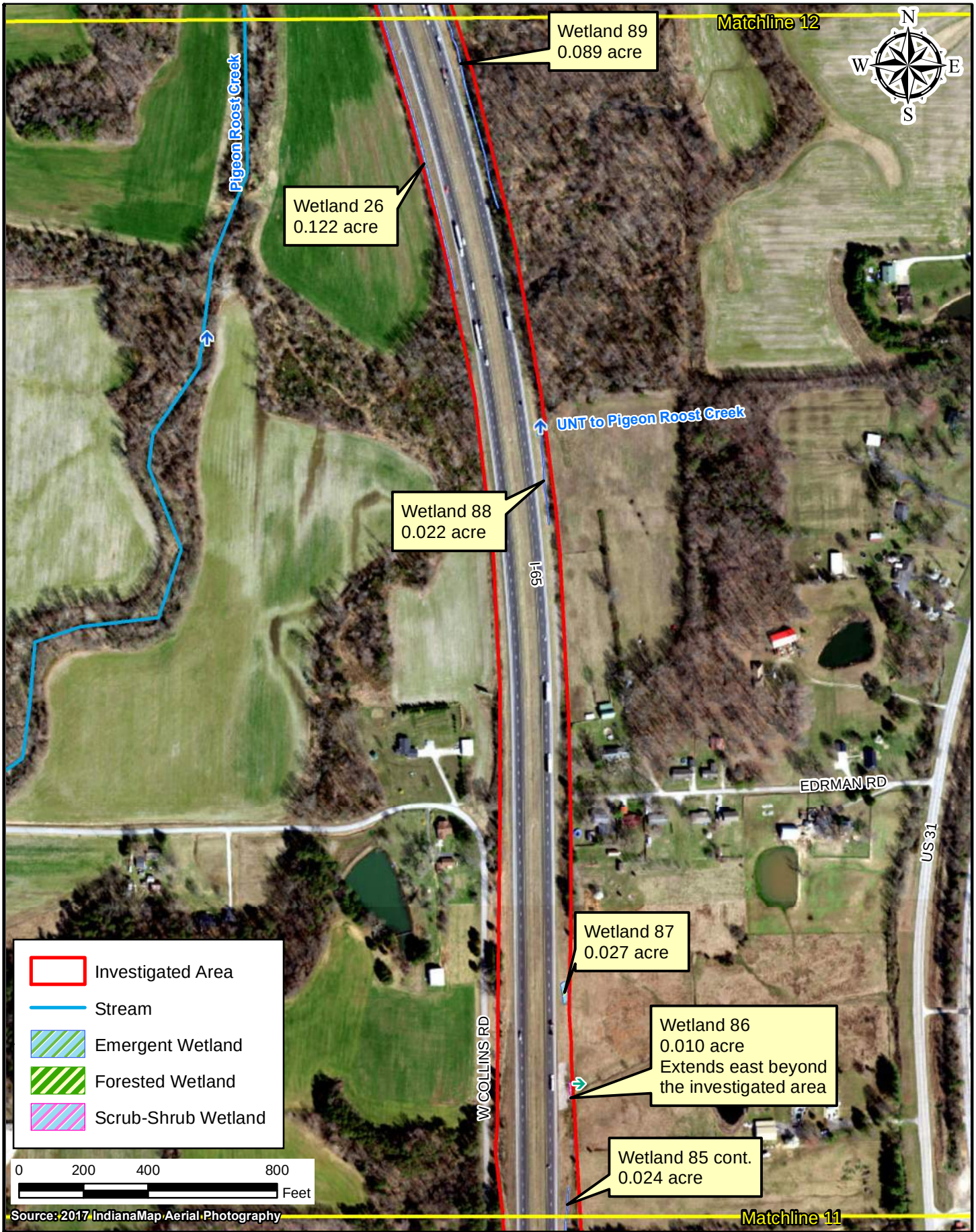

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Figure 5: 2017 Aerial Photography
Map 12 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
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Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1

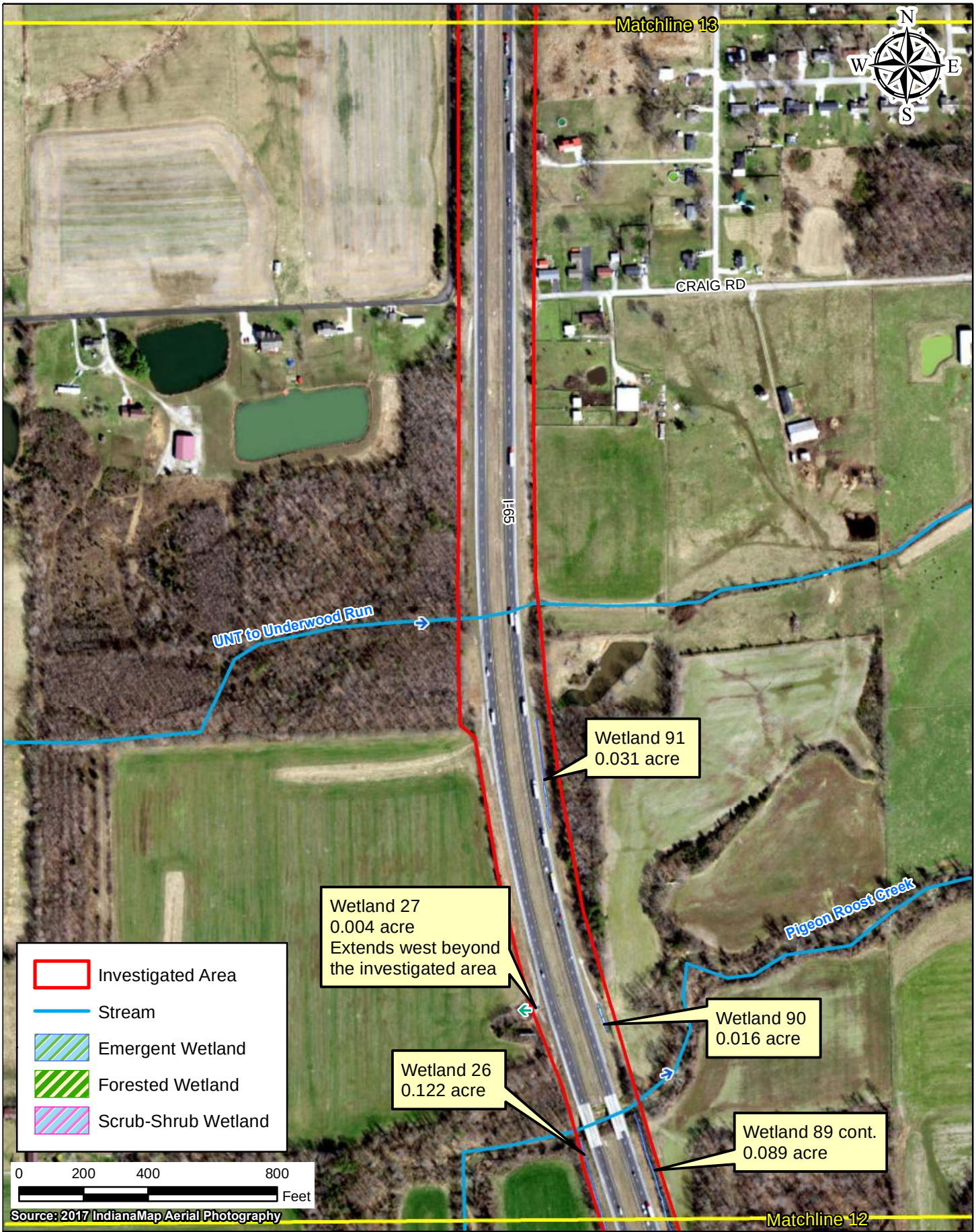

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Figure 5: 2017 Aerial Photography
Map 13 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
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Appendix D

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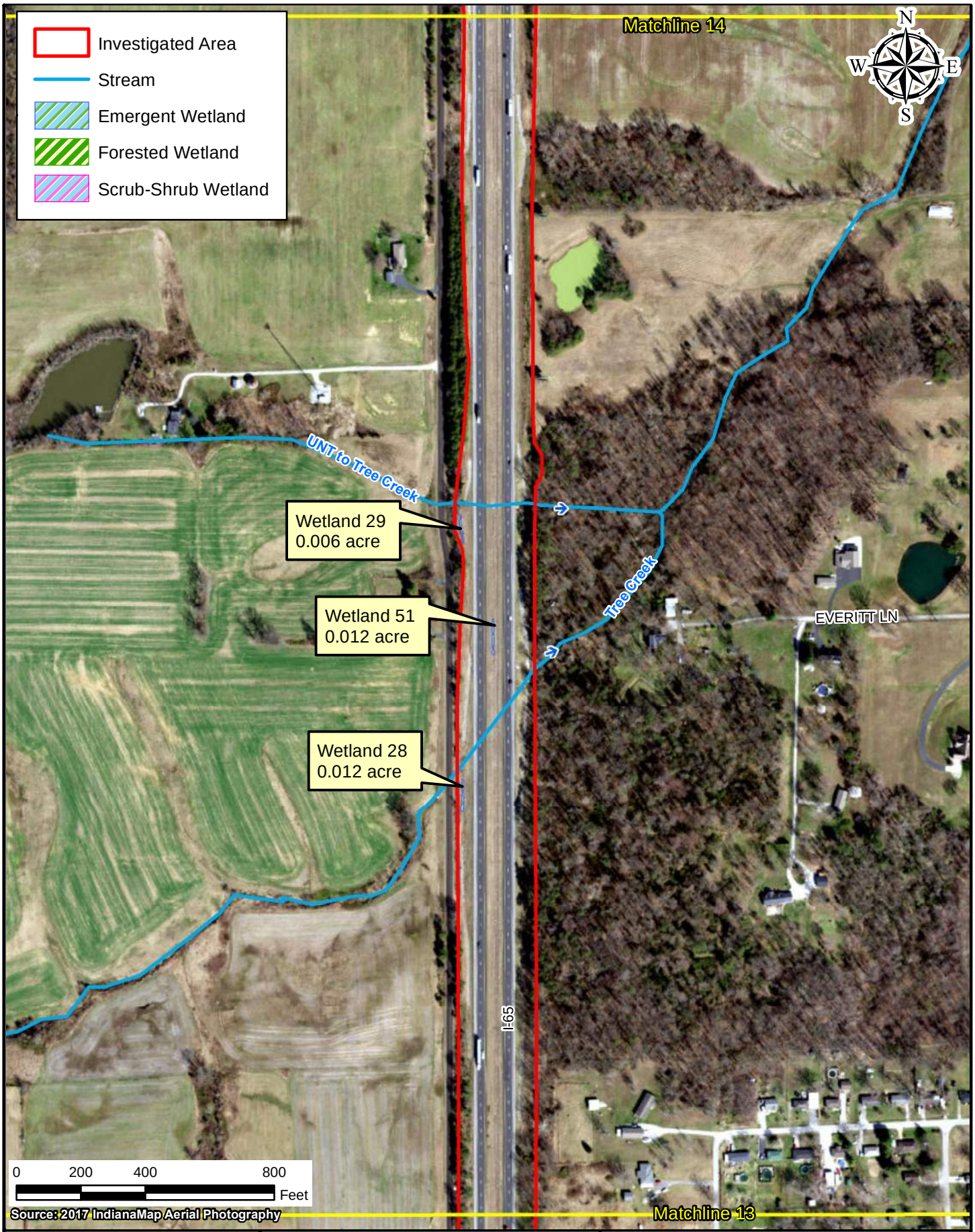

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Figure 5: 2017 Aerial Photography
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INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
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Date: 11/12/2020 State: Indiana

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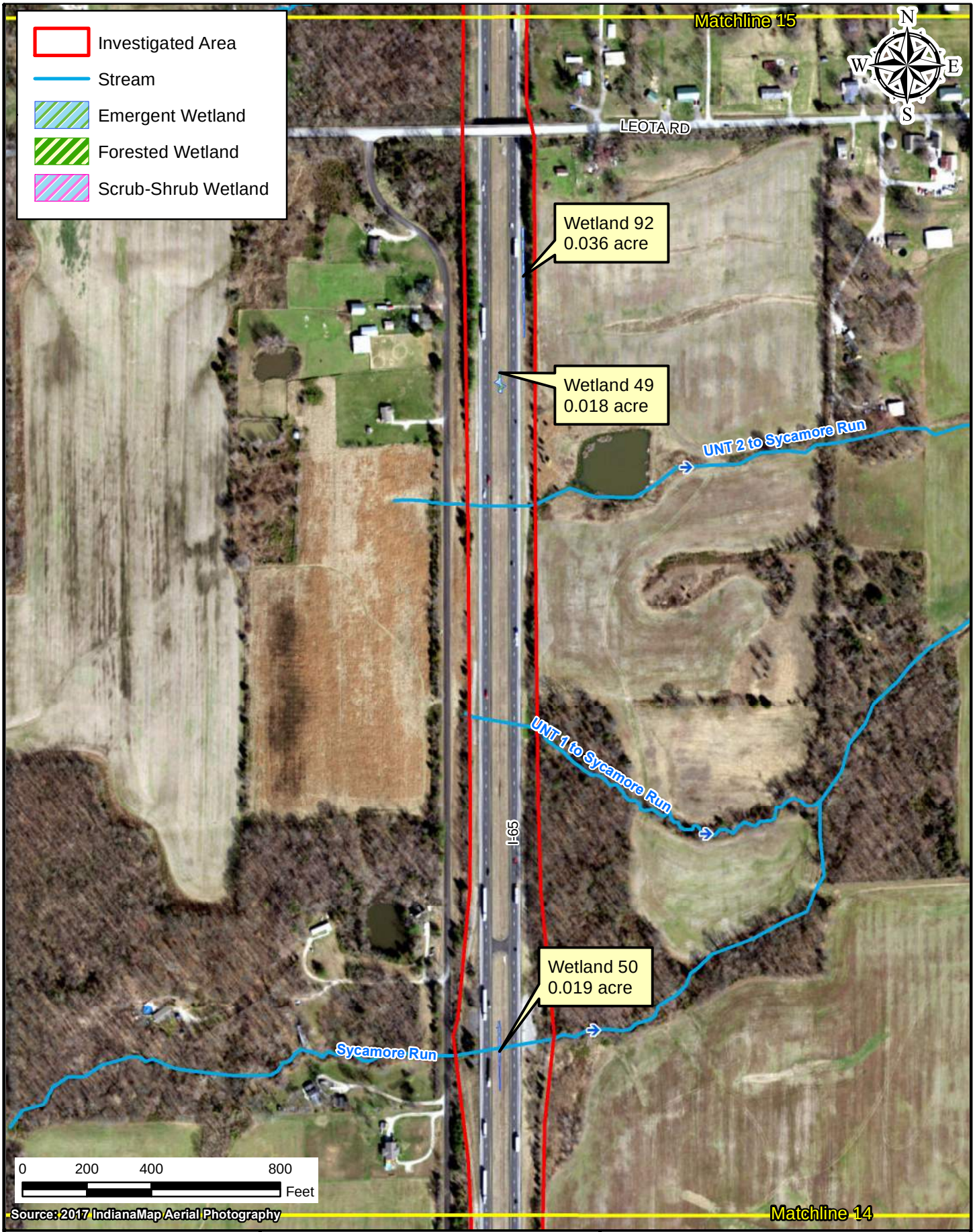

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Figure 5: 2017 Aerial Photography
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INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
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Date: 11/12/2020 State: Indiana

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Attachment 14-1

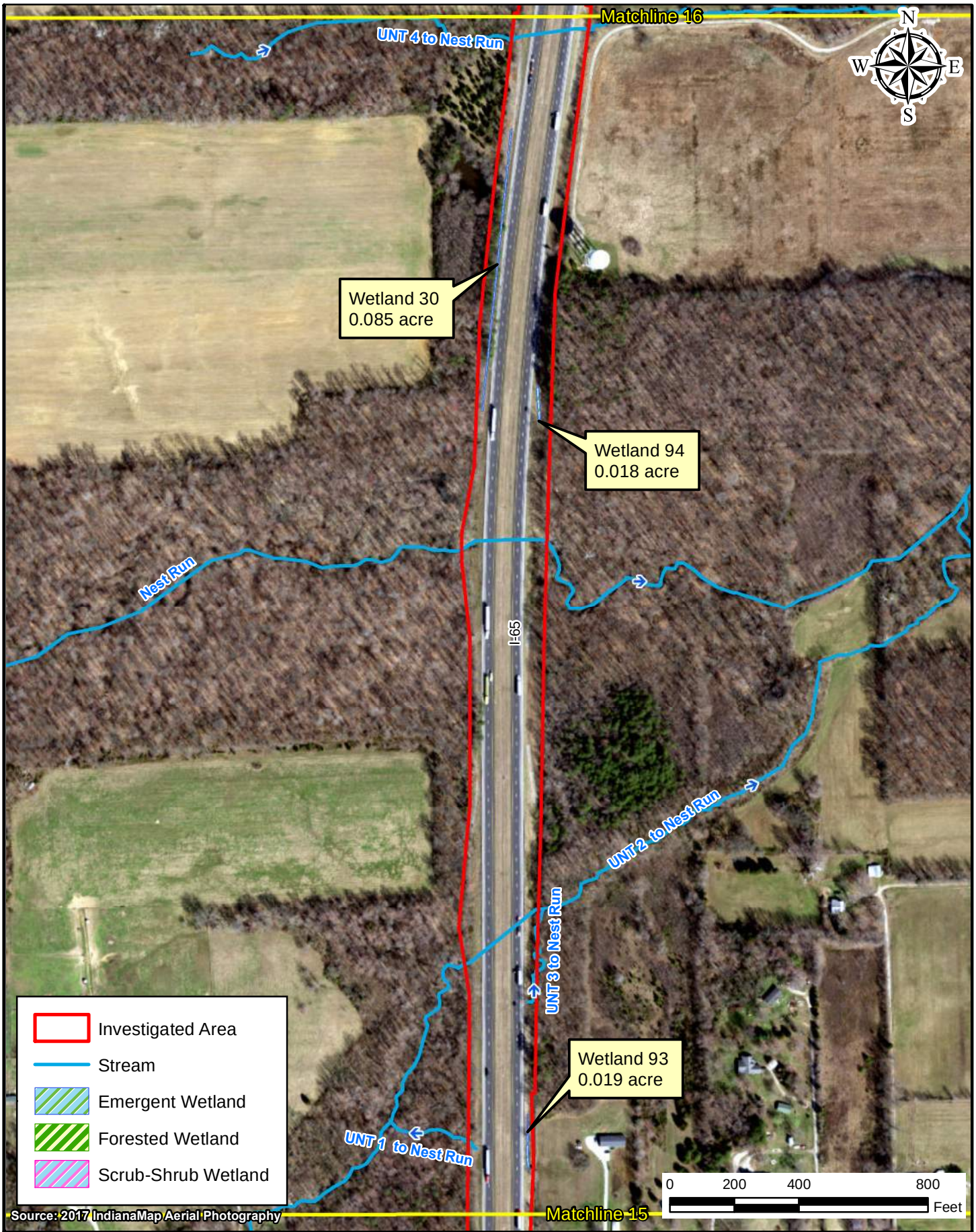

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Figure 5: 2017 Aerial Photography
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INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
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Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 5: 2017 Aerial Photography
Map 17 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

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Des. No. 1700135
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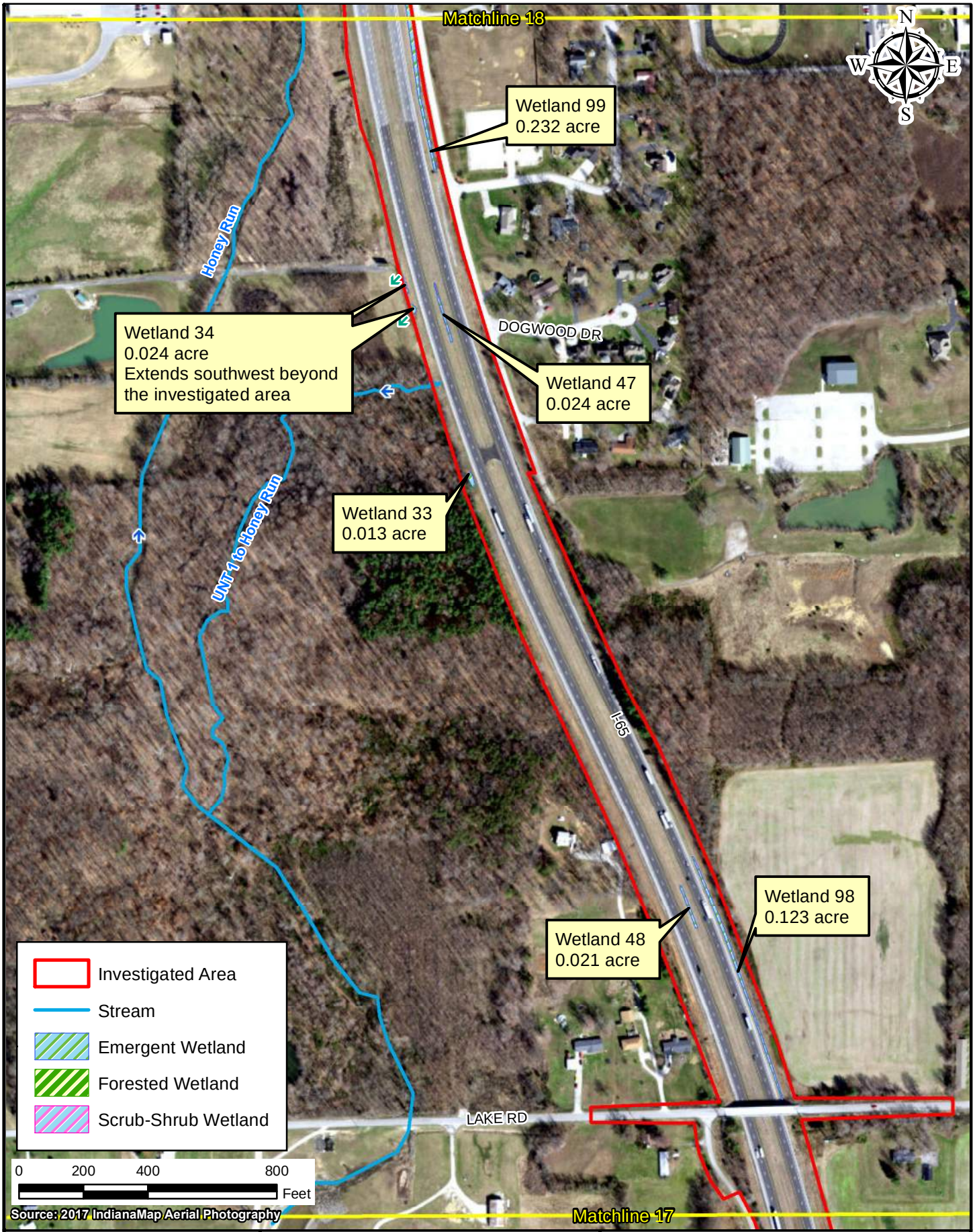
Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

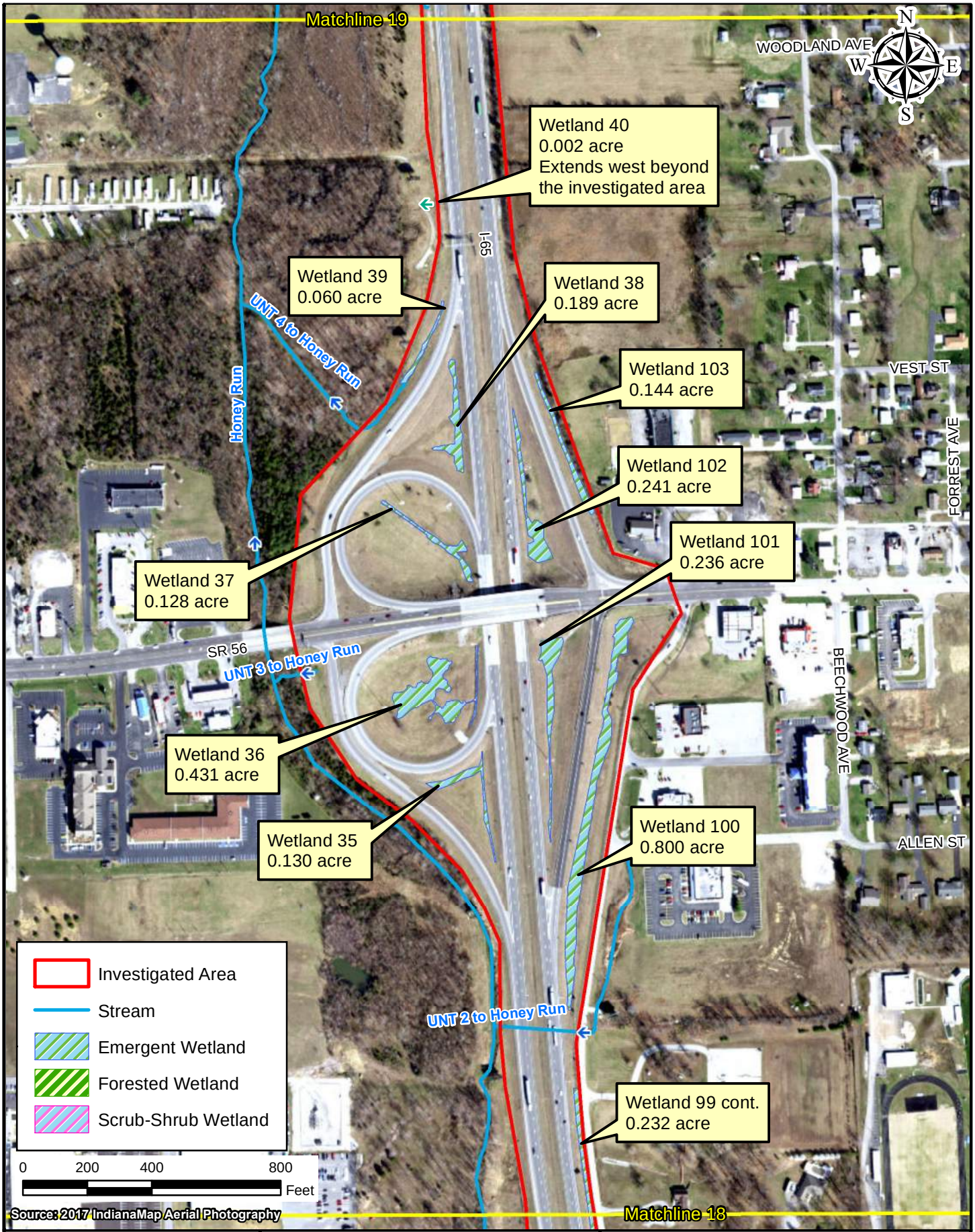
Figure 5: 2017 Aerial Photography
Map 18 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

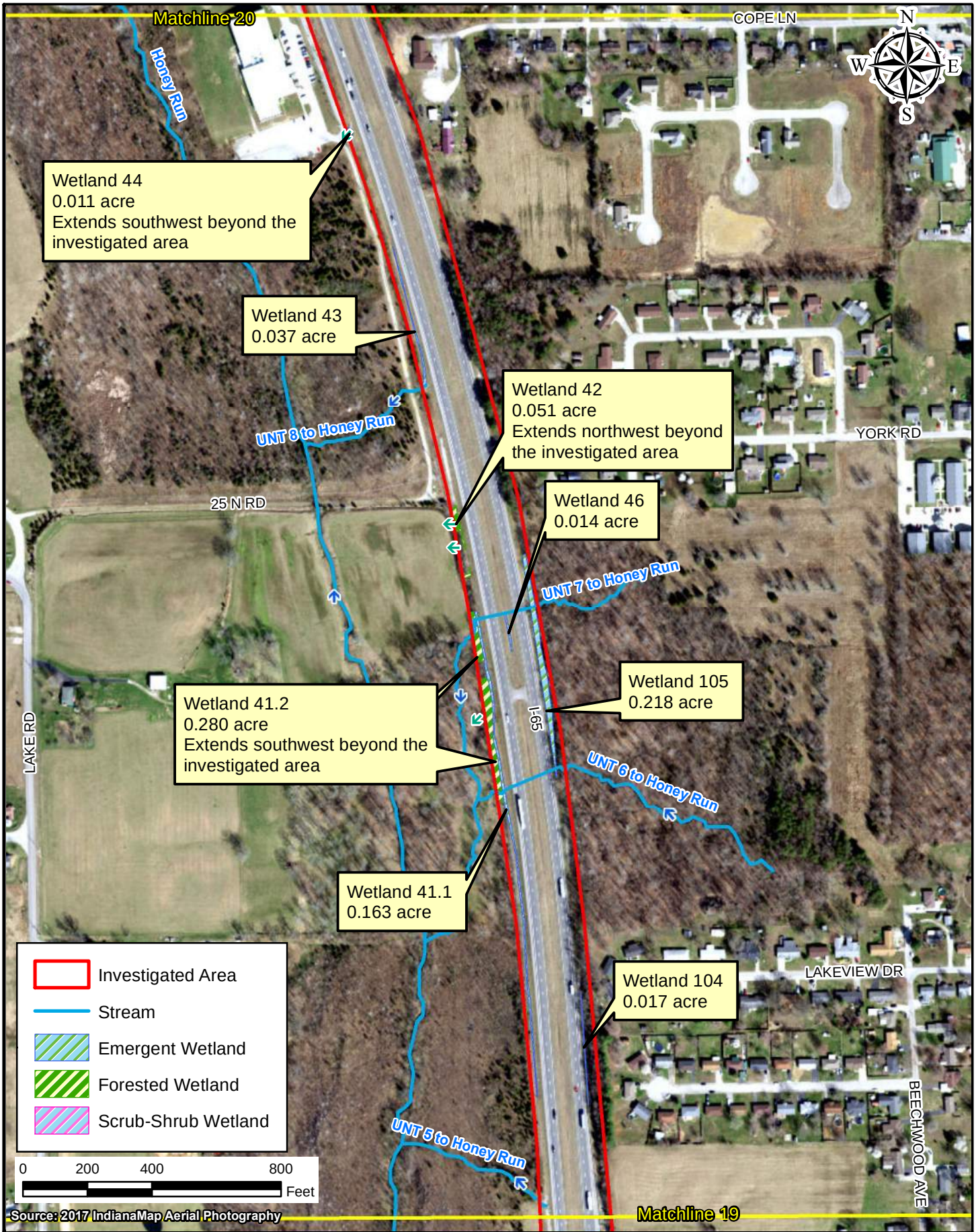
Figure 5: 2017 Aerial Photography
Map 19 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

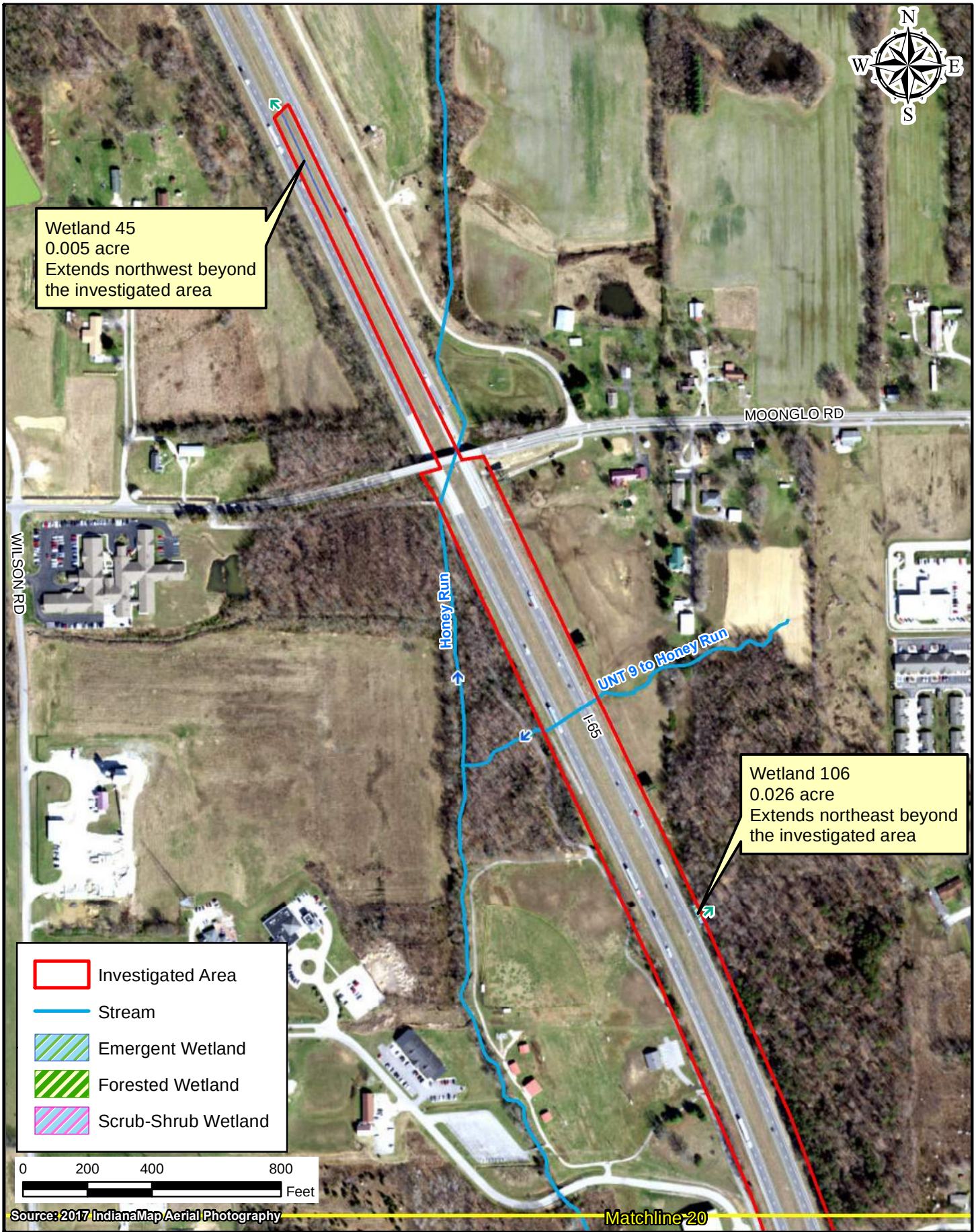
Figure 5: 2017 Aerial Photography
Map 20 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

Appendix D



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AMERICAN STRUCTUREPOINT INC.

Figure 5: 2017 Aerial Photography
Map 21 of 21

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

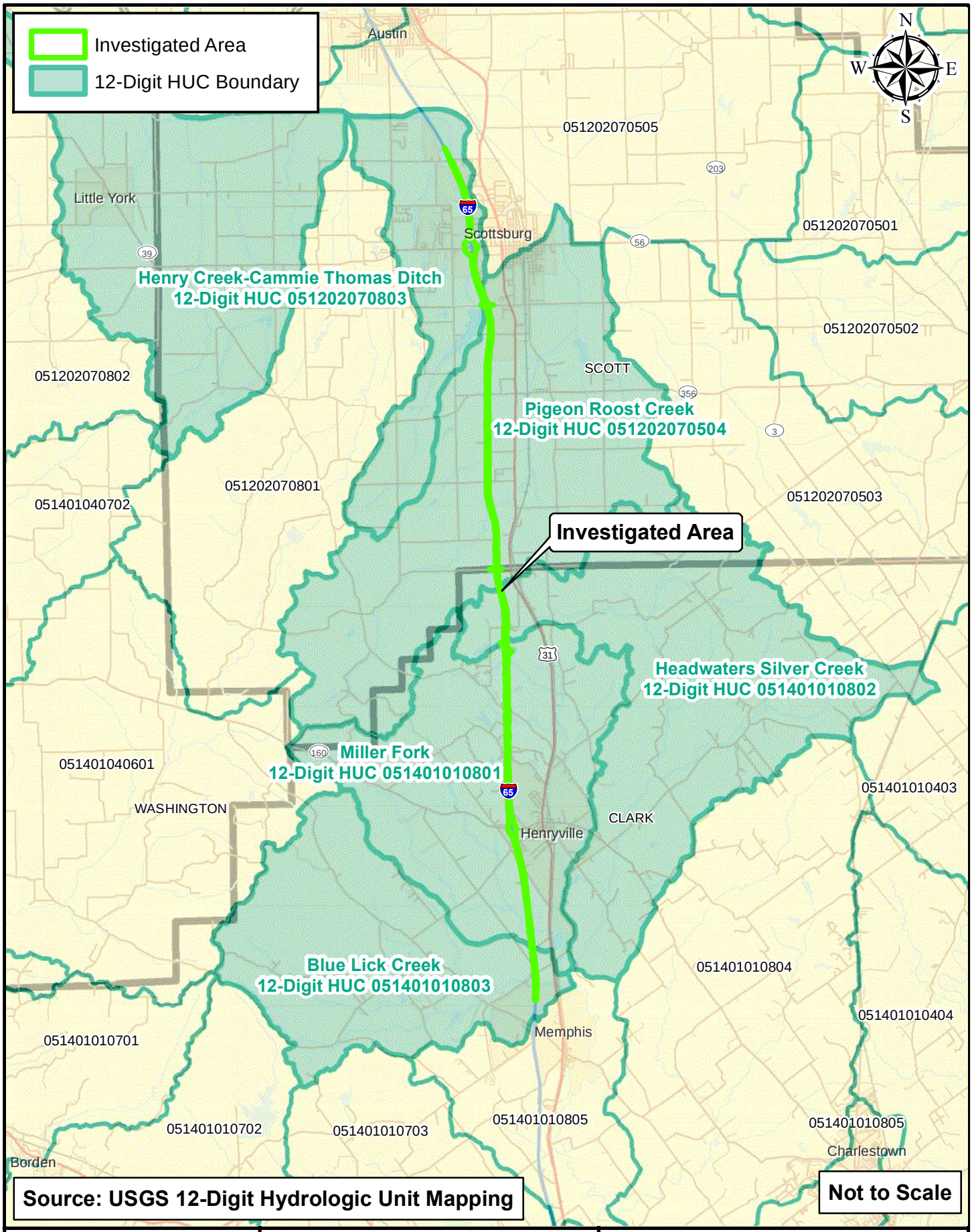

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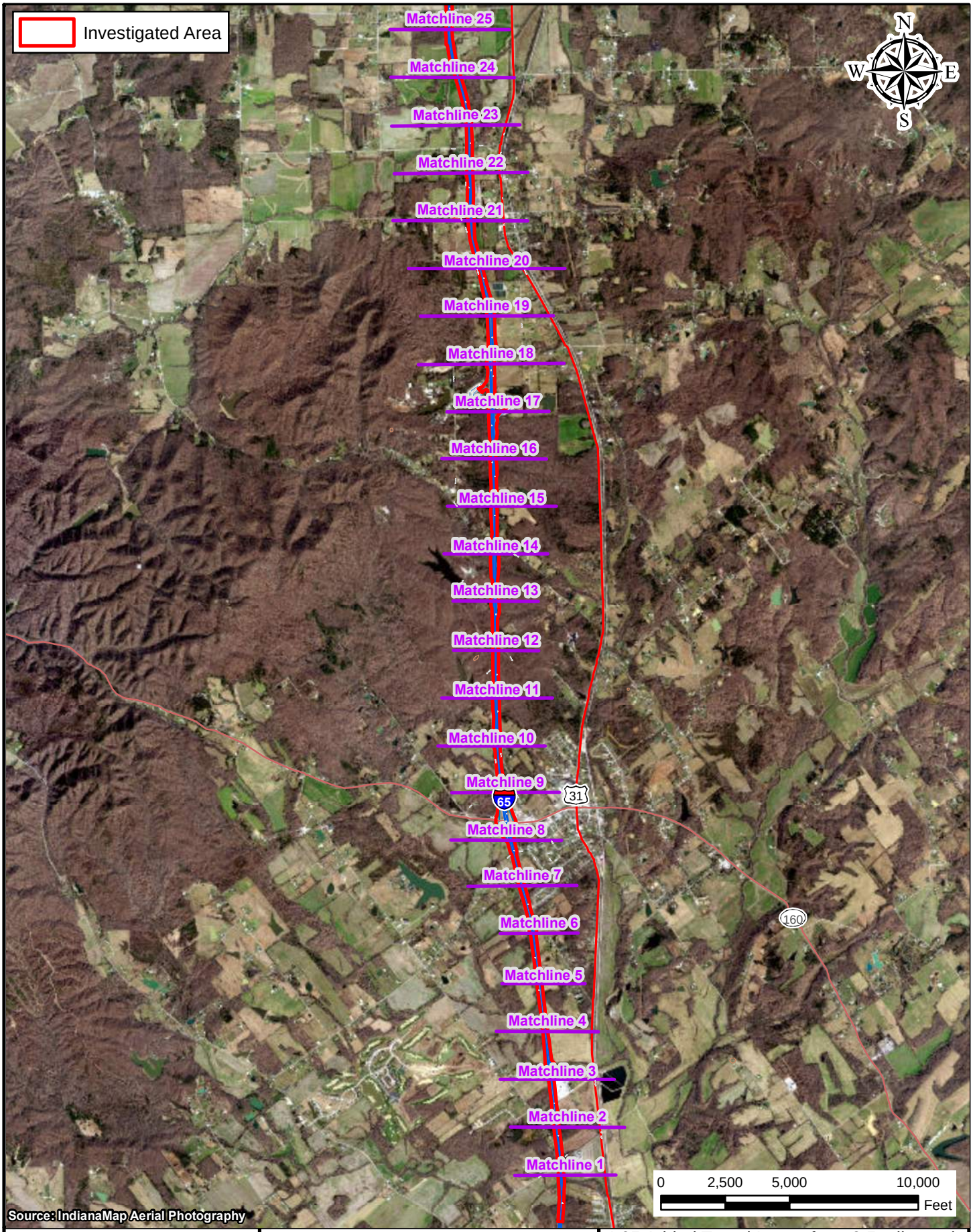
Figure 6: 12-Digit HUC Map

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1

Appendix D



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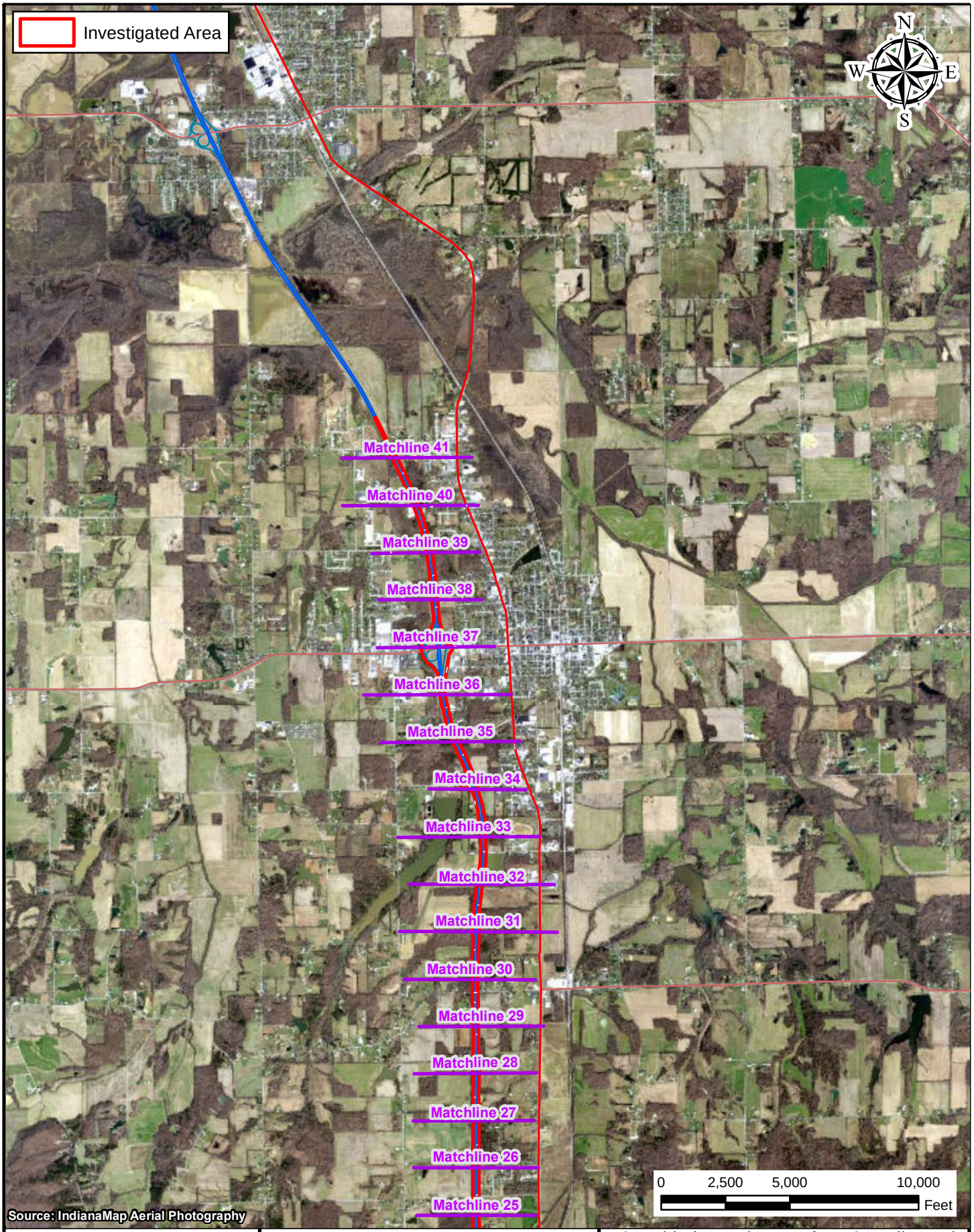
Matchline Key for
Figure 7 (1 of 2)

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburgand Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Appendix D

Attachment 14-1



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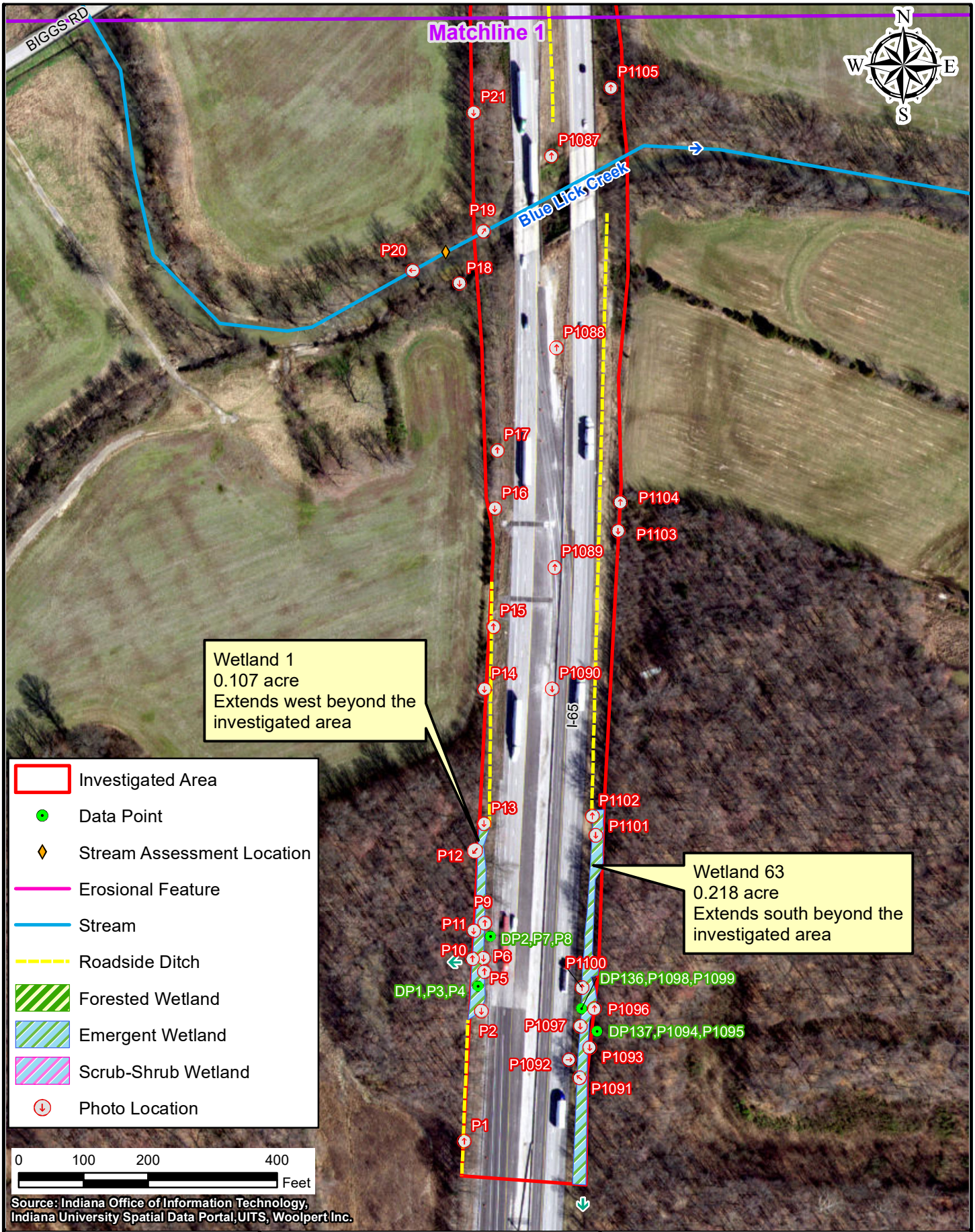
AMERICAN STRUCTUREPOINT INC.

Matchline Key for
Figure 7 (2 of 2)

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburgand Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 11/12/2020 State: Indiana

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

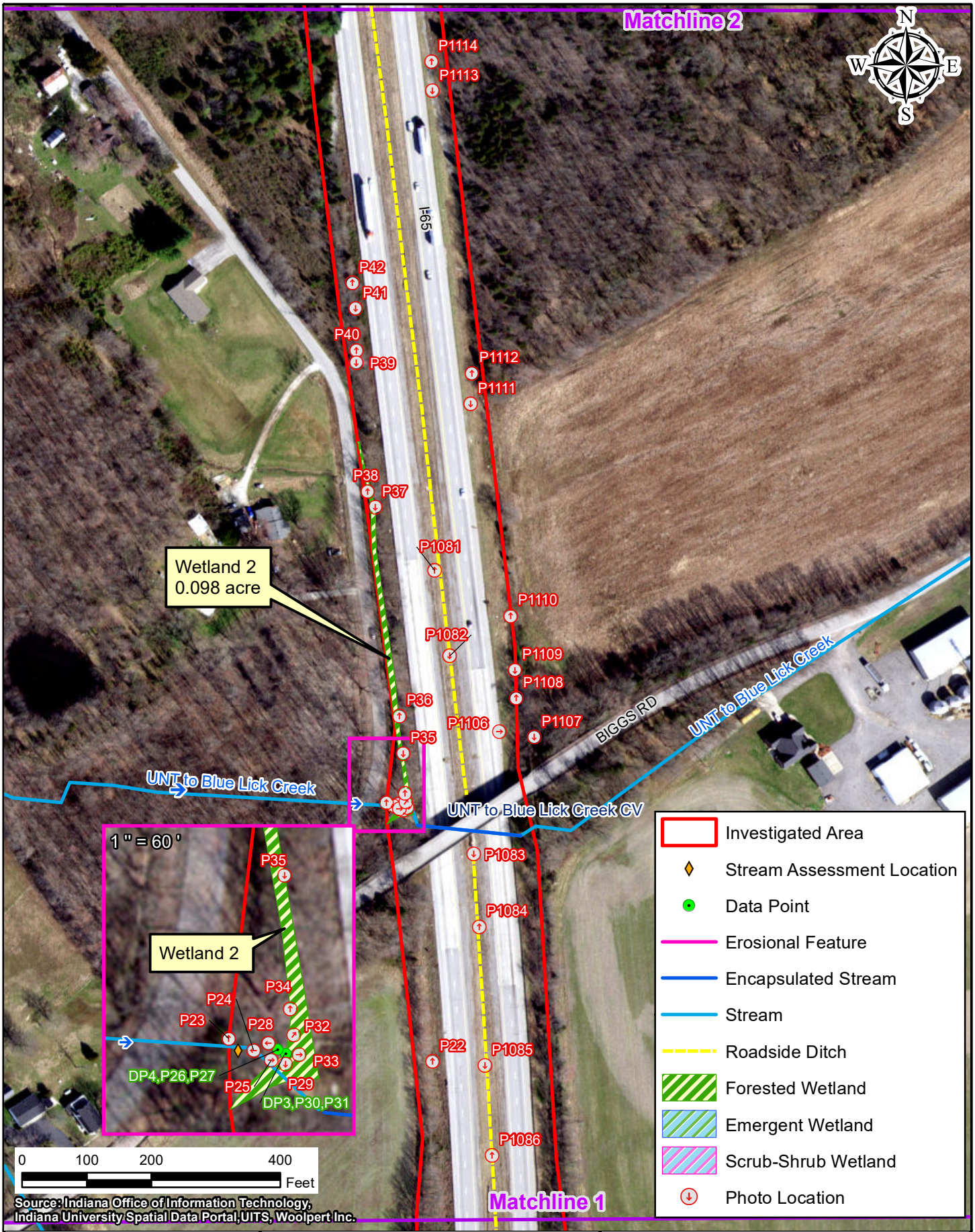
Figure 7: Field Investigation and Photo Location Map - Map 1 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Attachment 14-1

Appendix D



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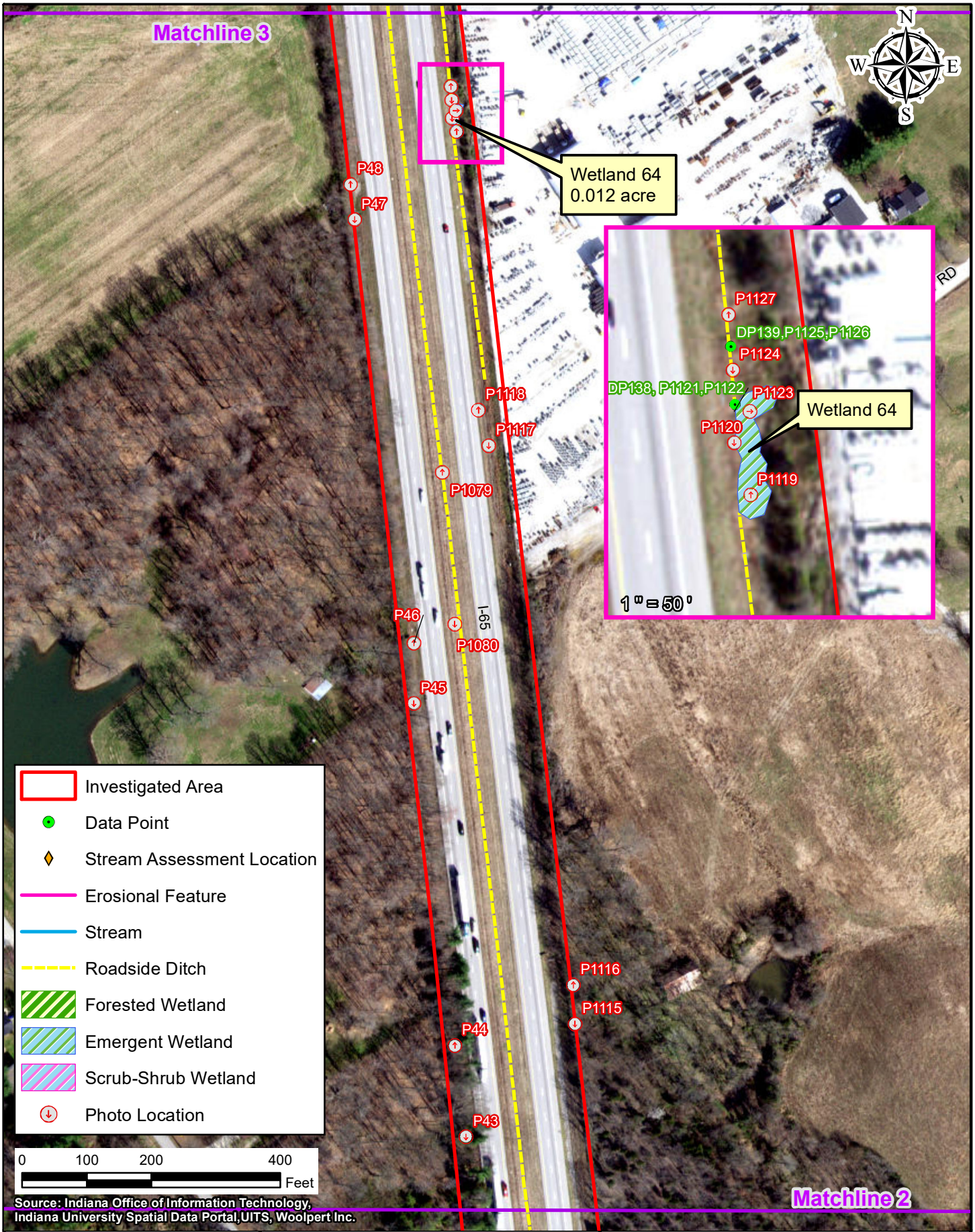
AMERICAN STRUCTUREPOINT INC.

Figure 7: Field Investigation and Photo Location Map - Map 2 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana



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AMERICAN STRUCTUREPOINT INC.

Figure 7: Field Investigation and Photo Location Map - Map 3 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1

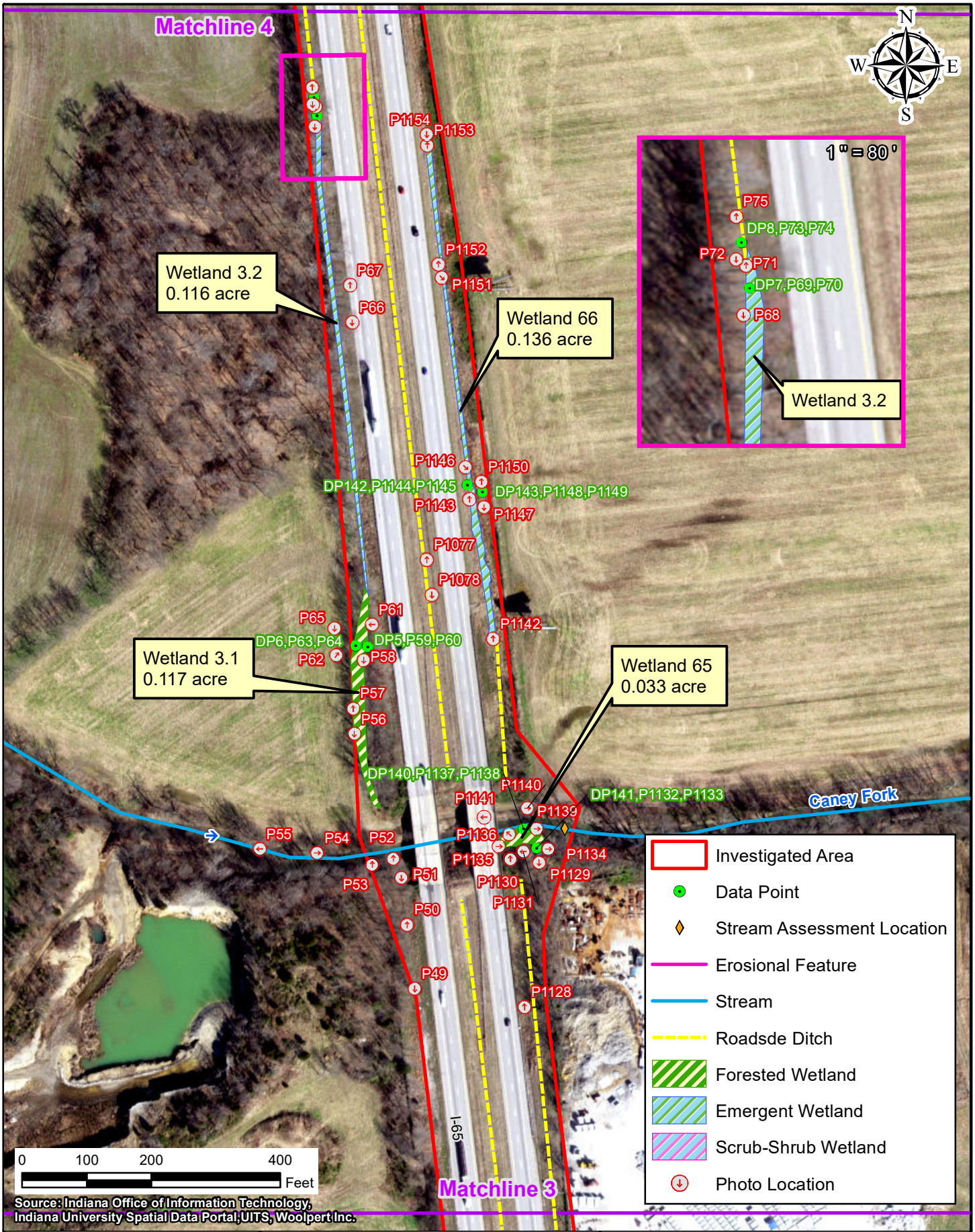

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Figure 7: Field Investigation and Photo Location Map - Map 4 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1

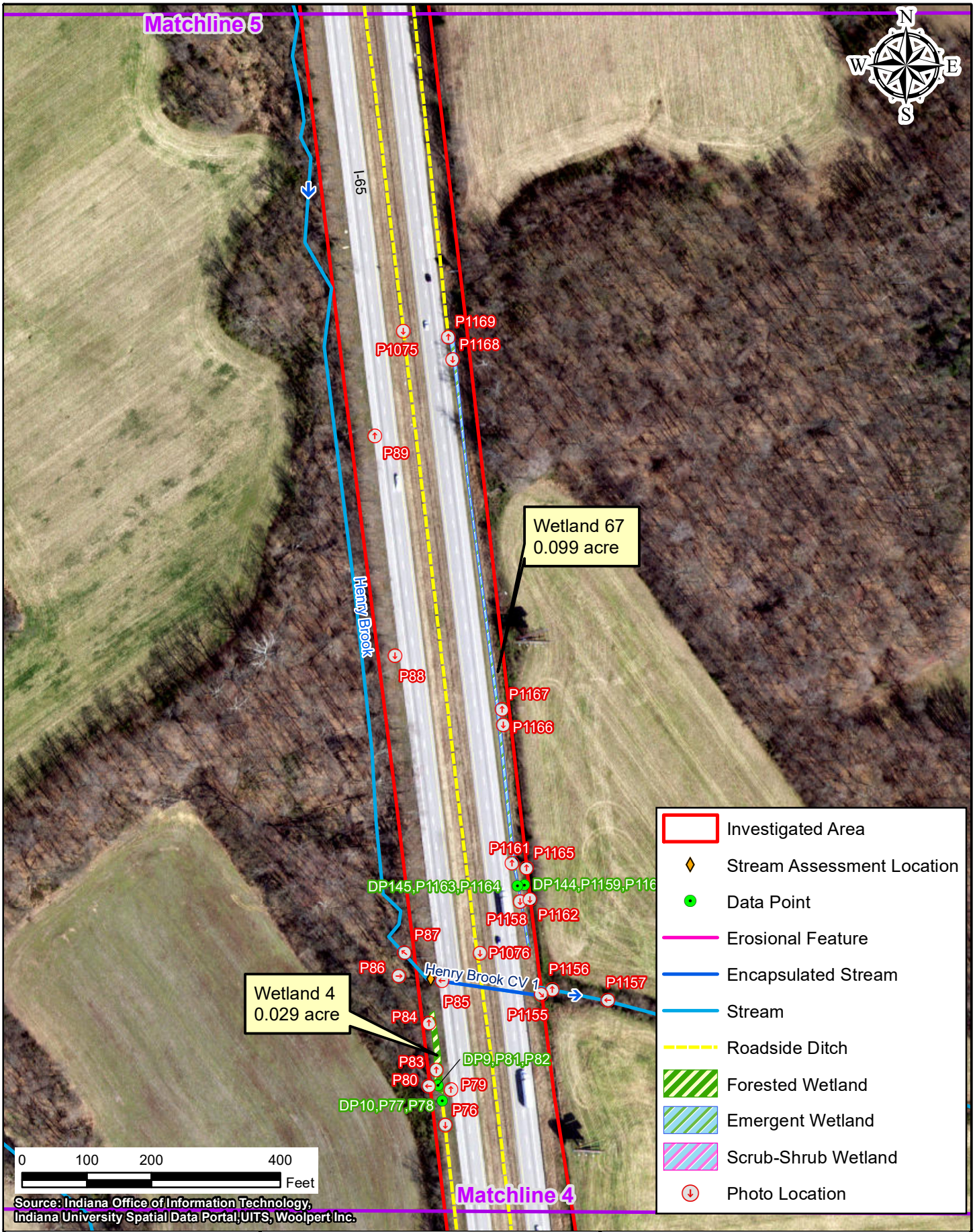

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Figure 7: Field Investigation and Photo Location Map - Map 5 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1 Appendix D

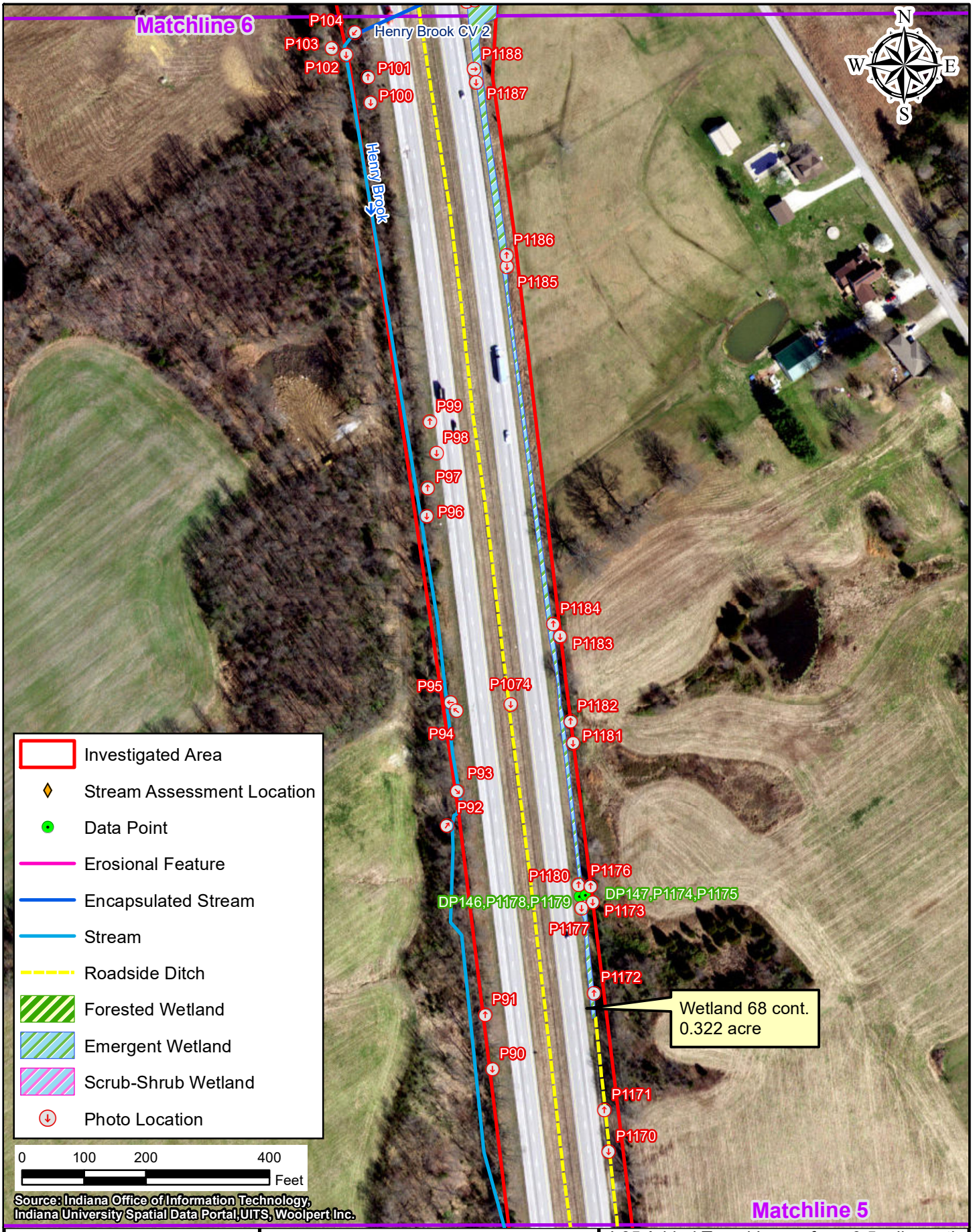

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Figure 7: Field Investigation and Photo Location Map - Map 6 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

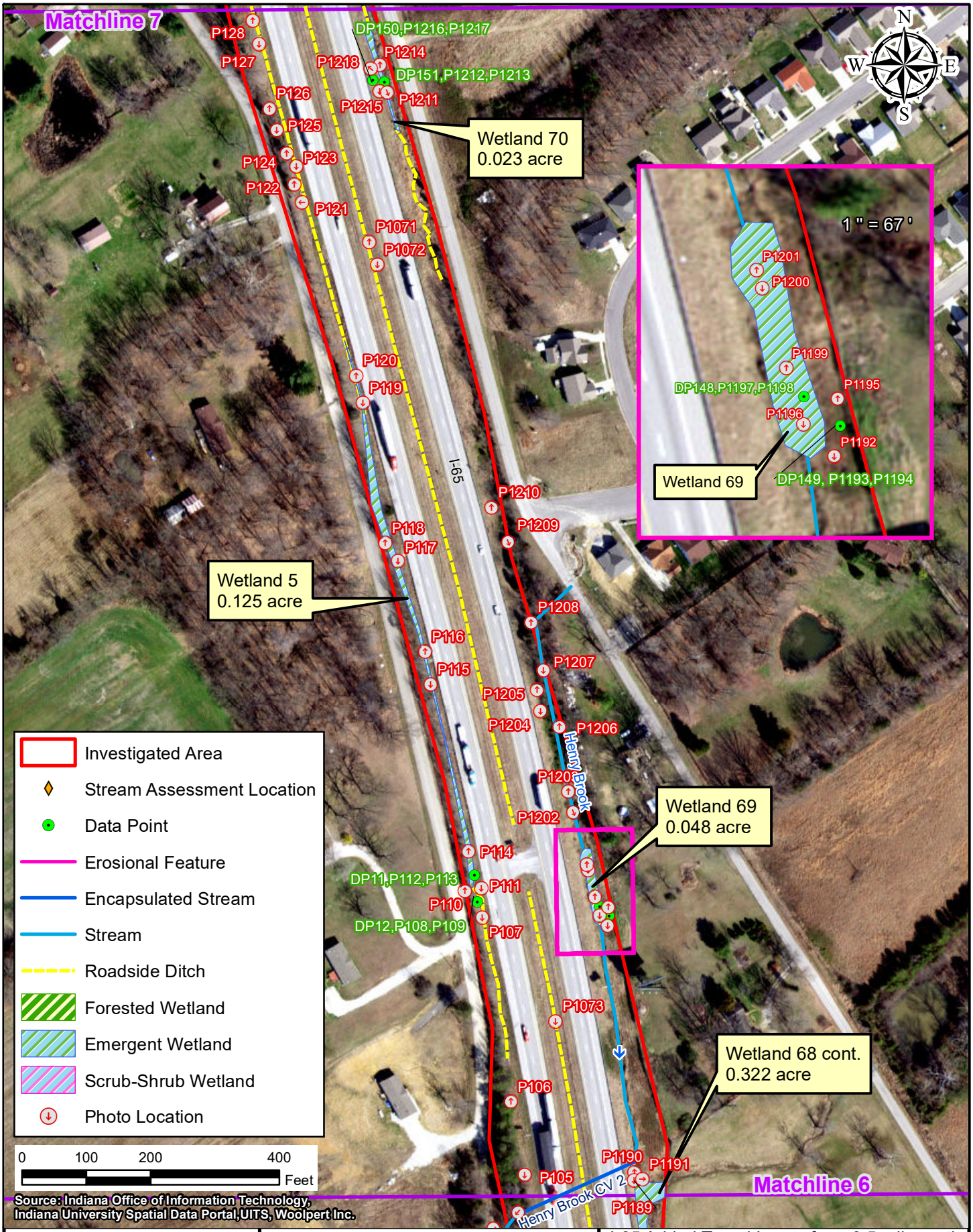

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Figure 7: Field Investigation and Photo Location Map - Map 7 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

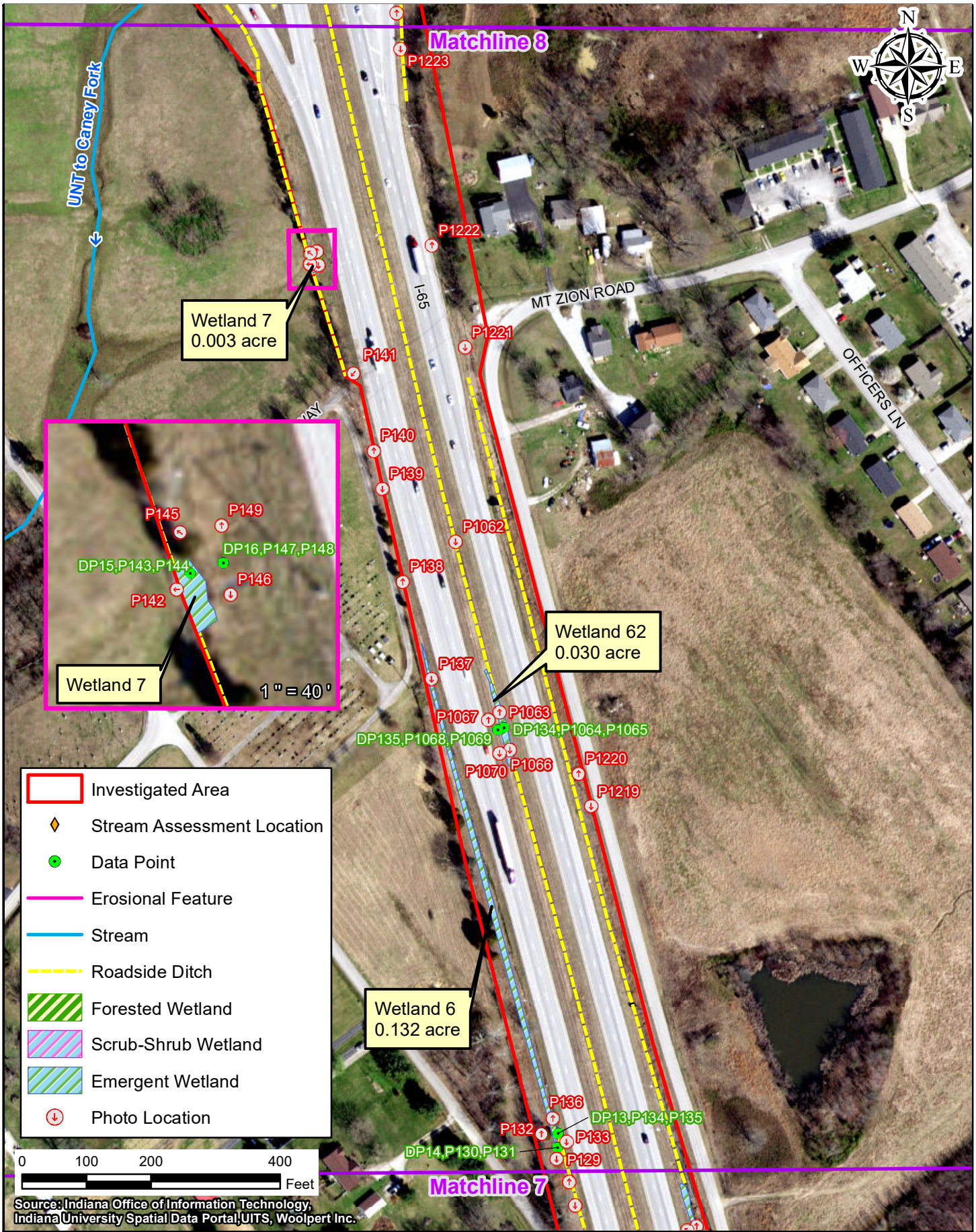

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Figure 7: Field Investigation and Photo Location Map - Map 8 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1

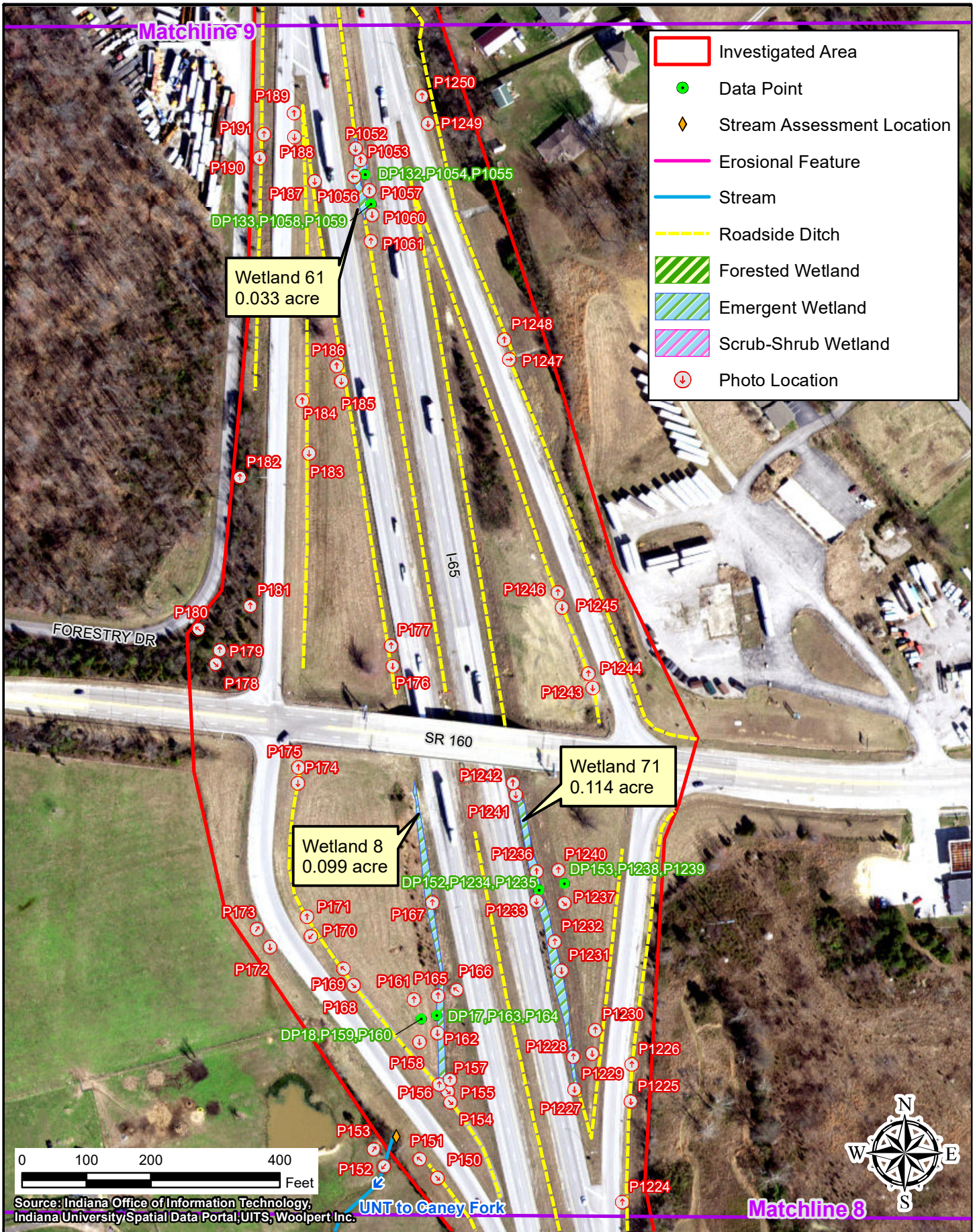

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Figure 7: Field Investigation and Photo Location Map - Map 9 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1

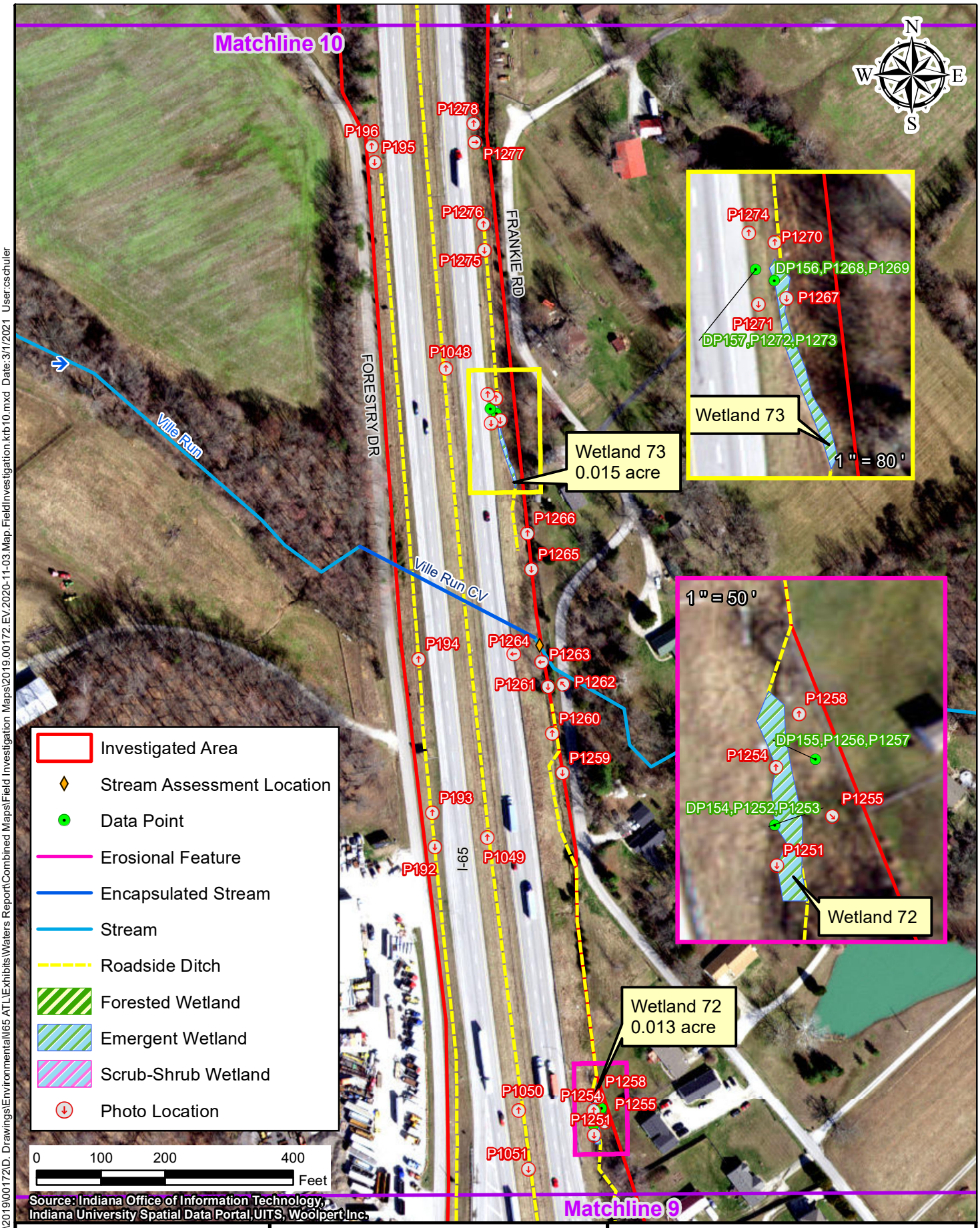

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Figure 7: Field Investigation and Photo Location Map - Map 10 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

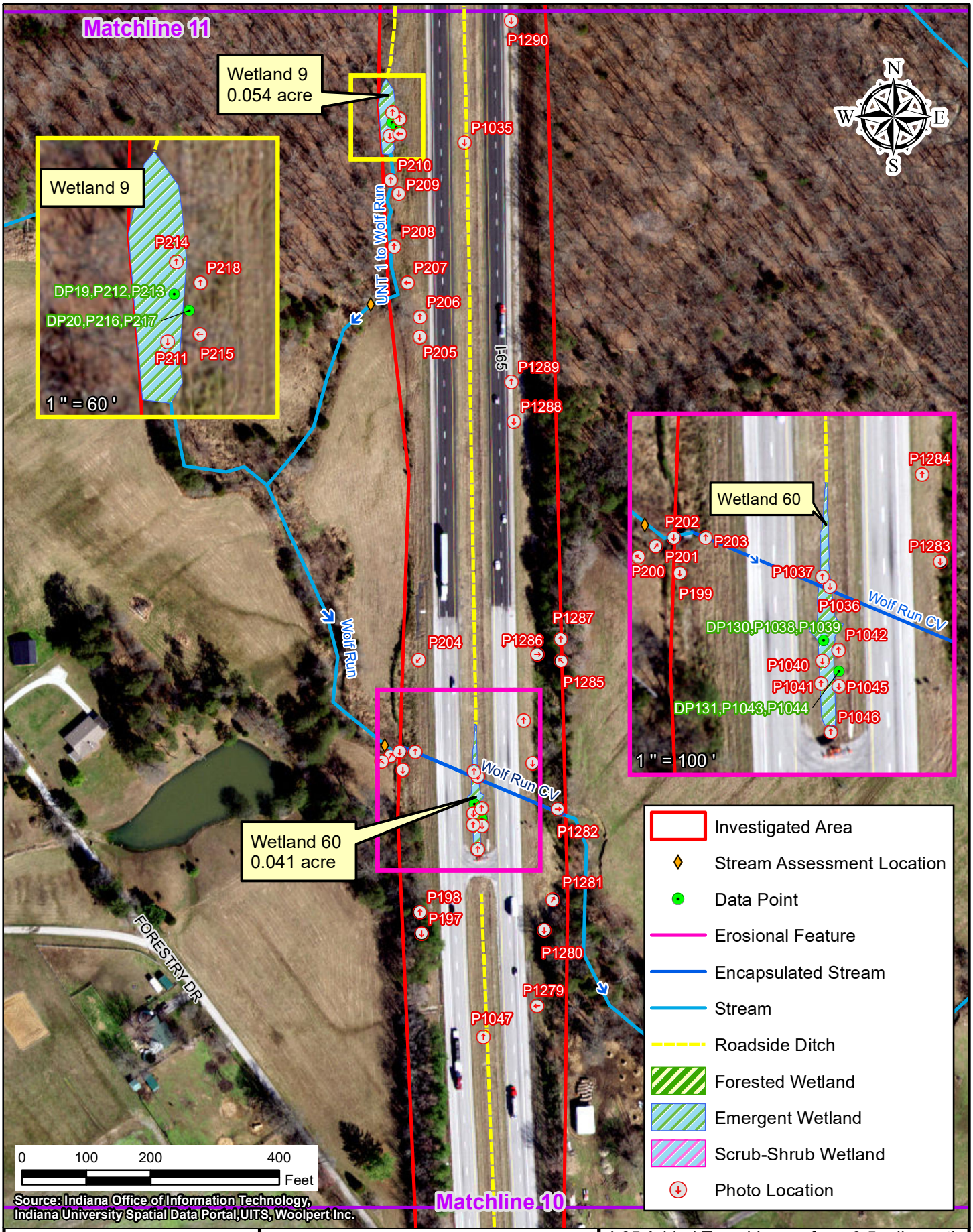

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Figure 7: Field Investigation and Photo Location Map - Map 11 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

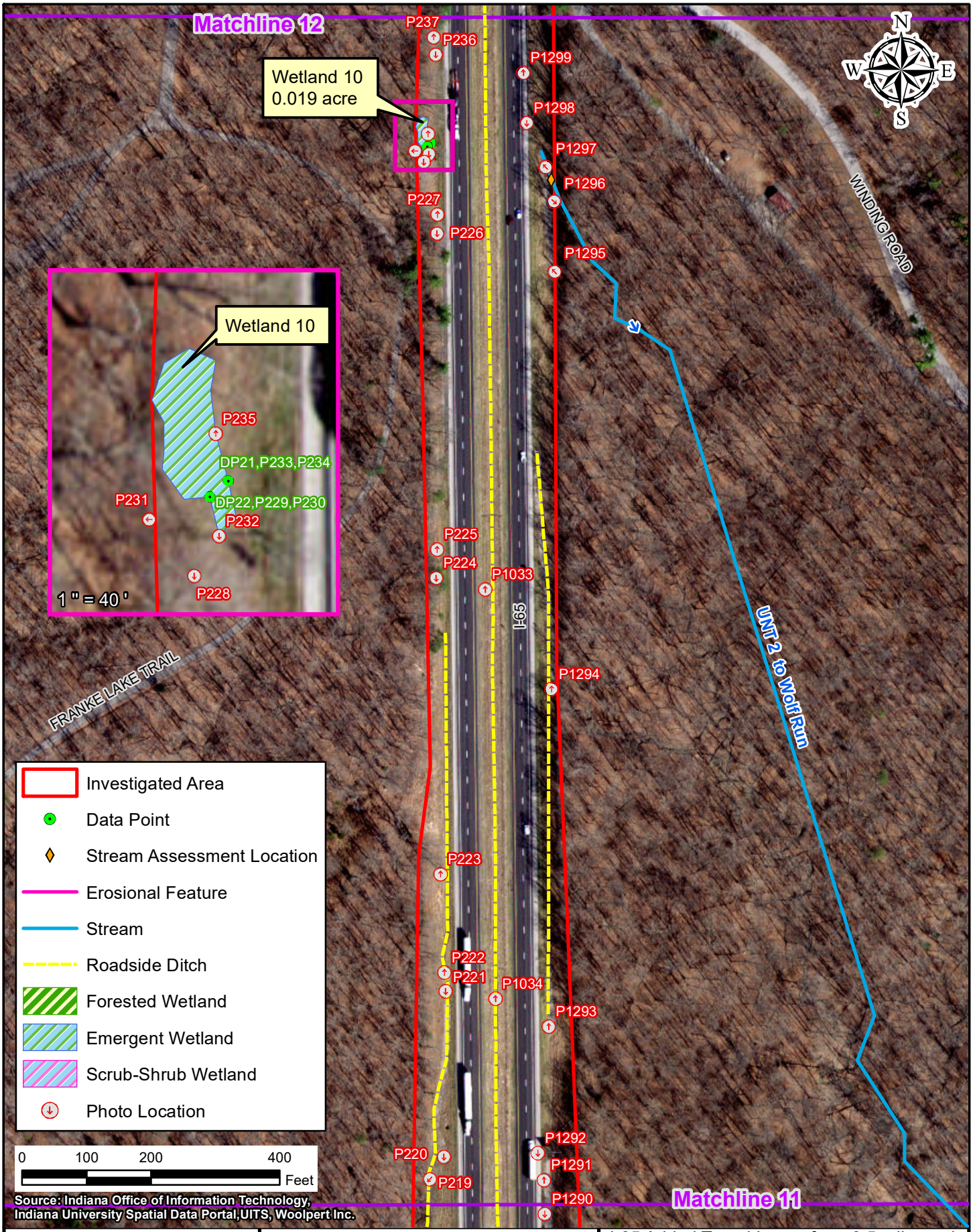

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Figure 7: Field Investigation and Photo Location Map - Map 12 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1

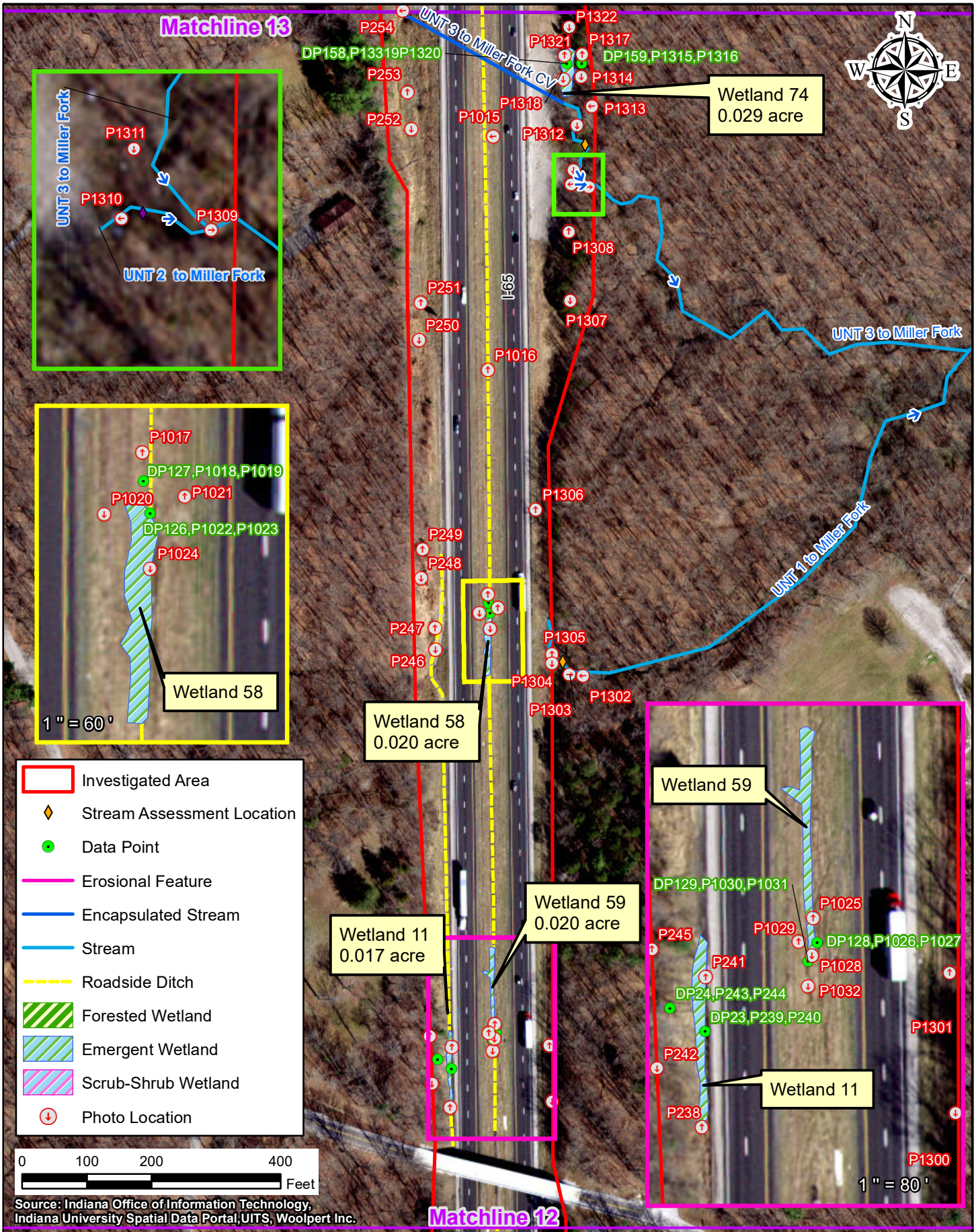

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Figure 7: Field Investigation and Photo Location Map - Map 13 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

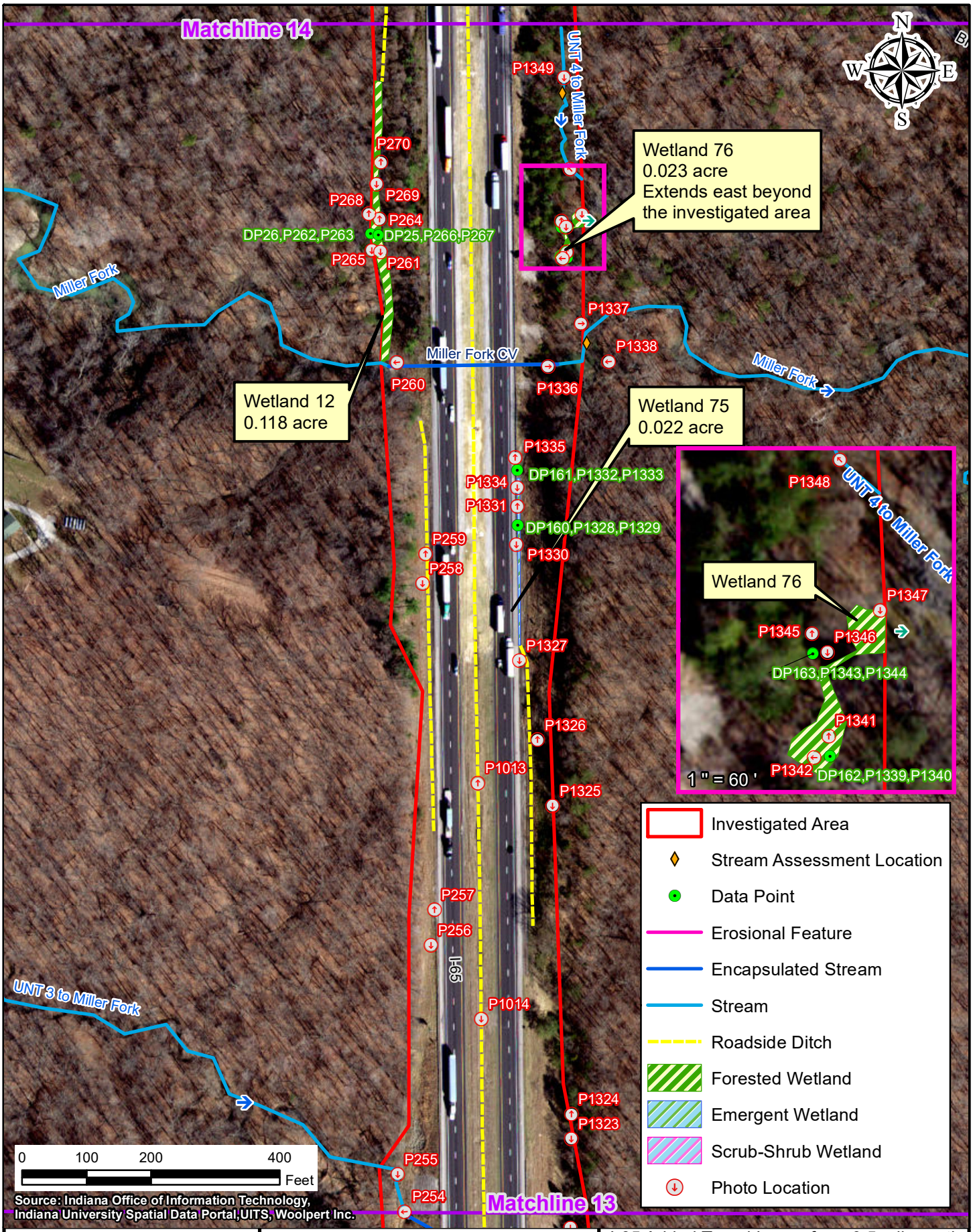

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Figure 7: Field Investigation and Photo Location Map - Map 14 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

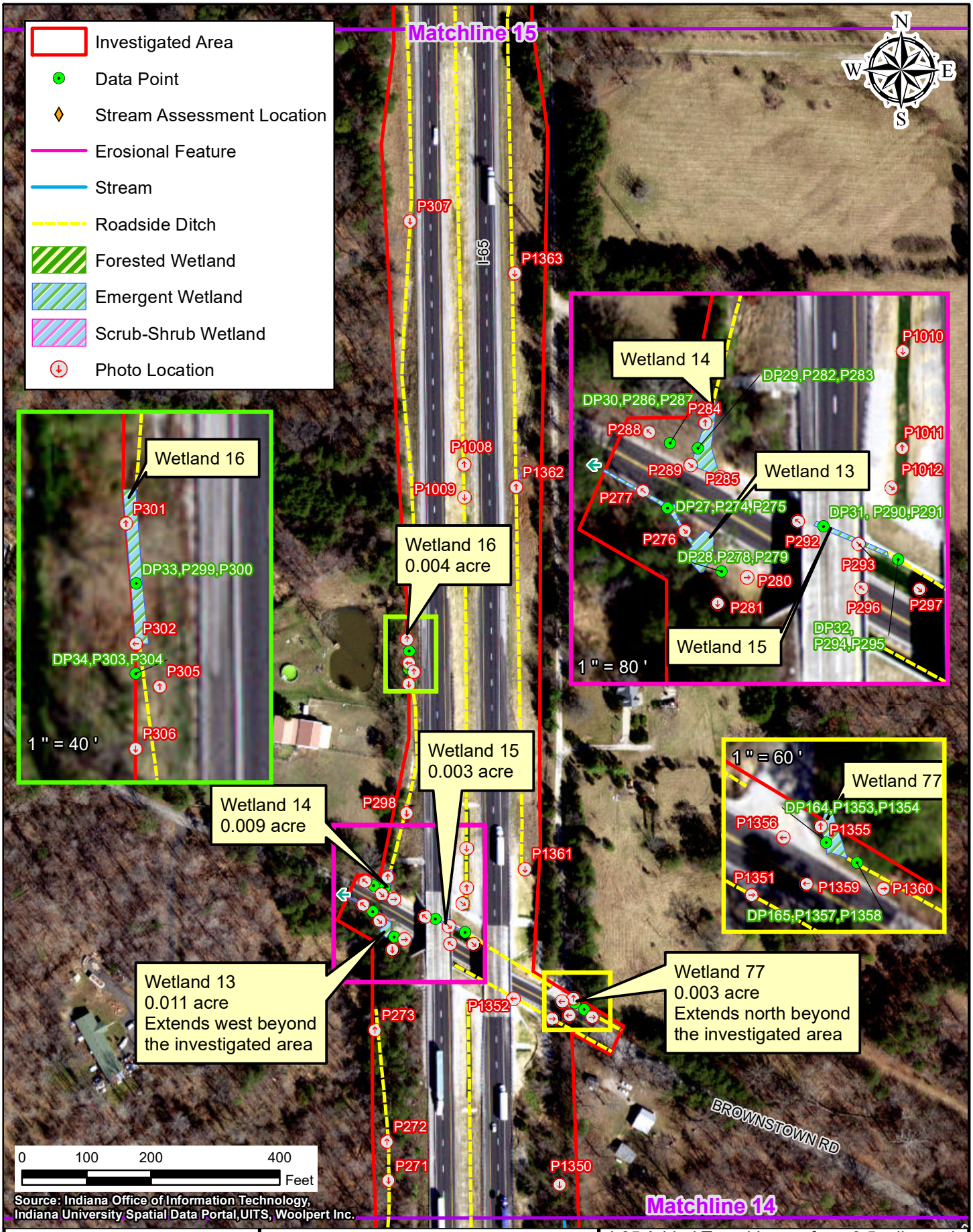

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Figure 7: Field Investigation and Photo Location Map - Map 15 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/04/2020 State: Indiana

Appendix D

Attachment 14-1

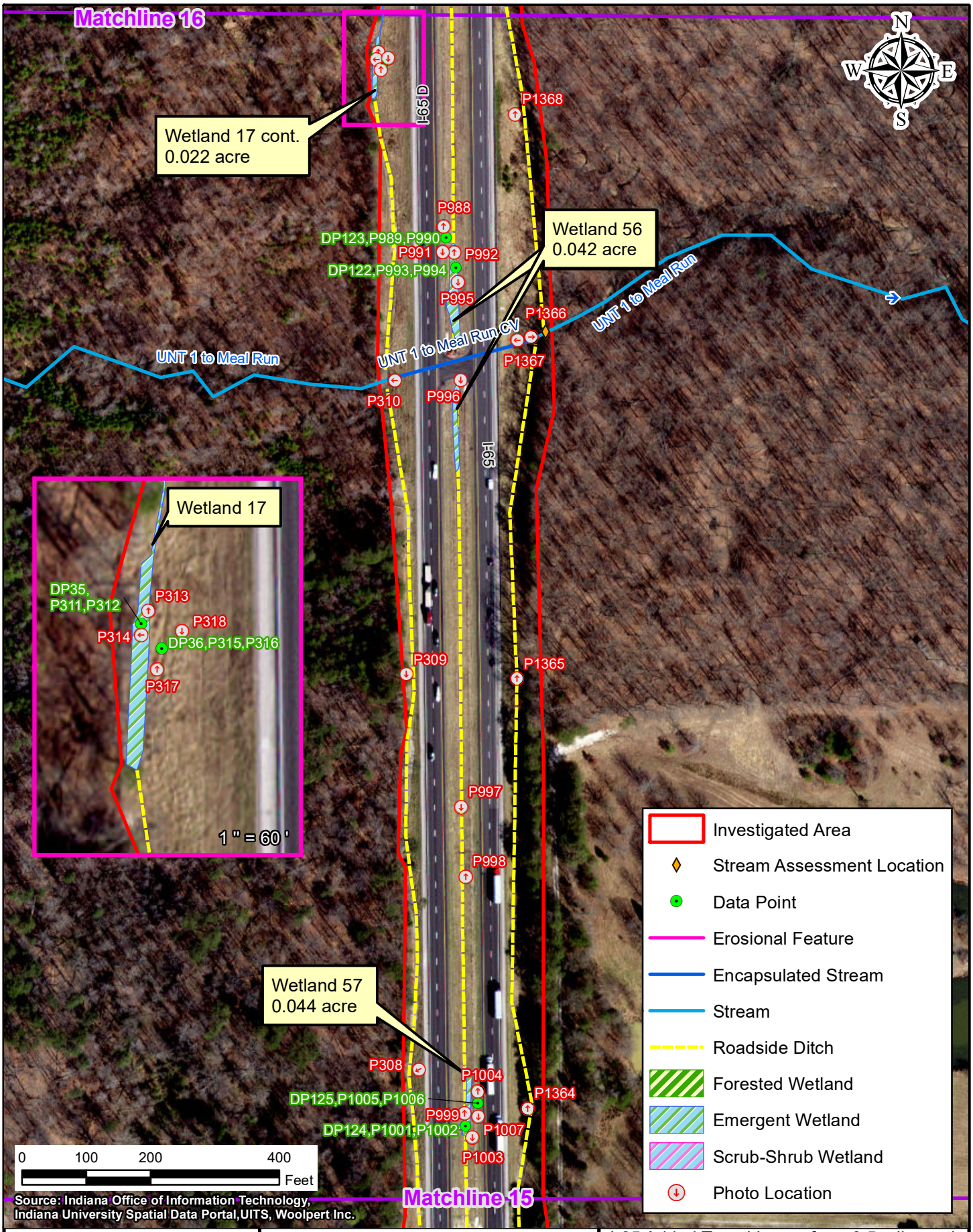

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Figure 7: Field Investigation and Photo Location Map - Map 16 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

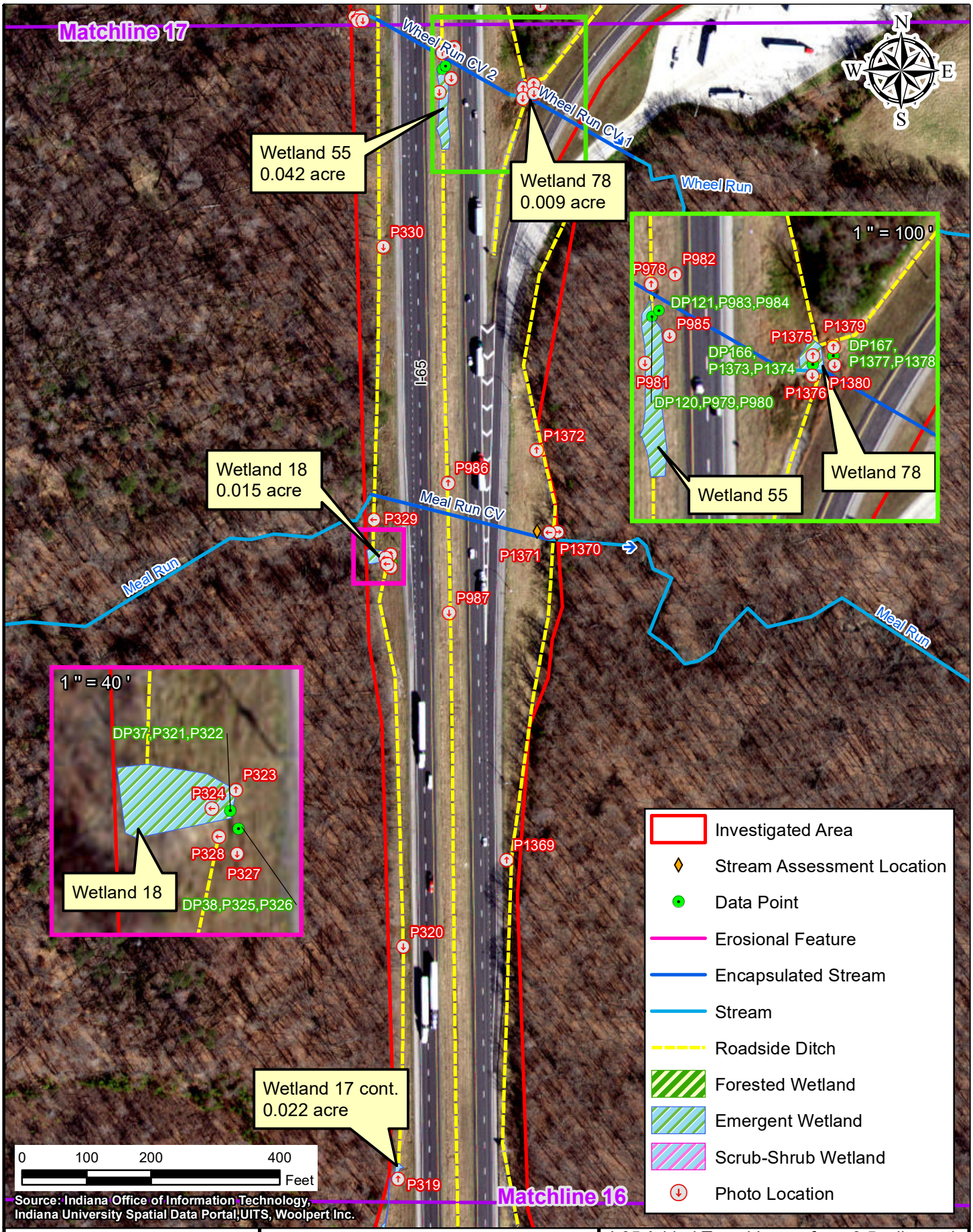

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Figure 7: Field Investigation and Photo Location Map - Map 17 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

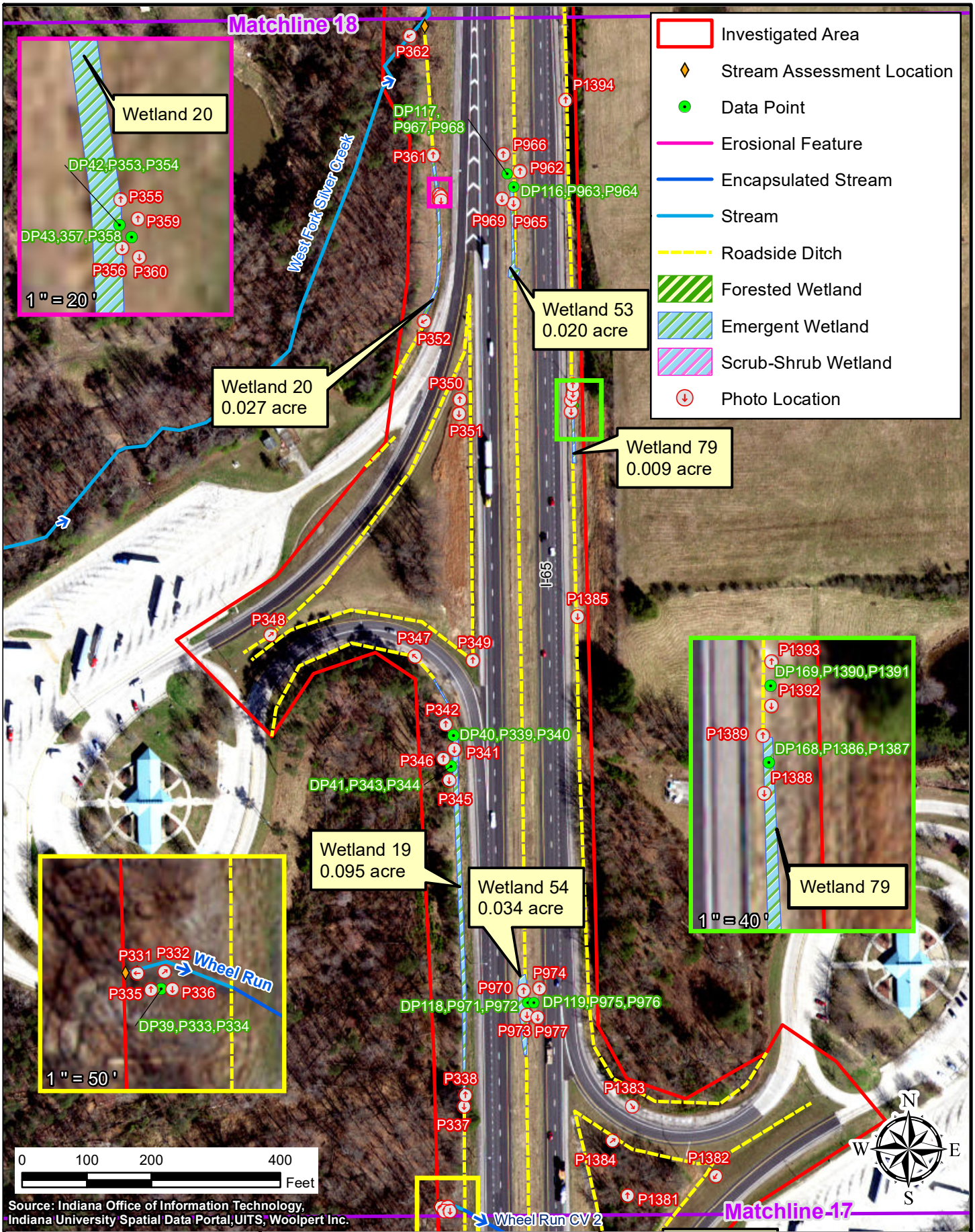

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Figure 7: Field Investigation and Photo Location Map - Map 18 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

Appendix D

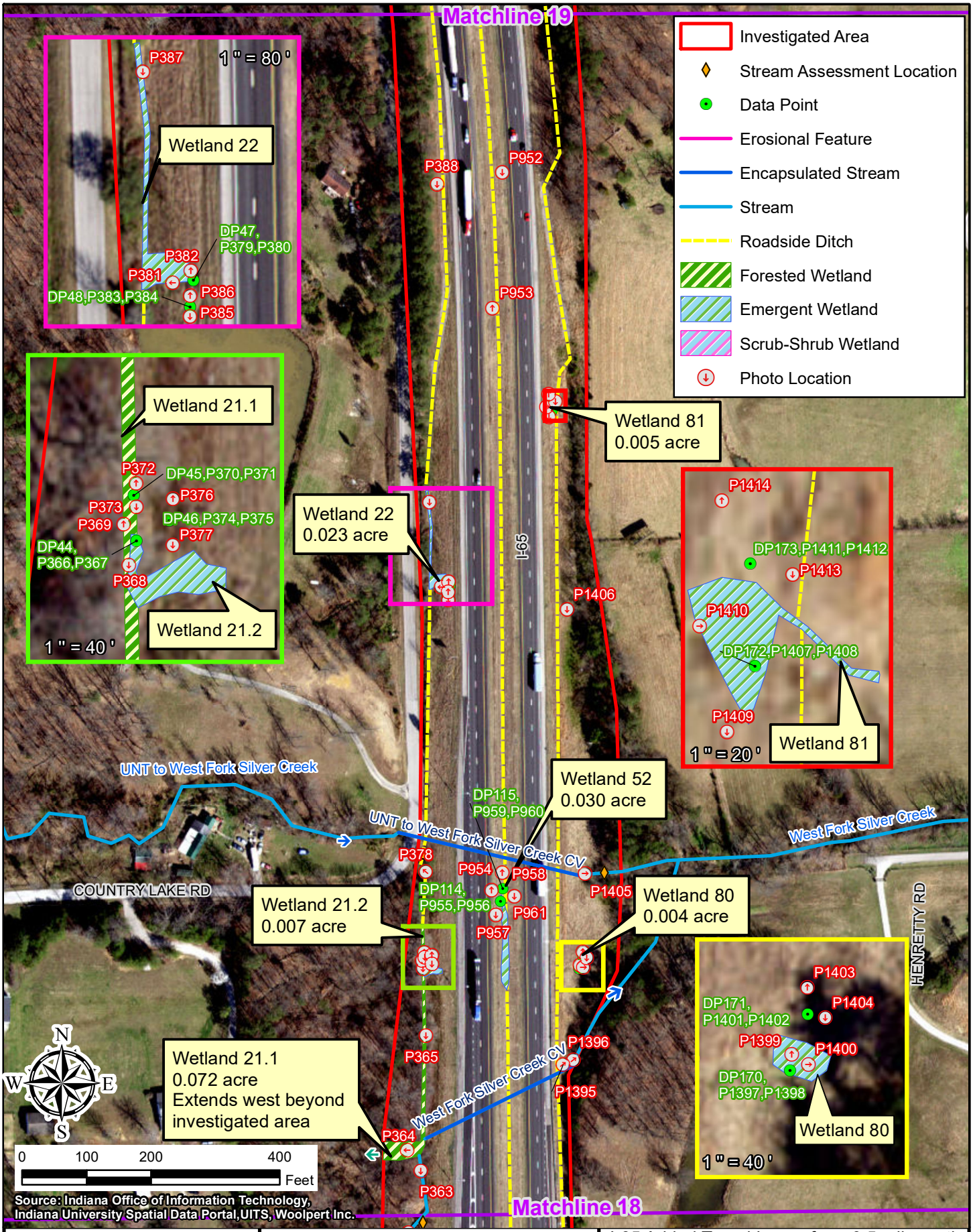

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Figure 7: Field Investigation and Photo Location Map - Map 19 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

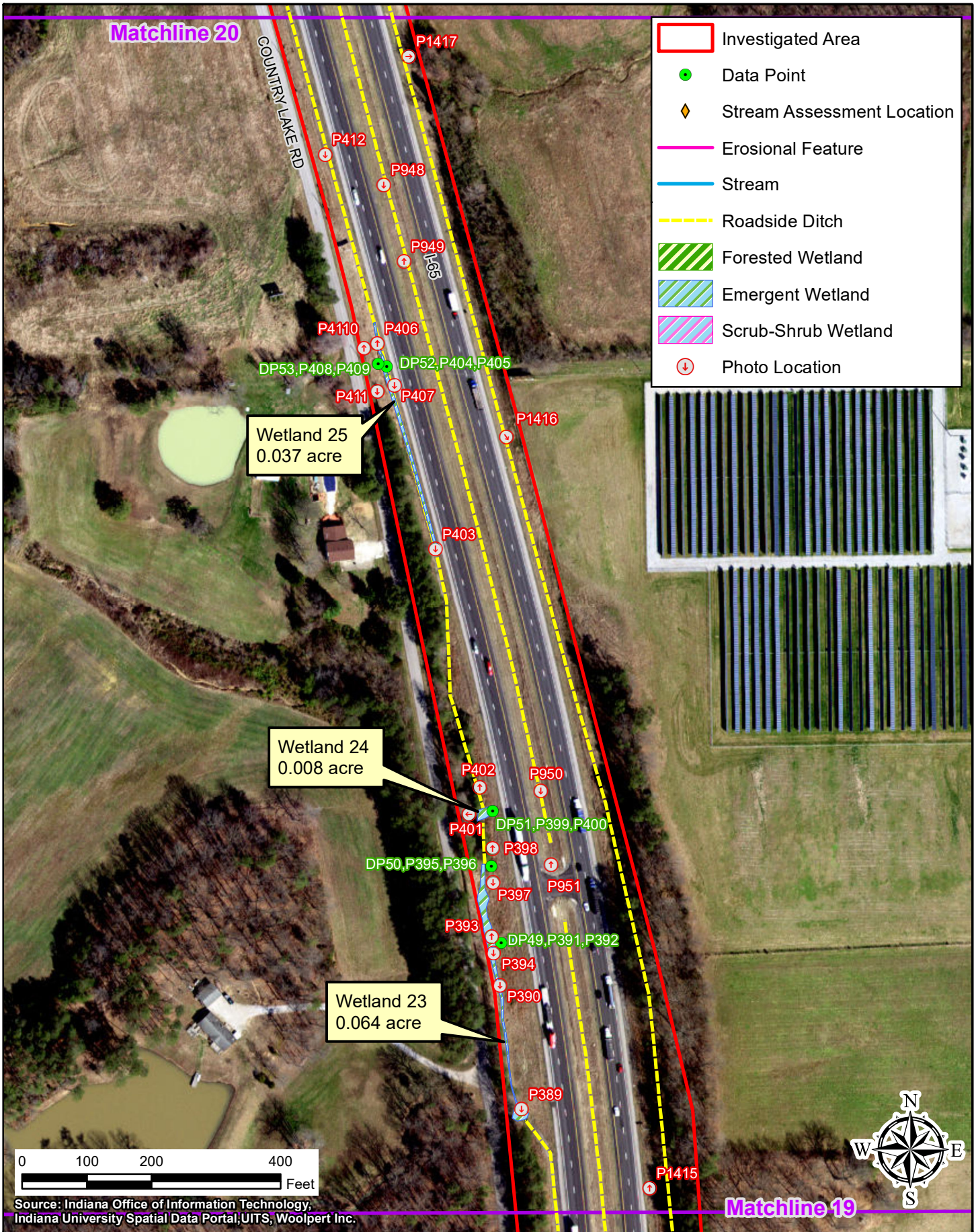

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Figure 7: Field Investigation and Photo Location Map - Map 20 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

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Attachment 14-1

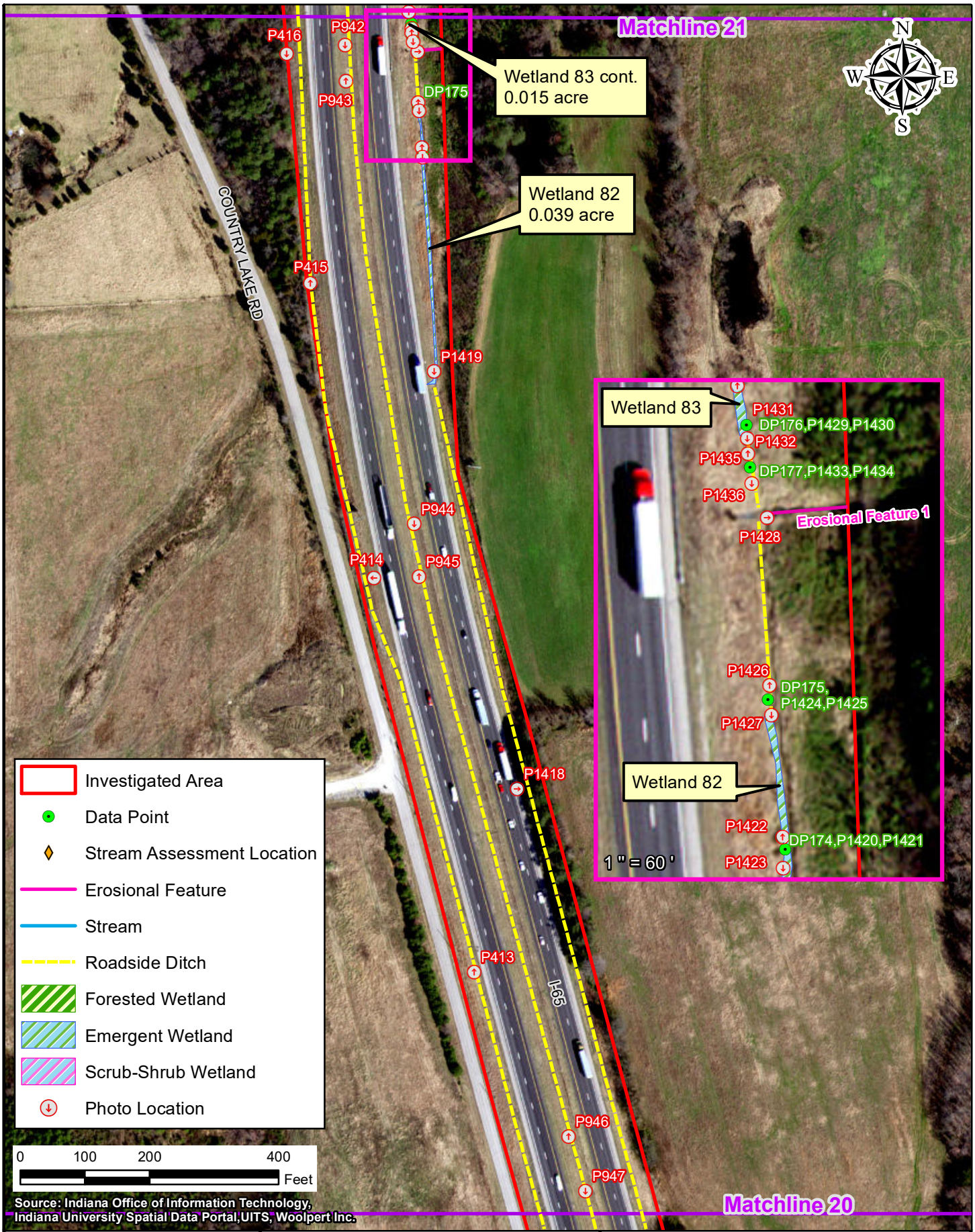

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Figure 7: Field Investigation and Photo Location Map - Map 21 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1

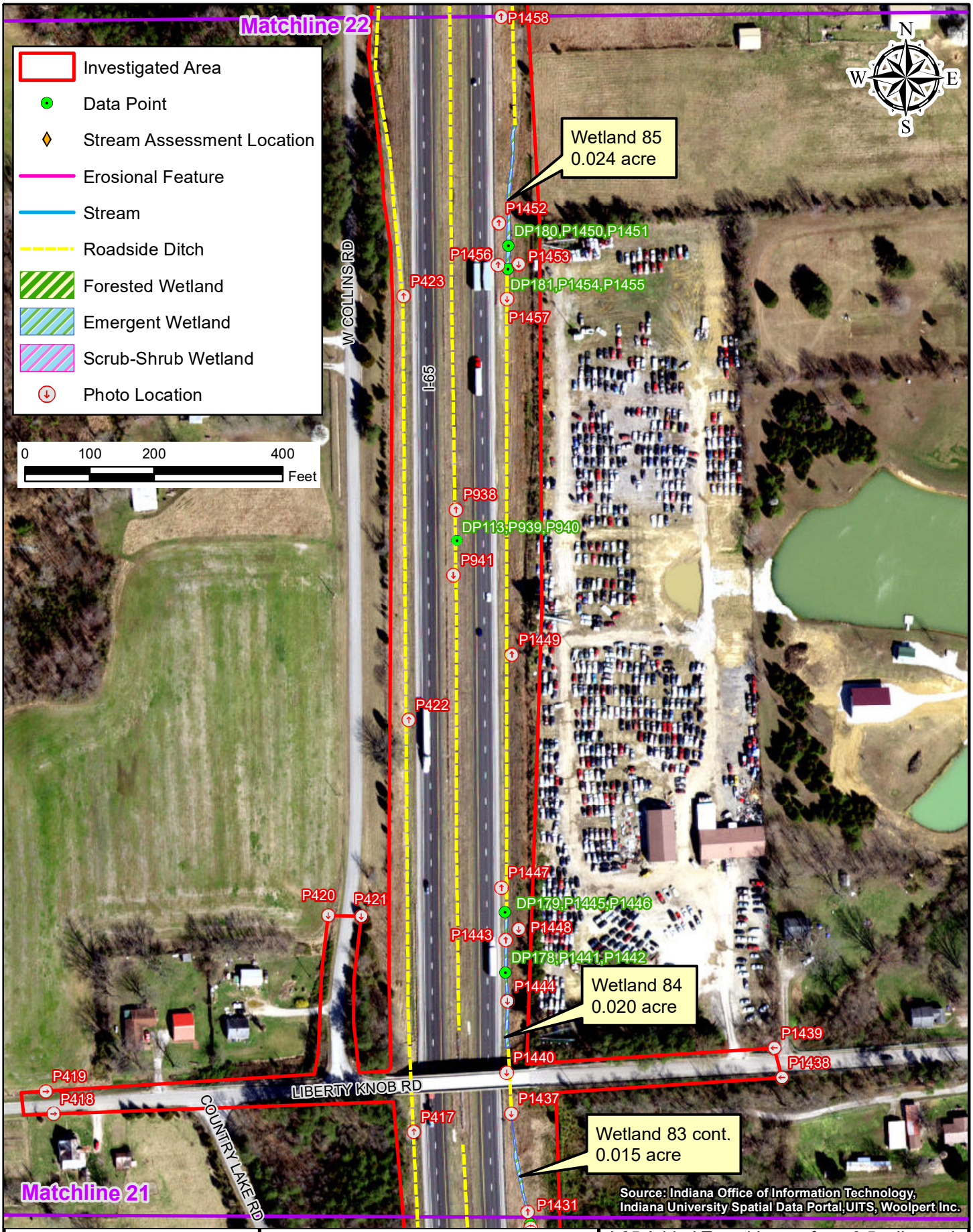

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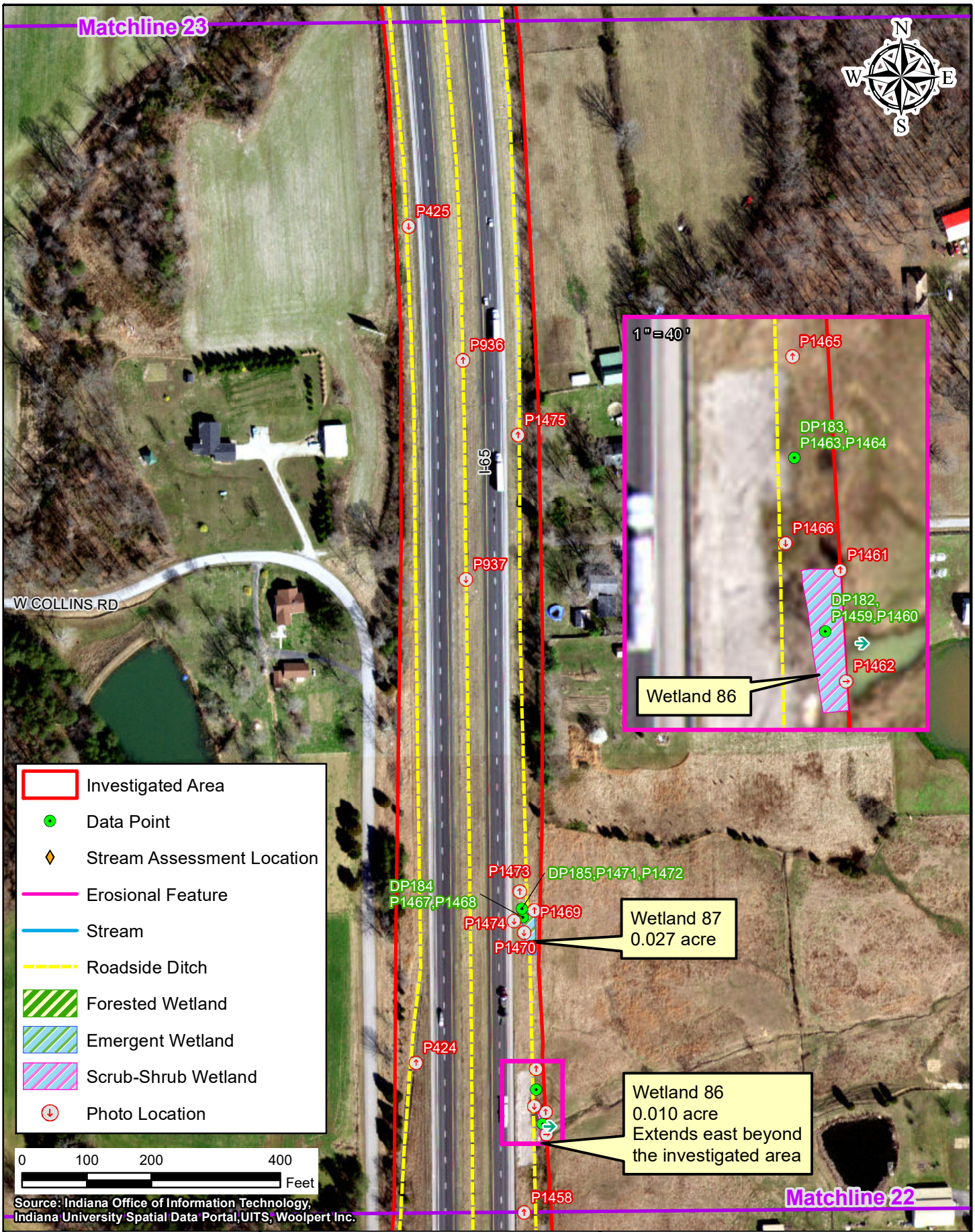
Figure 7: Field Investigation and Photo Location Map - Map 22 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1



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AMERICAN STRUCTUREPOINT INC.

Figure 7: Field Investigation and Photo Location Map - Map 23 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

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Attachment 14-1

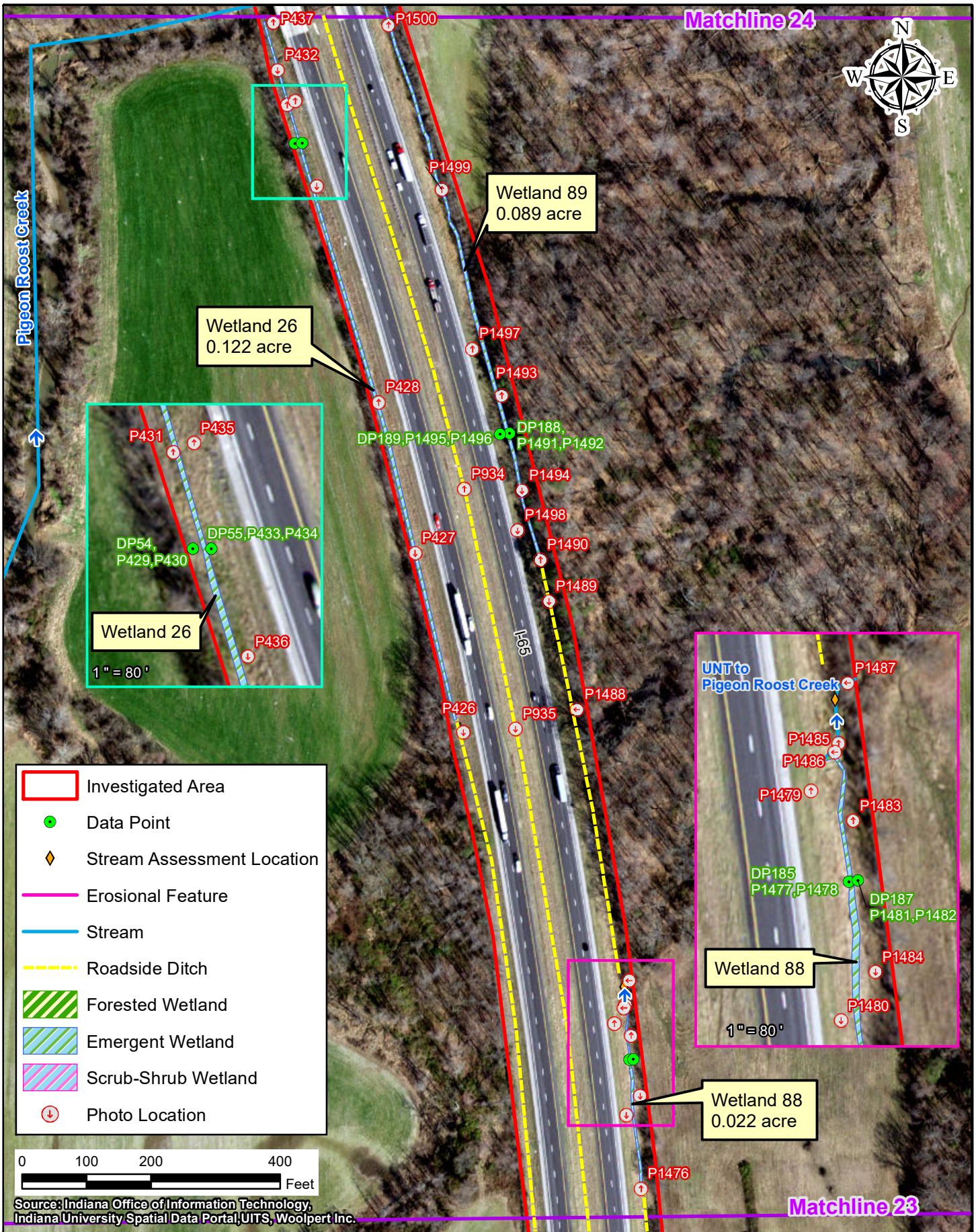

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Figure 7: Field Investigation and Photo Location Map - Map 24 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

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Attachment 14-1

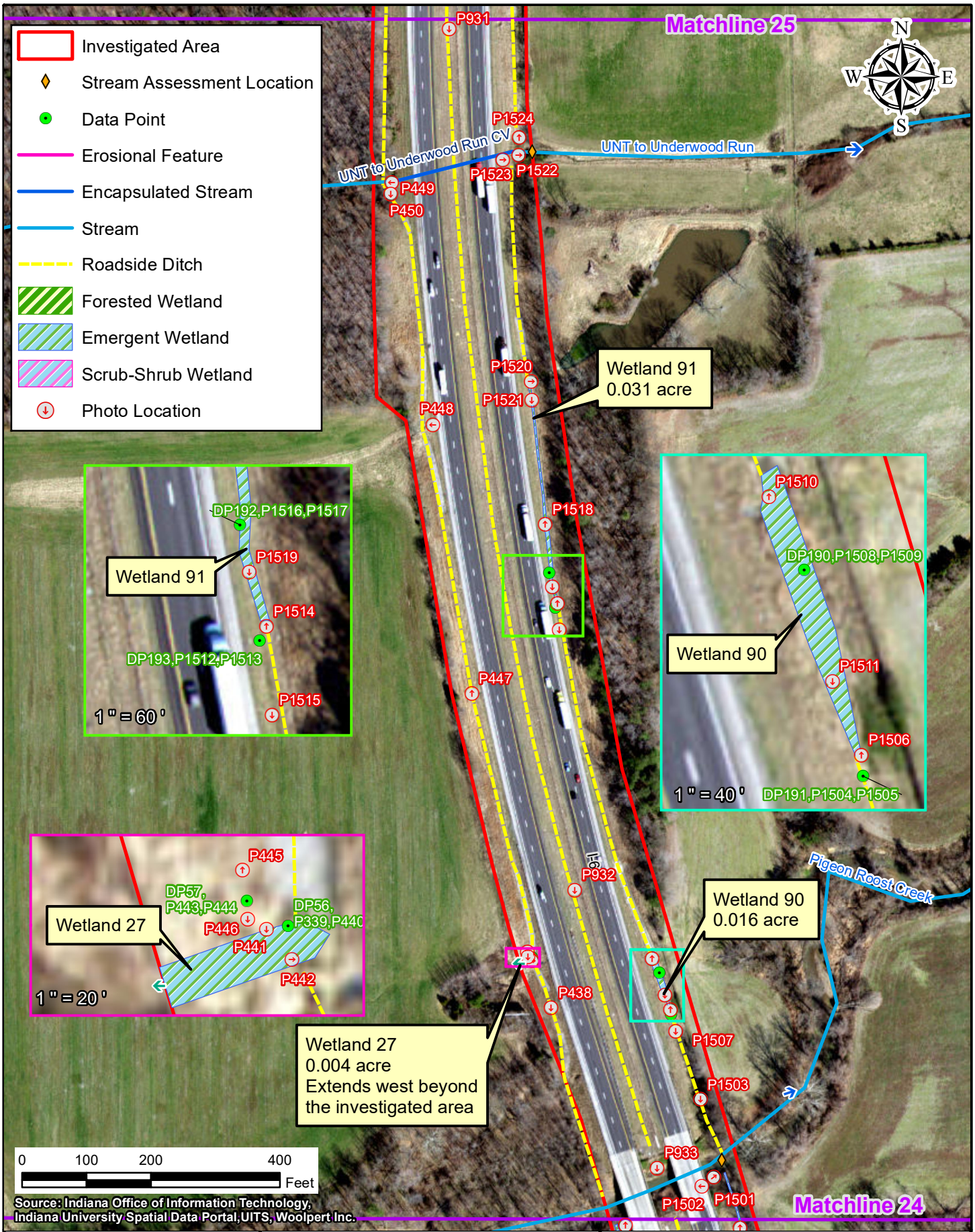

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Figure 7: Field Investigation and Photo Location Map - Map 25 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

Appendix D

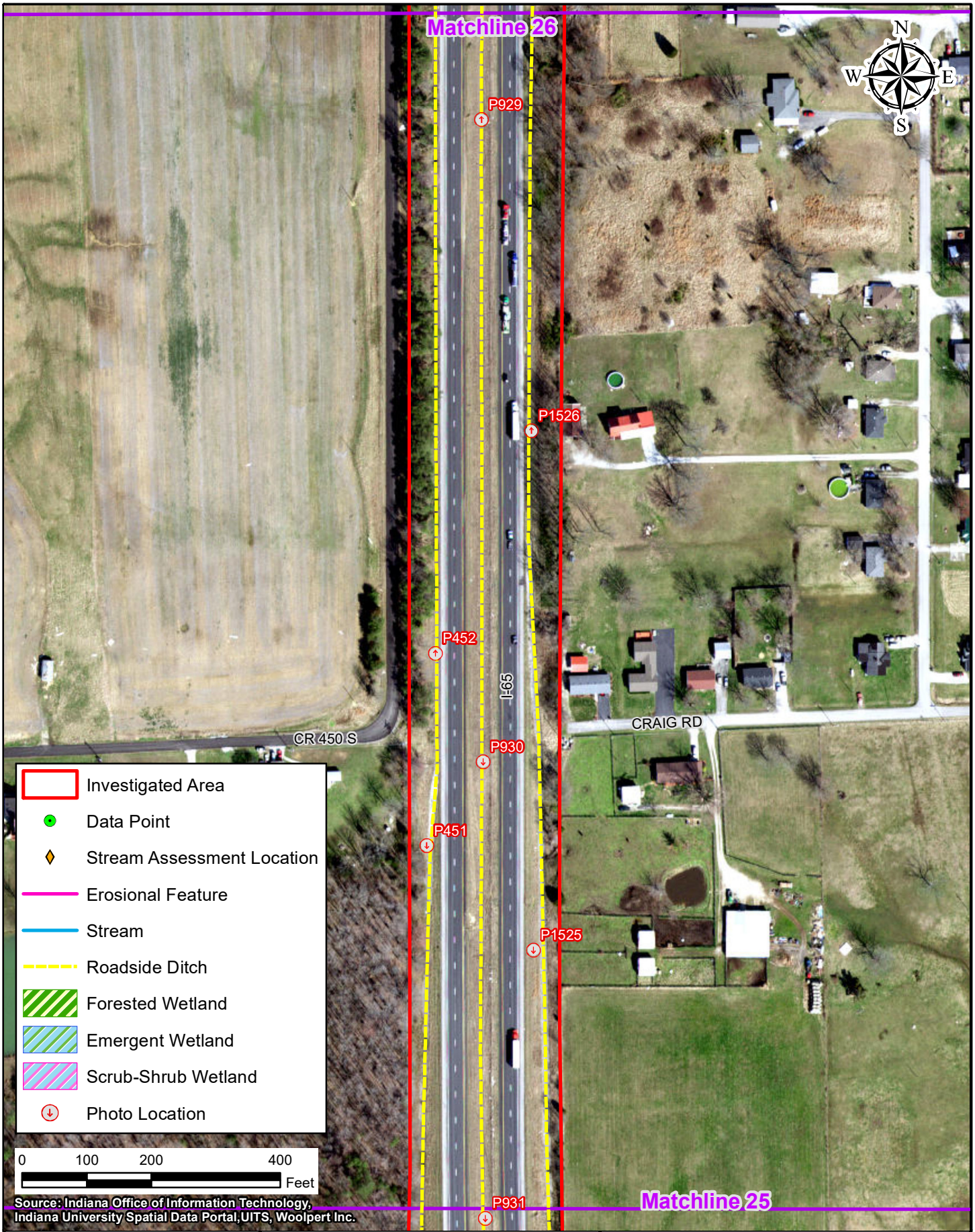

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Figure 7: Field Investigation and Photo Location Map - Map 26 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/04/2020 State: Indiana

Attachment 14-1

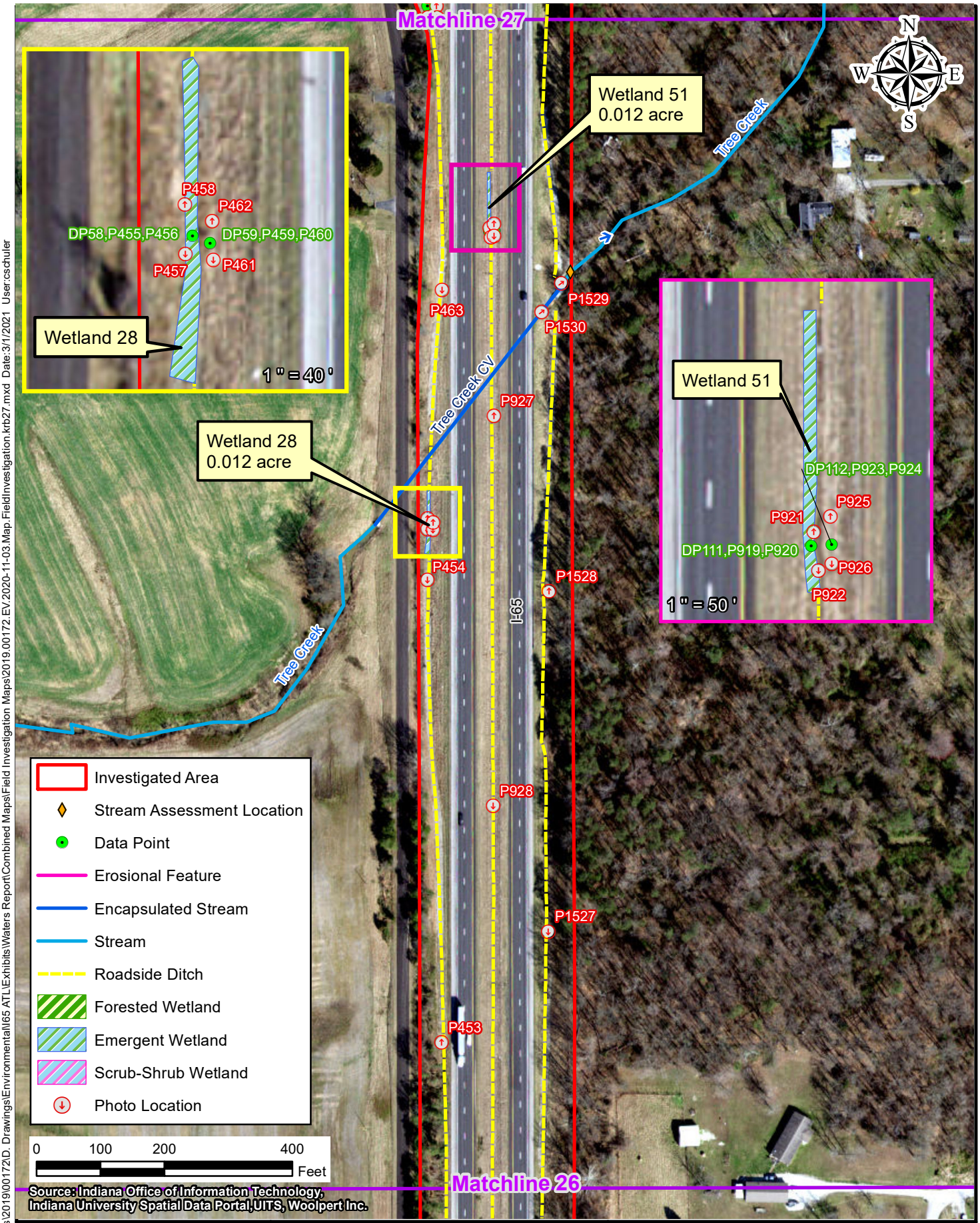

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Figure 7: Field Investigation and Photo Location Map - Map 27 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties Appendix D
Date: 03/01/2021 State: Indiana

Attachment 14-1

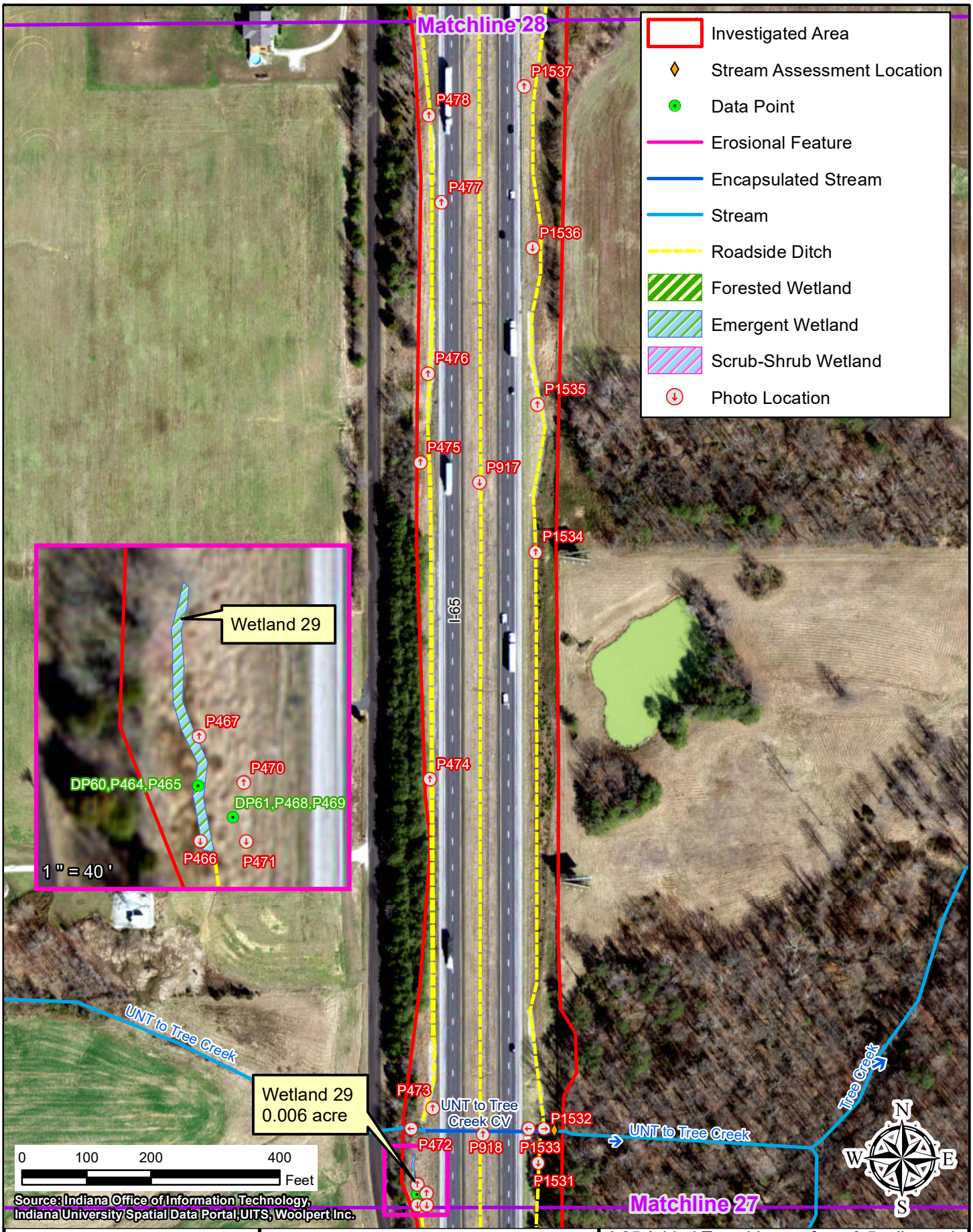

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Figure 7: Field Investigation and Photo Location Map - Map 28 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

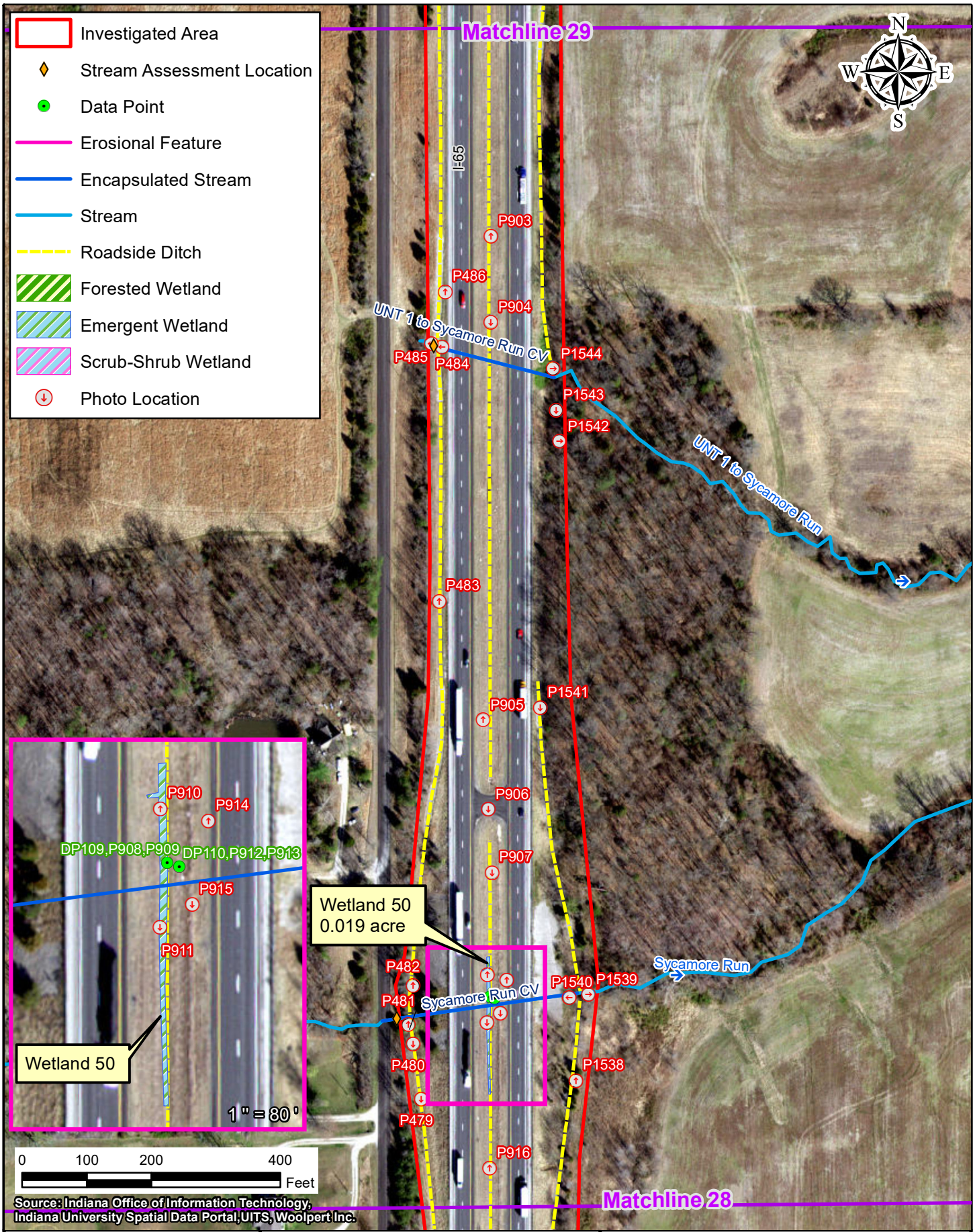

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Figure 7: Field Investigation and Photo Location Map - Map 29 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

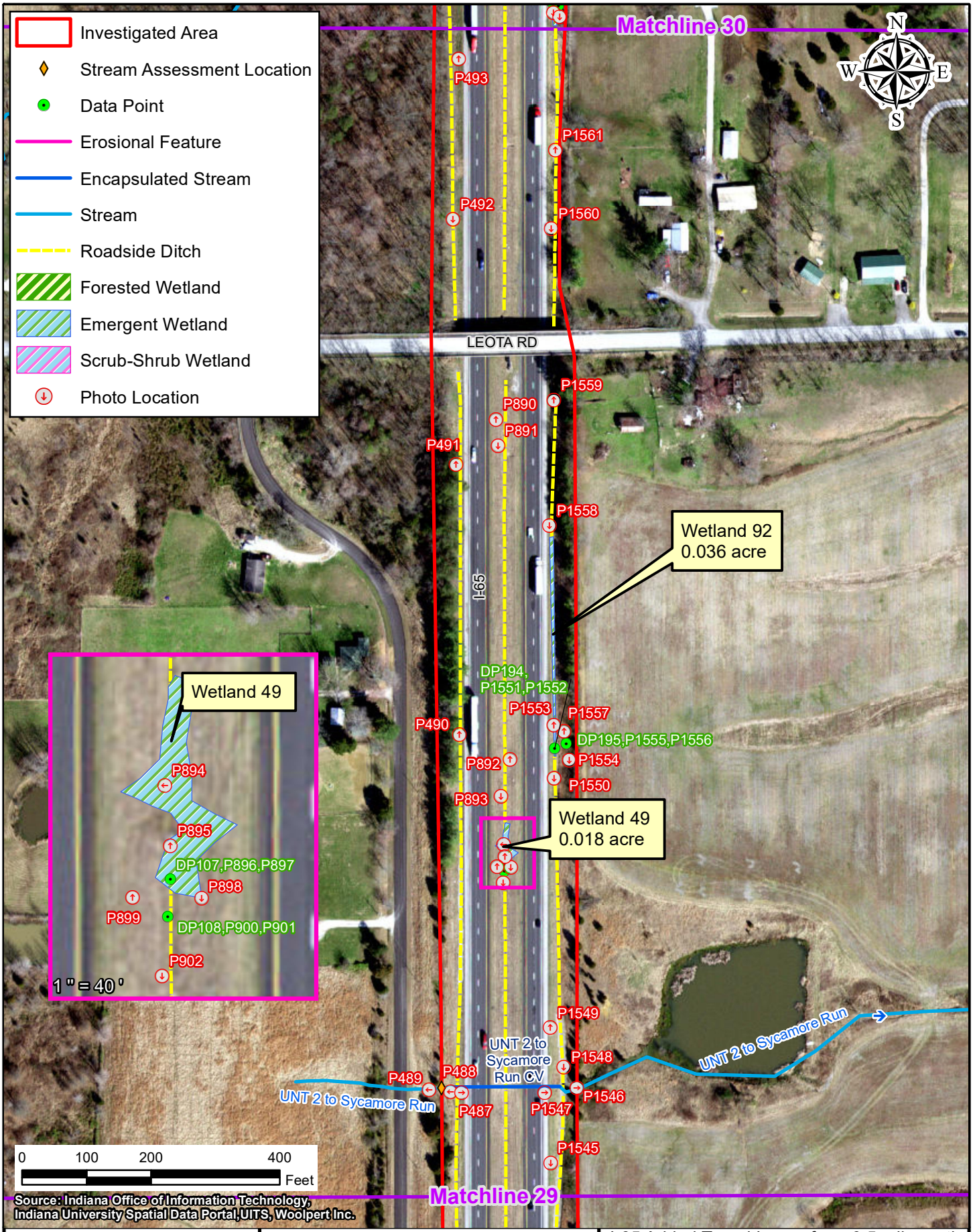

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Figure 7: Field Investigation and Photo Location Map - Map 30 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

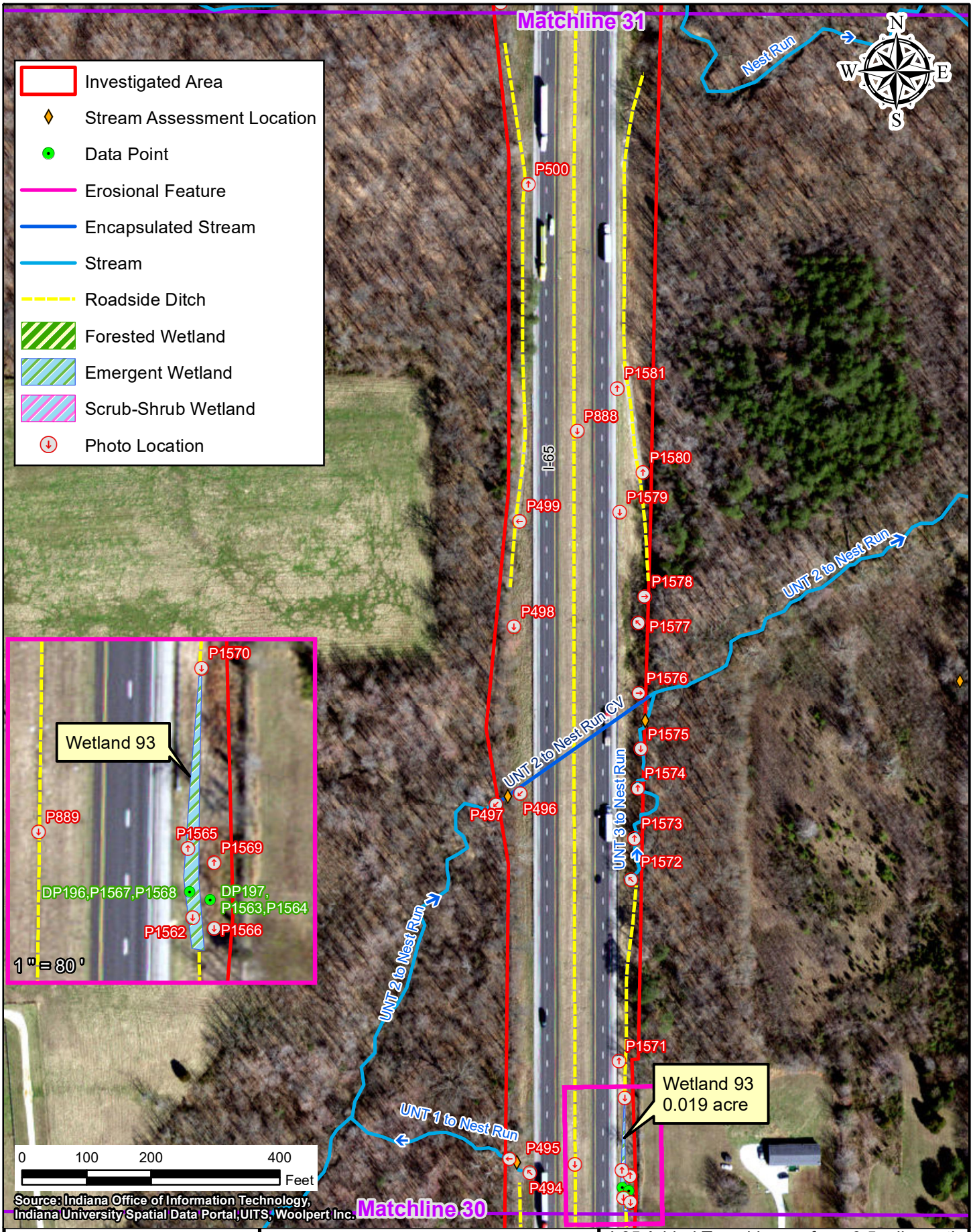

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Figure 7: Field Investigation and Photo Location Map - Map 31 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

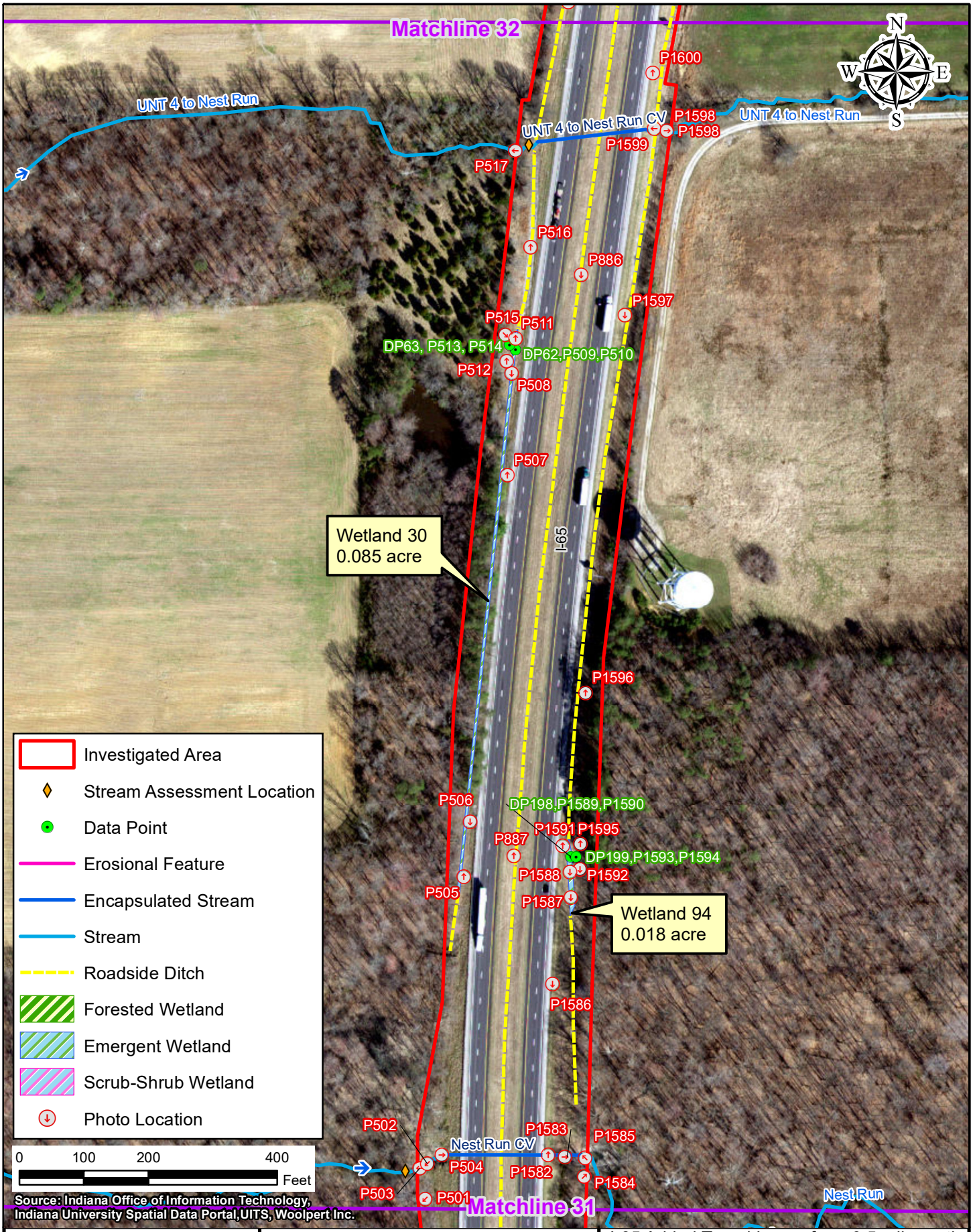

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Figure 7: Field Investigation and Photo Location Map - Map 32 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

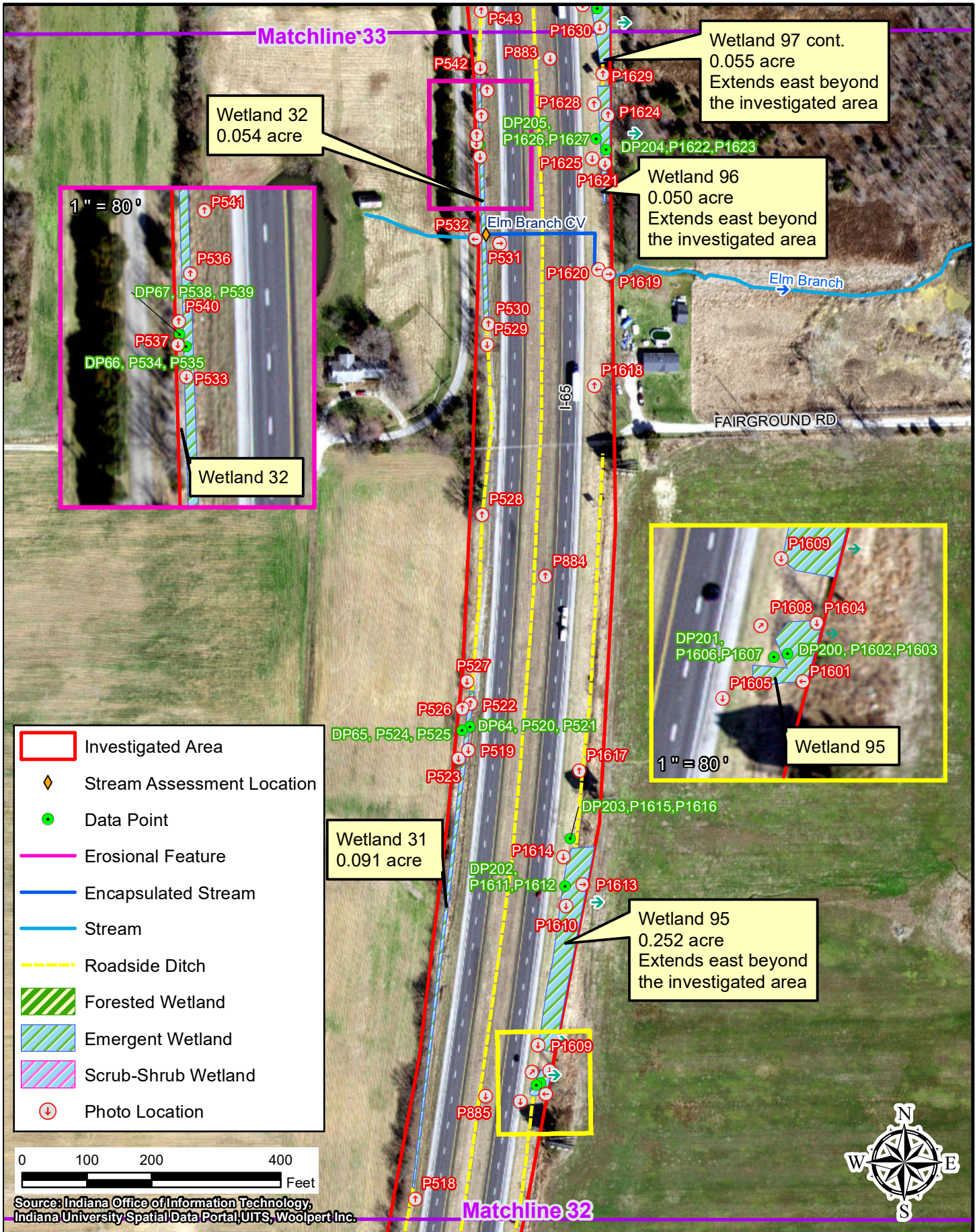

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Figure 7: Field Investigation and Photo Location Map - Map 33 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
State: Indiana
03/01/2021

Appendix D

Attachment 14-1

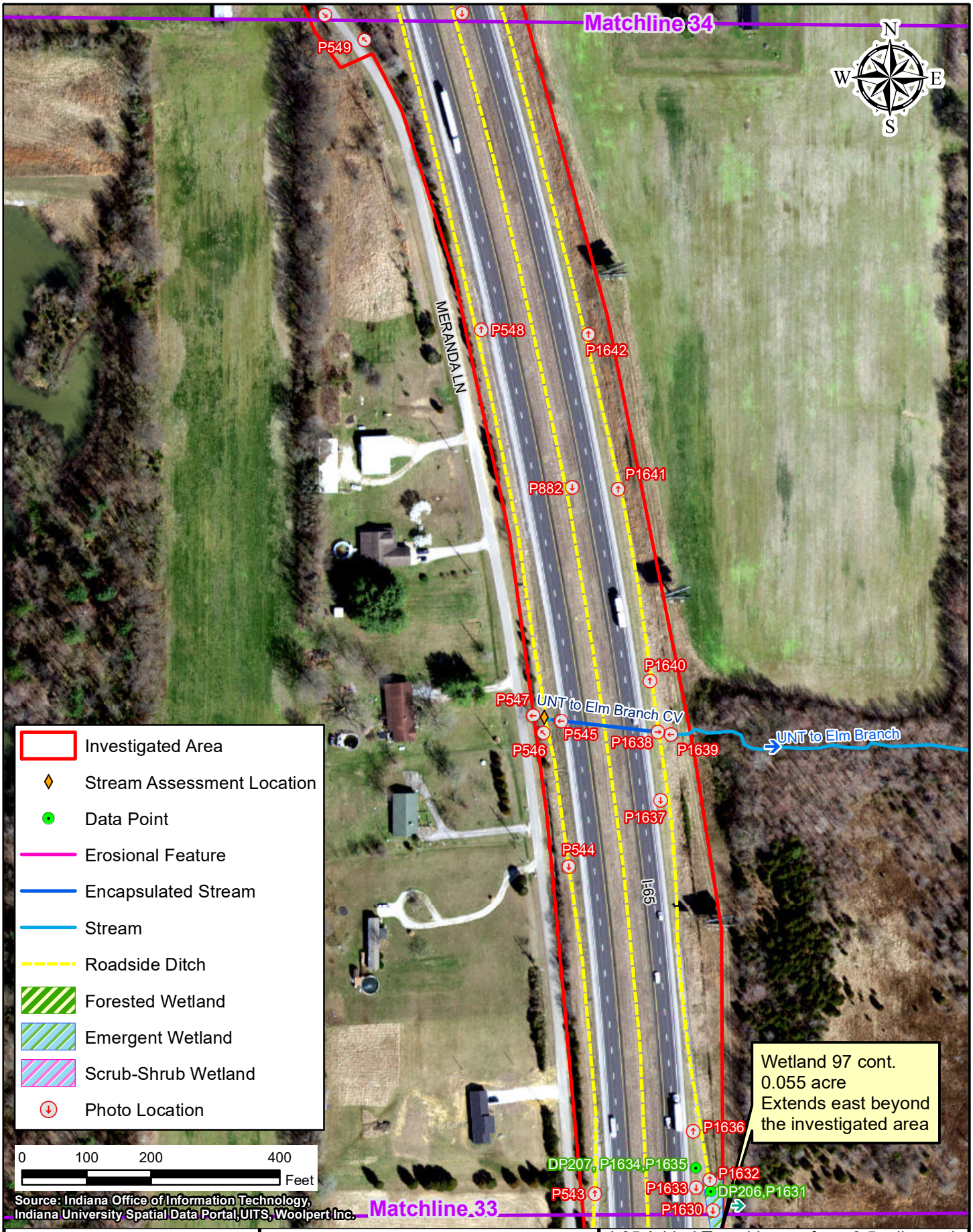

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Figure 7: Field Investigation and Photo Location Map - Map 34 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

Appendix D

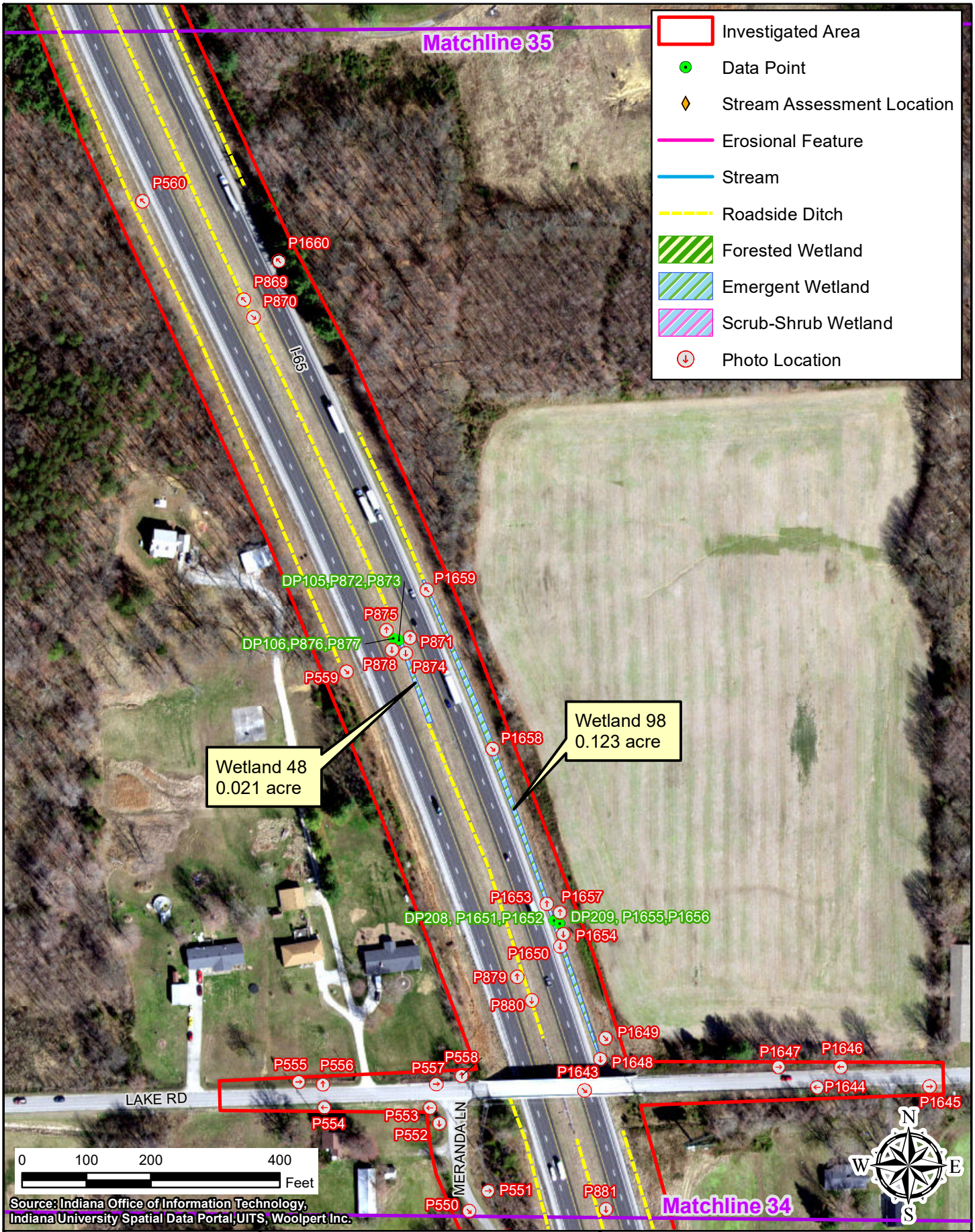

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Figure 7: Field Investigation and Photo Location Map - Map 35 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/04/2020 State: Indiana

Appendix D

Attachment 14-1

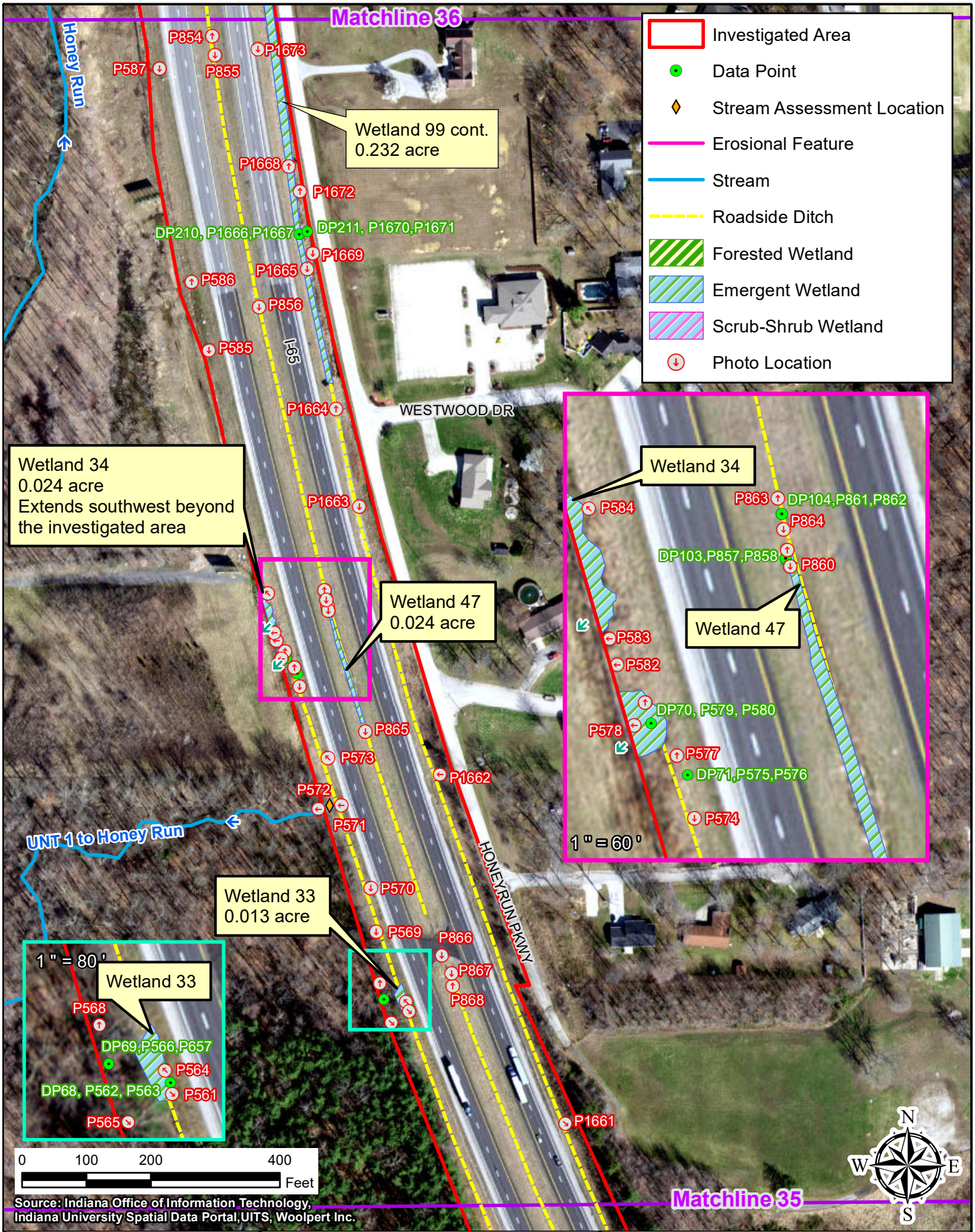

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Figure 7: Field Investigation and Photo Location Map - Map 36 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/04/2020 State: Indiana

Appendix D

Attachment 14-1

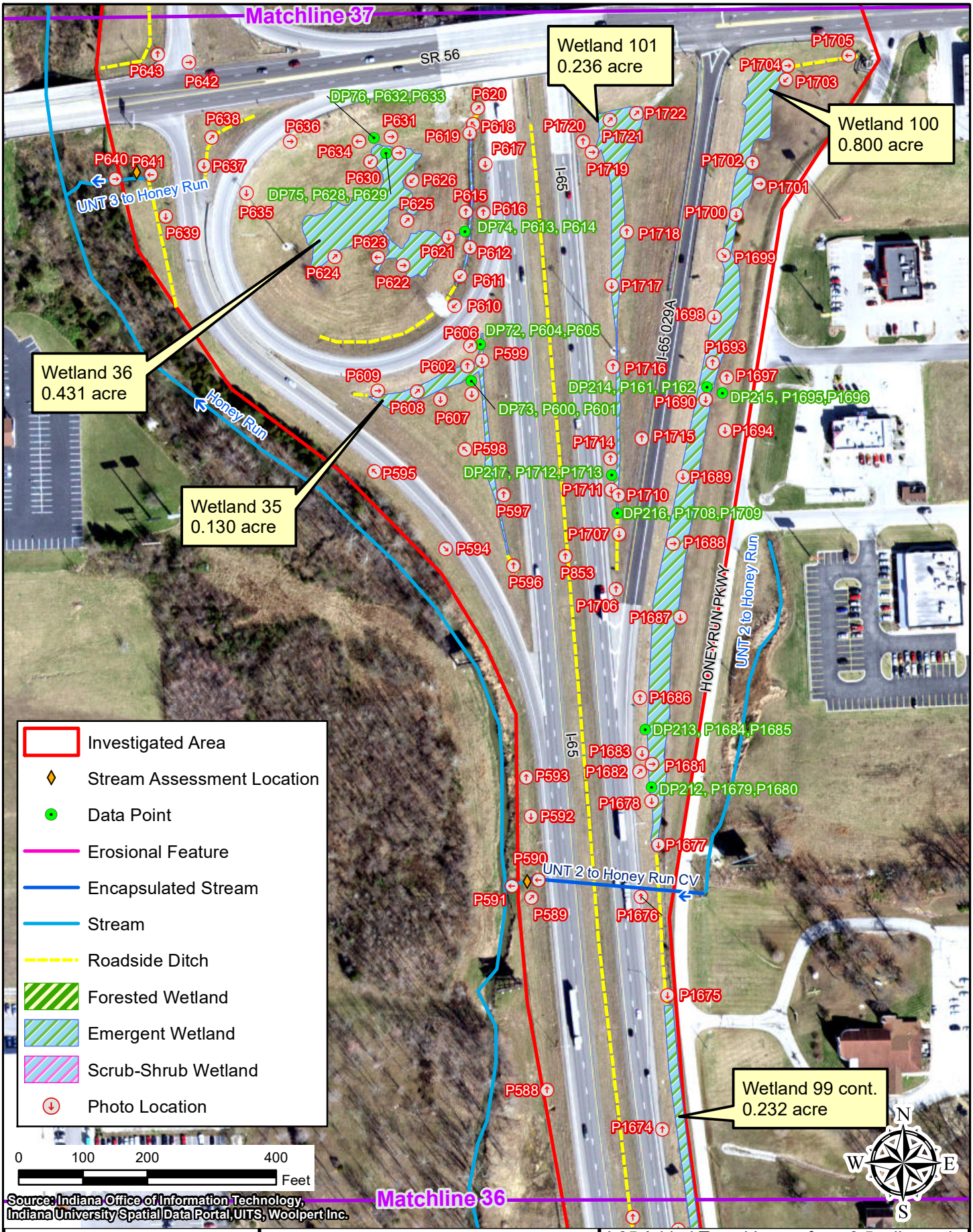

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Figure 7: Field Investigation and Photo Location Map - Map 37 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

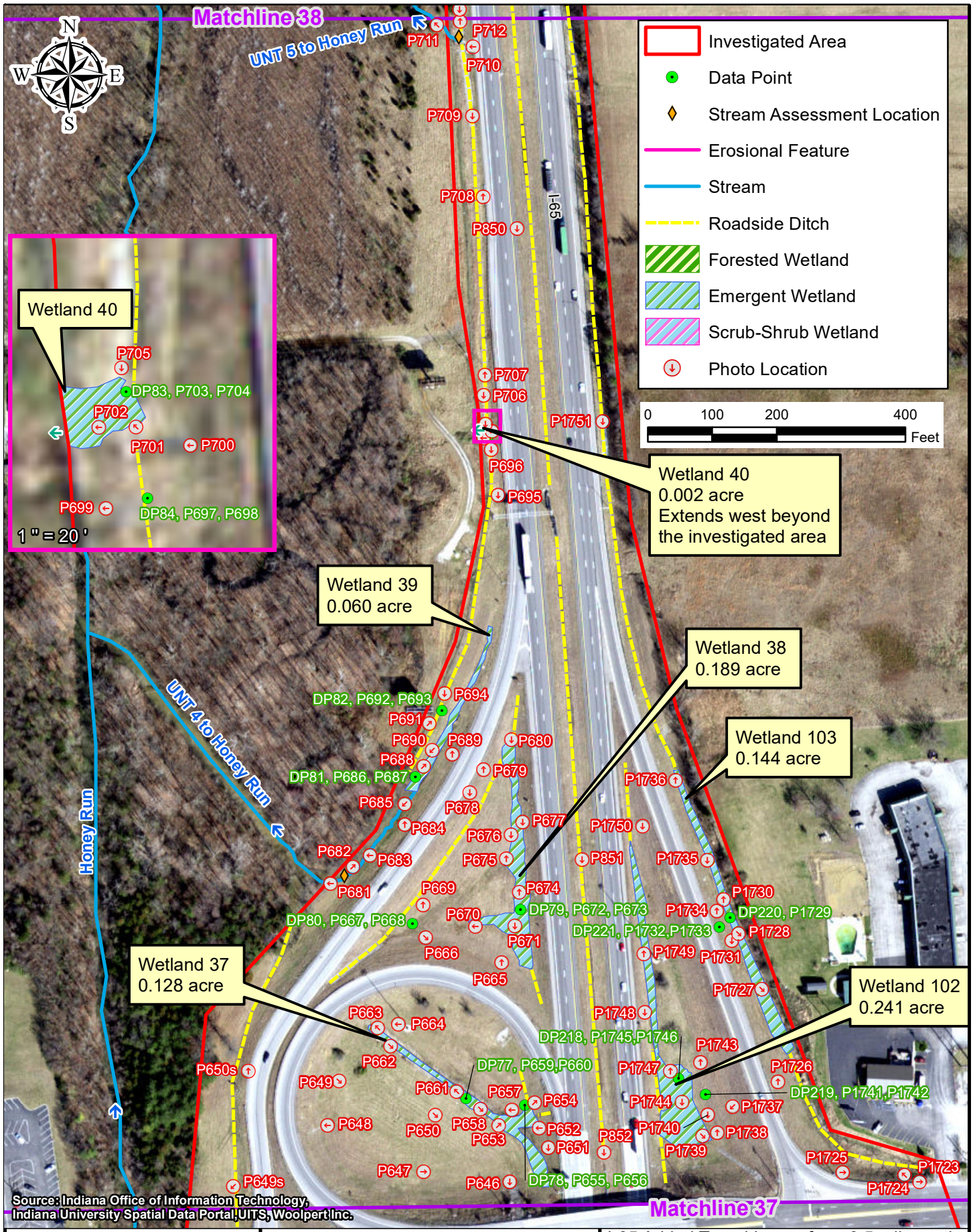

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Figure 7: Field Investigation and Photo Location Map - Map 38 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/04/2020 State: Indiana

Appendix D

Attachment 14-1

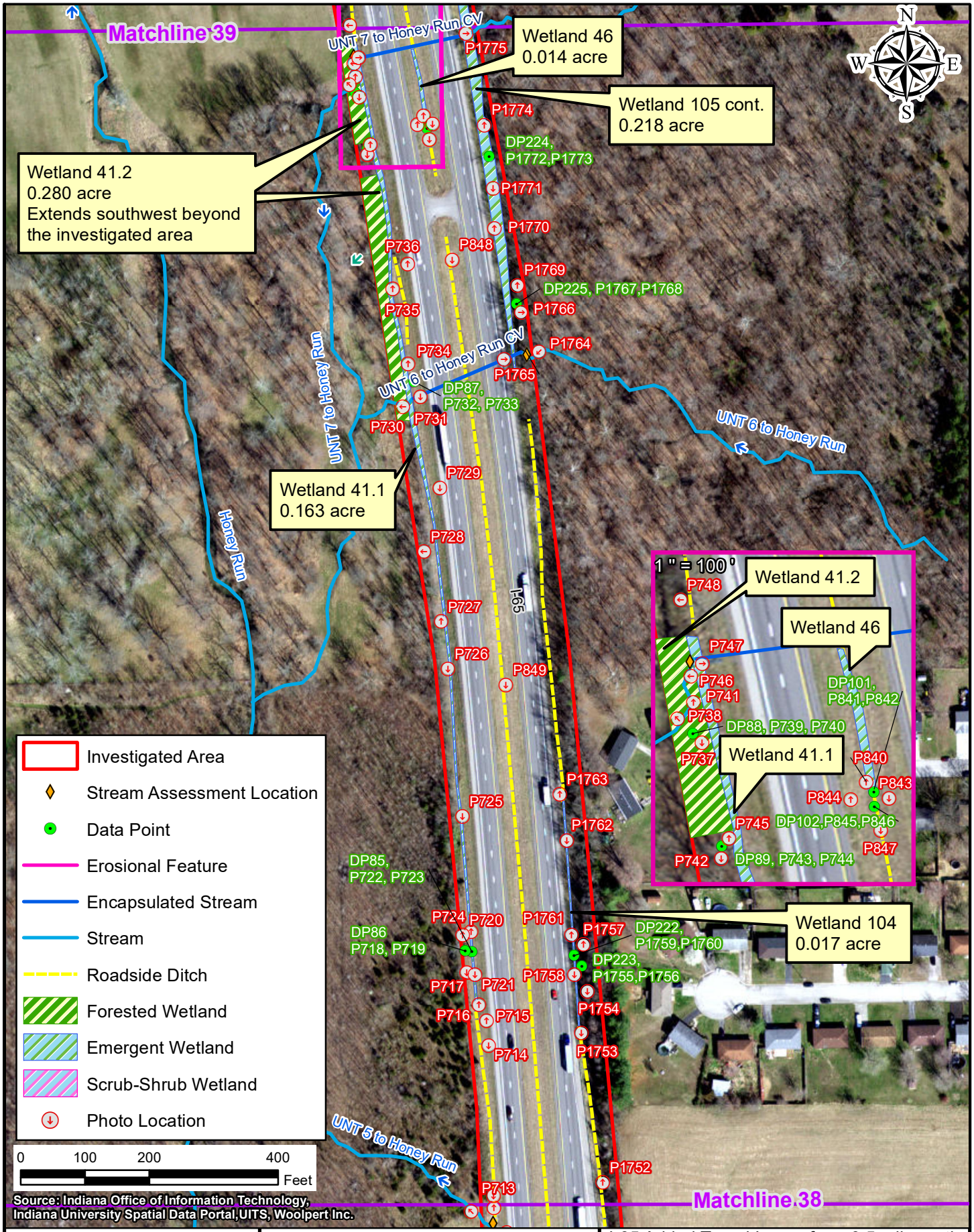

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Figure 7: Field Investigation and Photo Location Map - Map 39 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

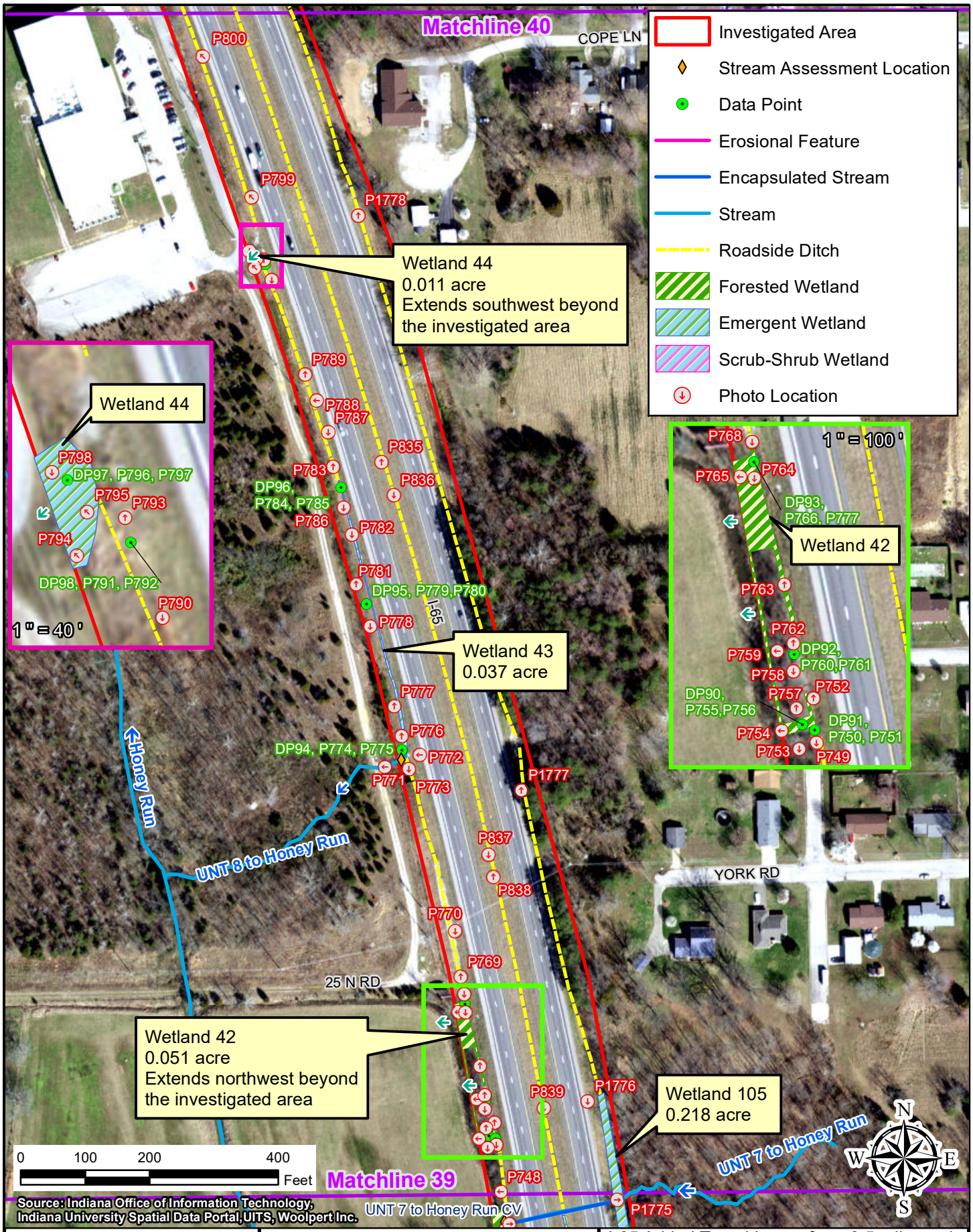

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Figure 7: Field Investigation and Photo Location Map - Map 40 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Appendix D

Attachment 14-1

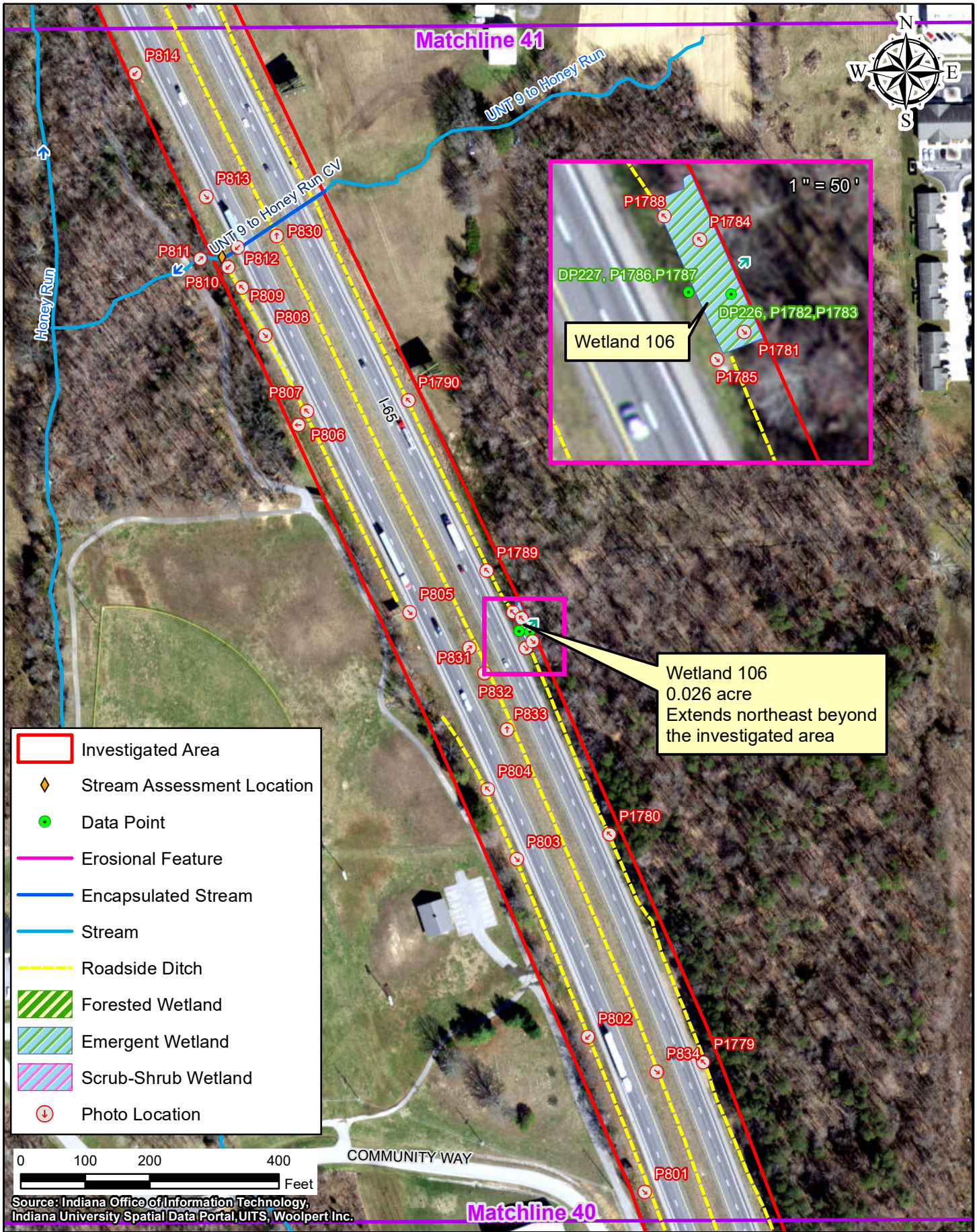

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Figure 7: Field Investigation and Photo Location Map - Map 41 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 03/01/2021 State: Indiana

Attachment 14-1

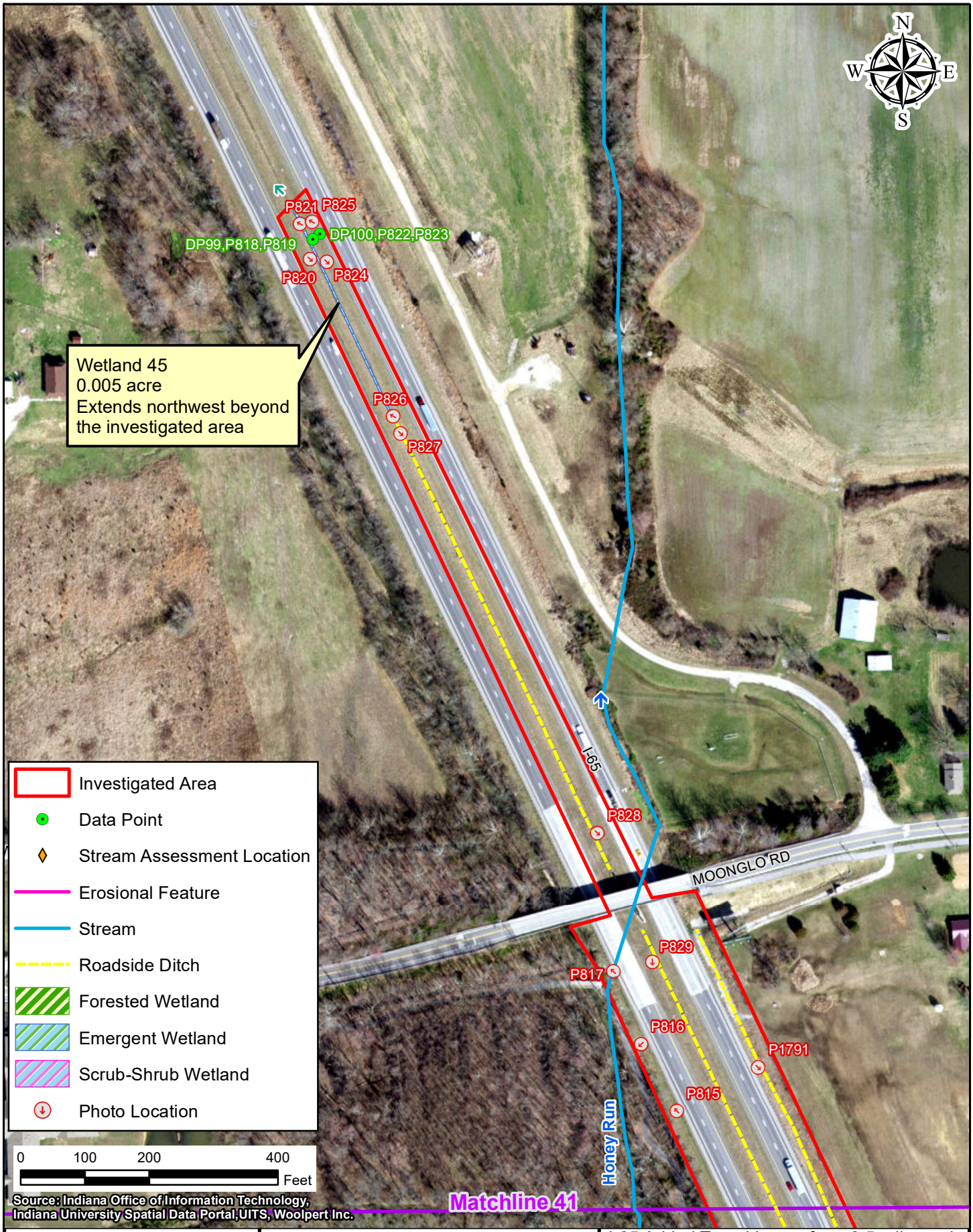

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Figure 7: Field Investigation and Photo Location Map - Map 42 of 42

INDOT Seymour District
185 Agrico Lane
Seymour, IN 47274

I-65 Added Travel Lanes from 0.5 mile north of Blue Lick Road to 1.5 miles north of SR 56
Des. No. 1700135
Location: Scottsburg and Henryville
Township: Union, Monroe, and Vienna
County: Clark and Scott Counties
Date: 12/03/2020 State: Indiana

Appendix D

Attachment 14-1