

FHWA-Indiana Environmental Document
CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM
GENERAL PROJECT INFORMATION

Road No./County:	United States (US) Route 421, Clinton County
Designation Number(s):	Des. No. 2200665
Project Description/Termini:	Small Structure Culvert Replacement, US 421, 0.67 mile south of SR 26 over a drainage swale. The project extends 227 feet south and 188 feet north of the structure center.

X	Categorical Exclusion, Level 2 – Required Signatories: INDOT DE and/or INDOT ESD
	Categorical Exclusion, Level 3 – Required Signatories: INDOT ESD
	Categorical Exclusion, Level 4 – Required Signatories: INDOT ESD and FHWA
	Environmental Assessment (EA) – Required Signatories: INDOT ESD and FHWA
	Additional Investigation (AI) – The proposed action included a design change from the original approved environmental document. Required Signatories must include the appropriate environmental approval authority

Approval

INDOT DE Signature and Date

INDOT ESD Signature and Date

FHWA Signature and Date

Release for Public Involvement

BNE
INDOT DE Initials and Date

3/21/2025

INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Michael J. Lawson 3/21/2025

Name and Organization of CE/EA Preparer:

Rachel Pluckebaum and Kirk Roth, Corradino, LLC

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Note: Refer to the most current INDOT CE Manual, guidance language, and other ESD resources for further guidance regarding any section of this form.

Part I – Public Involvement

Every Federal action requires some level of public involvement, providing for early and continuous opportunities throughout the project development process. **The level of public involvement should be commensurate with the proposed action.**

Does the project have a historic bridge processed under the Historic Bridges PA*?

If No, then:

Opportunity for a Public Hearing Required?

**A public hearing is required for all historic bridges processed under the Historic Bridges Programmatic Agreement between INDOT, FHWA, SHPO, and the ACHP.*

Discuss what public involvement activities (legal notices, letters to affected property owners and residents (i.e. notice of entry), meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.

Notice of Entry letters were mailed to potentially affected property owners near the project area on April 11, 2023 notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in Appendix G-2 to G-3.

Project Does Meet

This project requires more than 0.50 acre of new permanent right-of-way. Therefore, this project meets the requirements described in the current Indiana Department of Transportation (INDOT) Public Involvement Manual, which requires the project sponsor to offer the public an opportunity to submit comments and/or request a public hearing.

The project will meet the minimum requirements described in the current Indiana Department of Transportation (INDOT) Project Development Public Involvement Procedures Manual which requires the project sponsor to offer the public an opportunity to submit comments and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

Public Controversy on Environmental Grounds

Discuss public controversy concerning community and/or natural resource impacts, including what is being done during the project to minimize impacts.

No Controversy

At this time, there is no substantial public controversy concerning impacts to the community or to natural resources.

Part II - General Project Identification, Description, and Design Information

Sponsor of the Project: Indiana Department of Transportation (INDOT) INDOT District: Crawfordsville

Local Name of the Facility: Highway United States (US) 421

Funding Source (mark all that apply): Federal State Local Other*

*If other is selected, please identify the funding source: _____

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PURPOSE AND NEED:

The need should describe the specific transportation problem or deficiency that the project will address. The purpose should describe the goal or objective of the project. The solution to the traffic problem should NOT be discussed in this section.

Need: The need for this project is due to the condition of the existing reinforced concrete box structure (CV 421-012-133.62). There is heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The structural evaluation rating from the culvert inspection report is a 4 (poor condition) on a scale from 0 (failed condition) to 9 (excellent condition). See the culvert inspection report dated July 13, 2022 for more details (Appendix I-2 to I-18).

Purpose: The purpose of this project is to provide a structure with a condition rating of good or better (7 or above).

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Clinton

Municipality: Rossville

Limits of Proposed Work: The project is located 0.67 mile south of SR 26 and extends from 402 feet south of the culvert's center to 298 feet north of the culvert's center.

Total Work Length: 0.133 Mile(s)

Total Work Area: 1.39 Acre(s)

<input type="checkbox"/> Yes ¹	<input checked="" type="checkbox"/> No
Date: _____	

Is an Interstate Access Document (IAD)¹ required?

If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?

¹If an IAD is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IAD.

Describe location of project including township, range, city, county, roads, etc. Existing conditions should include current conditions, current deficiencies, roadway description, surrounding features, etc. Preferred alternative should include the scope of work, anticipated impacts, and how the project will meet the Purpose and Need. Logical termini and independent utility also need discussed.

Location: The structure is on US 421, 0.67 mile south of SR 26 over a drainage swale. The project is in Clinton County, Frankfort Sub-District, Indiana, in Section 25, Township 23 North, Range 2 West (Appendix B-2).

Existing Conditions: The existing structure is a three-sided slab top structure with an 8-foot span, a 4-foot rise, and a 32-foot length. Structural deficiencies include heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The head walls have spalling with exposed rebar. The channel beams have cracks with efflorescence and spalling with exposed rebar. There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure. Per the inspection, the original slab of the structure has been widened in the past (Appendix I-8). As documented in the Waters of the U.S. Determination report, drainage flows west through a drainage swale served by the small structure and encounters Campbells Run (Appendix F-4 to F-5, WOTUS Report identifies the drainage swale as RSD-1). The small structure is surrounded by rural farmland. Overhead utilities are located within the project area and may be relocated to avoid conflict with the project. The existing US 421 pavement consists of asphalt on the travel lanes and shoulders. The northbound and southbound direction each have one 12-foot travel lane with a 2-foot usable shoulder. The functional class of US 421 is a *Minor Arterial*.

Preferred Alternative: INDOT and the Federal Highway Administration (FHWA) intend to proceed with the following project. The preferred alternative is to replace the existing structure. This alternative is to replace the entire small structure with a 17-foot span, 4-foot rise, by 47-foot-long reinforced concrete box culvert. The pavement will be widened to 12-foot lanes and 6-foot usable shoulders at the approach. Incidental construction will include placement of scour protection, revetment riprap on geotextiles at the inlet and outlet, placement of approximately 245 feet of new guardrail along each side of US 421 and milling and resurfacing approach pavement. Temporary dewatering measures will involve the installation of cofferdams at the inlet and outlet of the structure for a pump-around and construction site dewatering (Appendix B-14). INDOT has no documented right-of-way (ROW), and the existing ROW is considered the edge of the pavement. There will be 1.34 acre of permanent ROW, no reacquisition of existing ROW, and no temporary ROW acquired for this project. ROW will be acquired near the inlet and outlet of the proposed structure to place the new structure, reconstruct the ditch lines in the area, temporary dewatering, and scour protection.

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Construction limits and ROW acquisition have been reduced to only the extent necessary to meet the project's purpose and need. Impacts to the drainage swale that have been reduced to the extent practicable. Overhead utilities are located on the east and west side of the road will be relocated and will be relocated to the edge of the new ROW. Because no trees occur within the project area, no trees will be cut for this project, including for utility relocation purposes. See Appendix B-5 to B-15 for design plans. The existing roadway will not be disturbed, and the project will not change the vertical or horizontal alignment of US 421.

The maintenance of traffic (MOT) for this project will include a temporary closure on US 421 with a signed detour. The detour will follow SR 26 and SR 75. The detour is approximately 13 miles long (Appendix B-8 to B-9).

Logical Termini/Independent Utility: This alternative is expected to meet the project's purpose and need by providing a structure with a condition rating of good or better (7 or above). The project demonstrates independent utility because the purpose of maintaining the culvert's integrity is not associated with any other projects, and it would be built regardless of any other projects in the area. Therefore, it is a single and complete project. The project termini are logical because they are limited to only that required to construct the project and fulfill the purpose of the project. See the provided design plans for further details regarding the proposed project improvements (Appendix B-5 to B-15).

OTHER ALTERNATIVES CONSIDERED:

Provide a header for each alternative. Describe all discarded alternatives, including the No Build Alternative. Explain why each discarded alternative was not selected. Make sure to state how each alternative meets or does not meet the Purpose and Need and why.

Do Nothing: The no-build alternative was considered. This alternative has no costs and no environmental impacts. However, it does not meet the identified need of the project because it does not provide a sufficient structure with a condition rating of good or better (7 or above).

The No Build Alternative is not feasible, prudent or practicable because (Mark all that apply):

It would not correct existing capacity deficiencies;

X

It would not correct existing safety hazards;

It would not correct the existing roadway geometric deficiencies;

It would not correct existing deteriorated conditions and maintenance problems; or

It would result in serious impacts to the motoring public and general welfare of the economy.

Other (Describe):

ROADWAY CHARACTER:

If the proposed action includes multiple roadways, complete and duplicate for each roadway.

Name of Roadway	US 421			
Functional Classification:	Minor Arterial			
Current ADT:	2,765	VPD (2027)	Design Year ADT:	3,295
Design Hour Volume (DHV):	10.8%	Truck Percentage (%)	5.4%	VPD (2047)
Designed Speed (mph):	55 mph	Legal Speed (mph):	55 mph	

Existing		Proposed		
Number of Lanes:		2		
Type of Lanes:	Through Lanes		Through Lanes	
Pavement Width:	12	ft.	12	ft.
Shoulder Width:	0	ft.	6	ft.
Median Width:	0	ft.	0	ft.
Sidewalk Width:	0	ft.	0	ft.

Setting:	<input type="checkbox"/>	Urban
Topography:	<input checked="" type="checkbox"/>	Suburban
		Rolling
		<input type="checkbox"/> X Rural
		Hilly

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BRIDGES AND/OR SMALL STRUCTURE(S):

If the proposed action includes multiple structures, complete and duplicate for each bridge and/or small structure. Include both existing and proposed bridge(s) and/or small structure(s) in this section.

Structure/NBI Number(s): CV 421-012-133.62 Sufficiency Rating: N/A
(Rating, Source of Information)

Existing		Proposed	
Bridge/Structure Type:	Three-sided slab top structure	Reinforced concrete box structure	
Number of Spans:	1	1	
Weight Restrictions:	N/A	36	ton
Height Restrictions:	N/A	N/A	ft.
Curb to Curb Width:	N/A	N/A	ft.
Outside to Outside Width:	30	47	ft.
Shoulder Width:	2.0	2.0	ft.

Describe impacts and work involving bridge(s), culvert(s), pipe(s), and small structure(s). Provide details for small structure(s): structure number, type, size (length and dia.), location and impacts to water. Use a table if the number of small structures becomes large. If the table exceeds a complete page, put it in the appendix and summarize the information below with a citation to the table.

The existing structure (CV 421-012-133.62) is an 8-foot span, a 4-foot rise, and a 32-foot length three-sided slab top structure. The project will include the complete removal and replacement of the existing structure. The existing structure will be replaced with a 17-foot span, 4-foot rise, by 47-foot-long reinforced concrete box structure. Riprap on geotextiles will be placed at the inlet and outlet of the new structure.

The latest Historic Bridge Inventory (<http://www.in.gov/indot/2521.htm>) did not identify any historic structures at or near the project area. No additional structures are located within the project area.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

Is a temporary bridge proposed? Yes No
 Is a temporary roadway proposed? Yes No
 Will the project involve the use of a detour or require a ramp closure? (describe below)
 Provisions will be made for access by local traffic and so posted.
 Provisions will be made for through-traffic dependent businesses.
 Provisions will be made to accommodate any local special events or festivals.
 Will the proposed MOT substantially change the environmental consequences of the action?
 Is there substantial controversy associated with the proposed method for MOT?
 Will the project require a sidewalk, curb ramp, and/or bicycle lane closure? (describe below)
 Provisions will be made for access by pedestrians and/or bicyclist and so posted (describe below).

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discuss closures, detours, and/or facilities (if any) that will be provided for maintenance of traffic. Any known impacts from these temporary measures should be quantified to the extent possible, particularly with respect to properties such as Section 4(f) resources and wetlands. Discuss any pedestrian/bicycle closures. Any local concerns about access and traffic flow should be detailed as well.

The MOT for the project will require a temporary road closure during construction. Traffic will be maintained on SR 26 and SR 75. The detour length is 13 miles in length (Appendix B-8 to B-9).

The road closure will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated, and all inconveniences and delays will cease upon project completion.

It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any

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construction that will block or limit access.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 180,273 (2023) Right-of-Way: \$ 55,000 (2026) Construction: \$ 813,199.64 (2026)

Anticipated Start Date of Construction: Spring 2027

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential		
Commercial		
Agricultural	0.77	
Forest		
Wetlands		
Other: Maintained Roadside Apparent Right-of-Way	0.57	
Other:		
TOTAL	1.34	

Describe both Permanent and Temporary right-of-way and describe their current use. Typical and Maximum right-of-way widths (existing and proposed) should also be discussed. Any advance acquisition, reacquisition or easements, either known or suspected, and their impacts on the environmental analysis should be discussed.

The existing ROW extends to the edge-of-pavement and is approximately 24-feet wide, extending 12-feet west and 12-feet east of the US 421 centerline within the project area. The proposed ROW is approximately 65 feet west and 65 feet east of the US 421 centerline. The apparent existing ROW is approximately 30 feet wide.

The project requires approximately 1.34 acre of ROW, along US 421, and at the inlet and outlet of the structure. The structure does not require any temporary or reacquisition of ROW. The current land use includes apparent existing ROW out to 30 feet; INDOT must acquire it based on a lack of documented ownership.

If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.

Part III – Identification and Evaluation of Impacts of the Proposed Action

SECTION A - EARLY COORDINATION:

List the date(s) coordination was sent and all resource agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received.

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Early coordination letters were sent on October 26, 2023 unless otherwise indicated (Appendix C-2 to C-4).

<u>Agency</u>	<u>Dates Sent</u>	<u>Date Response Received</u>	<u>Appendix</u>
INDOT Environmental Policy Manager	October 27, 2023	No response received	N/A
Federal Highway Administration (FHWA)	October 26, 2023	No response received	N/A
Indiana Department of Natural Resources-Division of Fish and Wildlife (IDNR-DFW)	October 26, 2023	November 21, 2023	C-6 to C-8
INDOT-Crawfordsville District	October 27, 2023	No response received	N/A
National Resource Conservation Service (NRCS)	November 10, 2023	November 20, 2023	C-9 to C-10
U.S. Army Corps of Engineers (USACE)	October 27, 2023	No response received	N/A
U.S. Department of Housing & Urban Development (USHUD)	October 26, 2023	No response received	N/A
U.S. Fish and Wildlife Service (USFWS)	October 26, 2023	October 26, 2023	C-5
Clinton County Highway Superintendent	October 27, 2023	No response received	N/A
Clinton County Surveyor	October 27, 2023	No response received	N/A
Indiana Geological and Water Survey (IGWS)	November 8, 2023	November 8, 2023	C-11 to C-13
USFWS Information for Planning and Consultation (IPaC) Portal	September 27, 2024	September 27, 2024	C-14 to C-36
Clinton County Council	October 27, 2023	No response received	N/A
Clinton County Commissioners	October 27, 2023	No response received	N/A
Clinton County Treasurer	October 27, 2023	No response received	N/A
Clinton County EMA	October 27, 2023	No response received	N/A
Rossville Consolidated School District	October 27, 2023	No response received	N/A
Clinton County EMS	October 27, 2023	No response received	N/A
Clinton County Soil & Water Conservation District	October 17, 2024	No response received	N/A

All applicable recommendations are included in the Environmental Commitments section of this CE document. Coordinating with agencies is one of the first things we do on a project. Since coordinating with the agencies, it has been determined that the roadway was in apparent existing ROW and not existing ROW as stated in the early coordination letter.

SECTION B – ECOLOGICAL RESOURCES:

Streams, Rivers, Watercourses & Other Jurisdictional Features

Federal Wild and Scenic Rivers
 State Natural, Scenic or Recreational Rivers
 Nationwide Rivers Inventory (NRI) listed
 Outstanding Rivers List for Indiana
 Navigable Waterways

<u>Presence</u>	<u>Impacts</u>	
	<u>Yes</u>	<u>No</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total stream(s) in project area: N/A Linear feet Total impacted stream(s): N/A Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)

This is page 7 of 21 Project name: US 421 Small Structure Replacement at Drainage Swale Date: March 7, 2025

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Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)

Describe all streams, rivers, watercourses and other jurisdictional features adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if the streams or rivers are listed on any federal or state lists for Indiana. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map (Appendix B-3) of the project area, and the RFI report (Appendix E-3 to E-4) there are four streams, rivers, watercourse, or other jurisdictional features within the 0.5-mile search radius. There are no streams, rivers, watercourse, or other jurisdictional features within or adjacent to the project area, which was confirmed by the site visit on June 8, 2023 by Corradino, LLC. The drainage swale served by the project structure was identified as RSD-1 in the *U.S. Determination Report*. The drainage swale was not found to be a regulated drain within the county.

A *Waters of the U.S. Determination Report* was completed for the project on July 26, 2024. Please refer to Appendix F for the *Waters of the U.S. Determination Report*. It was determined that there were no jurisdictional waters occurred within the investigative area. The USACE makes all final determinations regarding jurisdiction.

USFWS responded to early coordination on October 26, 2023 (Appendix C-5) stating they will not be providing a comment letter. IDNR-DFW responded to early coordination on November 21, 2023 (Appendix C-6 to C-8) with measures to minimize impacts to fish, wildlife, and botanical resources or compensate for impacts, including: consideration of wildlife crossing, bank stabilization, minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush, do not work in the waterway from April 1 through June 30 without approval, do not use broken concrete as riprap, underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap, minimize the movement of resuspended bottom sediment from the immediate project, do not deposit or allow demolition/construction materials to fall or enter the waterway, implement appropriately designed measures to prevent sediment from entering the stream or leaving the construction site, seed and protect all disturbed streambanks and slopes.

All applicable recommendations are included in the Environmental Commitments section of this CE document.

Open Water Feature(s)

Reservoirs
Lakes
Farm Ponds
Retention/Detention Basin
Storm Water Management Facilities
Other: _____

Presence

Impacts

Yes

Describe all open water feature(s) identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map (Appendix B-3) of the project area, and the RFI report (Appendix E-3 to E-4) there is one open water feature within the 0.5-mile search radius. There are no open water features within or adjacent to the project area, which was confirmed by the site visit on June 8, 2023 by Corradino, LLC. Therefore, no impacts are expected.

Wetlands

Total wetland area: N/A Acre(s) Total wetland area impacted: N/A Acre(s)

(If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

Presence

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Impacts

Yes

No

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Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments (i.e. location, likely Water of the US, appendix reference)

Documentation

Wetlands (Mark all that apply)

- Wetland Determination
- Wetland Delineation
- USACE Isolated Waters Determination

ESD Approval Dates

Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain):

- Substantial adverse impacts to adjacent homes, business or other improved properties;
- Substantially increased project costs;
- Unique engineering, traffic, maintenance, or safety problems;
- Substantial adverse social, economic, or environmental impacts, or
- The project not meeting the identified needs.

Describe all wetlands identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map (Appendix B-3) of the project area, and the RFI report (Appendix E-3 to E-4) there are seven wetlands within the 0.5-mile search radius. There are no wetlands within or adjacent to the project area, which was confirmed by the site visit on June 8, 2023 by Corradino, LLC. Therefore, no impacts are expected.

A Waters of the U.S. Determination Report was completed for the project on July 26, 2024. Please refer to Appendix F for the Waters of the U.S. Determination Report. It was determined that there were no jurisdictional waters occurred within the investigative area. The USACE makes all final determinations regarding jurisdiction.

USFWS responded to early coordination on October 26, 2023 (Appendix C-5) and IDNR-DFW responded to early coordination on November 21, 2023 (Appendix C-6 to C-8). Both agencies did not include recommendations for wetlands. All applicable recommendations are included in the Environmental Commitments section of this CE document.

Terrestrial Habitat

Presence	Impacts	
	Yes	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total terrestrial habitat in project area: 1.27 Acre(s) Total tree clearing: 0 Acre(s)

Describe types of terrestrial habitat (i.e. forested, grassland, farmland, lawn, etc) adjacent or within the project area. Include whether or not impacts will occur to habitat identified. Include total terrestrial habitat impacted and total tree clearing that will occur. Discuss measure to avoid, minimize, and mitigate if impacts will occur.

Based on a desktop review, a site visit on June 8, 2023 by Corradino, LLC, the aerial map (Appendix B-3) of the project area, there is 1.34 acre of open grassy habitat within the project area. Dominant species in this area include great ragweed (*Ambrosia trifida*), indianhemp (*Apocynum cannabinum*), Fuller's teasel (*Dipsacus fullonum*), tall fescue grass (*Schedonorus arundinaceus*), timothy grass (*Phleum pratense*), smooth brome grass (*Bromus inermis*), orchard grass (*Dactylis glomerata*), common milkweed (*Asclepias syriaca*), and smooth crabgrass (*Digitaria ischaemum*). Land use in the surrounding area is rural, with residential housing and farmland near the project area. The project will disturb approximately 1.27 acre of soil. Utilities will be relocated for this project; no additional tree-clearing will take place.

Early coordination letters were sent to USFWS and IDNR-DFW on October 26, 2023. USFWS responded to early coordination on

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October 26, 2023 (Appendix C-5) stating they will not be providing a comment letter. IDNR-DFW responded to early coordination on November 21, 2023 (Appendix C-6 to C-8) with recommendations regarding tree clearing, revegetation with native species, forest mitigation, and erosion control.

All applicable recommendations are included in the Environmental Commitments section of this CE document.

Protected Species

Federally Listed Bats

Information for Planning and Consultation (IPaC) determination key completed
 Section 7 informal consultation completed (IPaC cannot be completed)
 Section 7 formal consultation Biological Assessment (BA) required

Yes
<input checked="" type="checkbox"/>
<input type="checkbox"/>

No
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

Determination Received for Listed Bats from USFWS:

NE NLAA LAA

Other Species not included in IPaC

Additional federal species found in project area (based on IPaC species list)
 State species (not bird) found in project area (based upon consultation with IDNR)

Yes
<input type="checkbox"/>
<input type="checkbox"/>

No
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

Migratory Birds

Known usage or presence of birds (i.e. nests)
 State bird species based upon coordination with IDNR

Yes
<input type="checkbox"/>
<input type="checkbox"/>

No
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

Discuss IDNR coordination and species identified. Describe USFWS Section 7 consultation and determination received for Indiana bat and northern long-eared bat impacts. Discuss if other federally listed species were identified. If so, include consultation that has occurred and the determination that was received. Discuss if migratory birds have been observed and any impacts.

Based on a desktop review and the RFI report (Appendix E-5), completed by Corradino, LLC on May 23, 2023, the IDNR Clinton County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated November 21, 2023 (Appendix C-6 to C-8), the Natural Heritage Program's Database has been checked and no presence of ETR species are within the 0.5-mile search radius. INDOT DE conducted a review of documented sightings of bat species within 0.5-mile of the project area using the USFWS database on April 3, 2023 (Appendix C-37). None were identified.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated on September 16, 2024 (Appendix C-14 to C-25). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*).

The official species list generated from IPaC also indicated three other species present within the project area, the candidate species monarch butterfly (*Danaus plexippus*), the experimental population species whooping crane (*Grus americana*), and the proposed endangered species salamander mussel (*Simpsonaias ambigua*). Because the monarch butterfly, tricolored bat, and salamander mussel do not have endangered or threatened status, they are not federally protected under the Endangered Species Act.

The project qualifies for the Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB), dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. INDOT conducted a bridge inspection on July 13, 2022 and Corradino, LLC conducted a bat inspection on June 8, 2023. Neither inspection identified signs of bats/birds using the structure (Appendix I-8; I-19). An effect determination key was completed on September 27, 2024, and based on the responses provided, the project was found to *may affect- not likely to adversely affect* the Indiana bat and/or the NLEB (Appendix C-26). INDOT reviewed and verified the effect finding on September 27, 2024 and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Minimization Measures (AMMs) include the following:

- General AMM1 – Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.
- Lighting AMM1 – Direct temporary lighting away from suitable habitat during the active season.

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AMMs are included as firm commitments in the *Environmental Commitments* section of this document.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act, as amended. If new information on endangered species at the site becomes available, or if project plans are changed, USFWS will be contacted for consultation.

Geological and Mineral Resources

Project located within the Indiana Karst Region

Karst features identified within or adjacent to the project area

Oil/gas or exploration/abandoned wells identified in the project area

Yes

X
X
X

No

X
X
X

Date Karst Evaluation reviewed by INDOT EWPO (if applicable): _____

Discuss if project is located in the Indiana Karst Region and if any karst features have been identified in the project area (from RFI). Discuss response received from IGWS coordination. Discuss if any mines, oil/gas, or exploration/abandoned wells were identified and if impacts will occur. Include discussion of karst study/report was completed and results. (Karst investigation must comply with the current Protection of Karst Features during Planning and Construction guidance and coordinated and reviewed by INDOT EWPO)

Based on a desktop review and the Indiana Karst Region map, the project is located outside the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topographic map of the project area (Appendix B-4), the RFI report (Appendix E-3 to E-4) there are no karst features identified within or adjacent to the project area. In the early coordination response November 8, 2023, the Indiana Geological and Water Survey (IGWS) did not indicate that karst features exist in the project area (Appendix C-11 to C-13). IGWS identified the project area as having moderate liquefaction potential, moderate potential as a bedrock resource, low potential as a sand and gravel resource, and having no documented mineral extraction resources nearby. The features will not be affected because the project does not have excavation deep enough to impact bedrock, or other geological resources. Response for IGWS has been communicated to the designer on November 8, 2023. No impacts are expected.

SECTION C – OTHER RESOURCES

Drinking Water Resources

Wellhead Protection Area(s)

Source Water Protection Area(s)

Water Well(s)

Urbanized Area Boundary

Public Water System(s)

Presence

Impacts

Yes

No
X

Is the project located in the St. Joseph Sole Source Aquifer (SSA):

If Yes, is the FHWA/EPA SSA MOU Applicable?

If Yes, is a Groundwater Assessment Required?

Yes

No
X

Check the appropriate boxes and discuss each topic below. Provide details about impacts and summarize resource-specific coordination responses and any mitigation commitments. Reference responses in the Appendix.

The project is located in Clinton County, which is not located within the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/EPA/INDOT Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project, a detailed groundwater assessment is not needed, and no impacts are expected.

The Indiana Department of Environmental Management's Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on November 8, 2023 by Corradino, LLC. This project is located within a Wellhead Protection Area. Coordination occurred with the Clinton County Highway Superintendent (October 27, 2023), the Clinton County Surveyor (October 27, 2023), and the Clinton County Soil & Water Conservation District (October 17, 2024) and no

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response was received. The features will not be affected because this project is only buying ROW near the roadway and small structure.

The Indiana Department of Natural Resources Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed October 3, 2023 by Corradino, LLC. No wells are located near this project. Therefore, no impacts are expected.

Based on a desktop review of the INDOT Municipal Separate Storm Sewer Systems (MS4) website (<https://entapps.indot.in.gov/MS4/>) by Corradino, LLC on October 3, 2023 and the RFI report; this project is not located in an Urban Area Boundary (UAB). No impacts are expected.

Based on a desktop review, a site visit on October 3, 2023 by Corradino, LLC, the aerial map of the project area (Appendix B-3), no public water systems were identified. Therefore, no impacts are expected.

Floodplains	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Project located within a regulated floodplain				
Longitudinal encroachment				
Transverse encroachment				
Homes located in floodplain within 1000' up/downstream from project				

If applicable, indicate the Floodplain Level?

Level 1 Level 2 Level 3 Level 4 Level 5

Use the IDNR Floodway Information Portal to help determine potential impacts. Include floodplain map in appendix. Discuss impacts according to the classification system. If encroachment on a flood plain will occur, coordinate with the Local Flood Plain Administrator during design to insure consistency with the local flood plain planning.

The Indiana Department of Natural Resources Indiana Floodway Information Portal website (<http://dnrmaps.dnr.in.gov/appsphp/fdms/>) was accessed on September 24, 2024 by Corradino, LLC. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F-12). In an early coordination response dated November 21, 2023, IDNR-DFW stated that formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project. In an early coordination response dated November 21, 2023, IDNR-DFW stated that formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project. Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

Farmland	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Agricultural Lands				
Prime Farmland (per NRCS)	X X		X X	

Total Points (from Section VII of CPA-106/AD-1006*) 135
*If 160 or greater, see CE Manual for guidance.

Discuss existing farmland resources in the project area, impacts that will occur to farmland, and mitigation and minimization measures considered.

Based on a desktop review, a site visit on June 8, 2023 by Corradino, LLC, the aerial map of the project area (Appendix B-3) the project will convert 0.50 acre of farmland as defined by the Farmland Protection Policy Act. Since coordinating, there have been changes to ROW totals. Total ROW for this project is 1.34 acre (0.57 acre is maintained roadside apparent ROW). This project as of March 3, 2025, will convert 0.77 acre of farmland by the Farmland Protection Policy Act. Because the Land Evaluation Criterion was rated as 86 out of 100 based on 0.50 acre, and because the maximum Land Evaluation Criterion plus the Total Site Assessment of 49 would still be below the NRCS threshold score of 160, which would indicate significant impacts to farmland, the result of the Farmland Conversion Impact Rating would be the same and no additional coordination with NRCS was necessary (Appendix C-10). An early coordination letter was sent on November 10, 2023, to Natural Resources Conservation Service (NRCS). Coordination with

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NRCS resulted in a score of 135 on the AD 1006 Form (Appendix C-9 to C-10). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

Minor Projects PA	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
	B-4; B-9	June 17, 2024	

Full 106 Effect Finding

No Historic Properties Affected No Adverse Effect Adverse Effect

Eligible and/or Listed Resources Present

NRHP Building/Site/District(s) Archaeology NRHP Bridge(s)

Documentation Prepared (mark all that apply)

APE, Eligibility and Effect Determination
800.11 Documentation
Historic Properties Report or Short Report
Archaeological Records Check and Assessment
Archaeological Phase Ia Survey Report
Archaeological Phase Ic Survey Report
Other:

X	ESD Approval Date(s)	SHPO Approval Date(s)
	June 17, 2024	

Memorandum of Agreement (MOA)

MOA Signature Dates (List all signatories)

--

If the project falls under the MPPA, describe the category(ies) that the project falls under and any approval dates. If the project requires full Section 106, use the headings provided. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of the paper(s) and the comment period deadline. Include any further Section 106 work which must be completed at a later date, such as mitigation from a MOA or avoidance commitments.

On June 17, 2024 the Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 4, which includes the installation of new safety appurtenances, including but not limited to guardrails, barriers, glare screens, and crash attenuators, and Category B, Type 9, which includes the installation, replacement, repair of culverts and other drainage structures. under the Minor Projects Programmatic Agreement (Appendix D-3 to D-4). An INDOT-CRO historian performed a desktop review of the surrounding area. Based on the review, it was noted that an early twentieth-century home is located outside of the project area to the southwest of the project on the west side of US 421, and a modern horse barn is located on the north side of the property and the structure reduces the view from the house toward the project location. No unusual features are present that may be impacted by the project (Appendix D-6). A Phase Ia Archaeological Reconnaissance Survey was filled out for this project and shovel probes were done throughout the project area (Appendix D-8 to D-19). Archaeological resources were not located during the survey. No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 been fulfilled.

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SECTION E – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES

Parks and Other Recreational Land

- Publicly owned park
- Publicly owned recreation area
- Other (school, state/national forest, bikeway, etc.)

<u>Presence</u>	<u>Use</u>	
	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wildlife and Waterfowl Refuges

- National Wildlife Refuge
- National Natural Landmark
- State Wildlife Area
- State Nature Preserve

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Historic Properties

- Site eligible and/or listed on the NRHP

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Evaluations Prepared

- Programmatic Section 4(f)
- “De minimis” Impact
- Individual Section 4(f)
- Any exception included in 23 CFR 774.13

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Discuss Programmatic Section 4(f) and “de minimis” Section 4(f) impacts in the discussion below. Individual Section 4(f) documentation must be included in the appendix and summarized below. Discuss proposed alternatives that satisfy the requirements of Section 4(f). FHWA has identified various exceptions to the requirement for Section 4(f) approval. Refer to 23 CFR § 774.13 - Exceptions.

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife/waterfowl refuges, and NRHP eligible or listed historic properties regardless of ownership. Lands subject to this law are considered section 4(f) resources.

Based on a desktop review, the aerial map of the project area (Appendix B-3), and the RFI report (Appendix E-3), there is one potential 4(f) resource located within the 0.5-mile search radius. According to additional research, and by the site visit on June 8, 2023 by Corradino, LLC, there are no Section 4(f) resources within or adjacent to the project area. Therefore, no use is expected.

Section 6(f) Involvement

Presence

Section 6(f) Property

Use

Yes

No

<input type="checkbox"/>
<input type="checkbox"/>

Discuss Section 6(f) resources present or not present. Discuss if any conversion would occur as a result of this project. If conversion will occur, discuss the conversion approval.

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use.

A review of 6(f) properties on the INDOT ESD website revealed no properties in Clinton County. There are no 6(f) located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

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SECTION F – Air Quality

STIP/TIP and Conformity Status of the Project

Is the project in the most current STIP/TIP?

Is the project located in an MPO Area?

Is the project in an air quality non-attainment or maintenance area?

If Yes, then:

Is the project in the most current MPO TIP?

Is the project exempt from conformity?

If No, then:

Is the project in the Transportation Plan (TP)?

Is a hot spot analysis required (CO/PM)?

Yes

X

No

X
X

Location in STIP: _____

Name of MPO (if applicable): _____

Location in TIP (if applicable): _____

Level of MSAT Analysis required?

Level 1a

Level 1b

Level 2

Level 3

Level 4

Level 5

Describe if the project is listed in the STIP and if it is in a TIP. Describe the attainment status of the county(ies) where the project is located. Indicate whether the project is exempt from a conformity determination. If the project is not exempt, include information about the TP and TIP. Describe if a hot spot analysis is required and the MSAT Level.

The FY 2020-2024 STIP is listed based on the lead DES number in the contract. The lead DES number for this contract is 2200682. The FY 2020-2024 STIP includes DES number 2200665 by reference with the contract number 44394 (2200682) (Appendix H-2).

This project is located in Clinton County, which is currently in attainment for all criteria pollutants according to IDEM (<https://www.in.gov/idem/airmonitoring/air-quality-data/>). Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

This project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(c), or exempt under the Clean Air Act conformity rule under 40 CFR 93.126, and as such, a Mobile Source Air Toxics analysis is not required.

SECTION G - NOISE

Noise

Yes No

Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?

Date Noise Analysis was approved/technically sufficient by INDOT ESD: _____

Describe if the project is a Type I or Type III project. If it is a Type I project, describe the studies completed to date and if noise impacts were identified. If noise impacts were identified, describe if abatement is feasible and reasonable and include a statement of likelihood.

This project is a Type III project. In accordance with 23 CFR 772 and the current Indiana Department of Transportation Traffic Noise Analysis Procedure, this action does not require a formal noise analysis.

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SECTION H – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

Will the proposed action comply with the local/regional development patterns for the area?

Yes	No
X	
	X
X	
	X
X	
X	

Will the proposed action result in substantial impacts to community cohesion?

Will the proposed action result in substantial impacts to local tax base or property values?

Will construction activities impact community events (festivals, fairs, etc.)?

Does the community have an approved transition plan?

If No, are steps being made to advance the community's transition plan?

Does the project comply with the transition plan? (explain in the discussion below)

Discuss how the project complies with the area's local/regional development patterns; whether the project will impact community cohesion; and impact community events. Discuss how the project conforms with the ADA Transition Plan.

The maintenance of traffic (MOT) for the project will require a temporary road closure during construction. The road closure will be implemented for approximately 4 weeks. Commuters may be affected by temporary impacts such as added travel time. Construction is expected in Spring of 2027 and will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated, and all inconveniences and delays will cease upon project completion.

The proposed action is not expected to conflict with development patterns or have substantial impacts to property values. This project is located in a rural area located more than 0.5 mile from the nearest communities, which are unincorporated towns. No sidewalks are present in or near the project area. Therefore, this project will have no involvement with facilities regulated under the American with Disabilities Act (ADA).

Public Facilities and Services

Discuss what public facilities and services are present in the project area and impacts (such as MOT) that will occur to them. Include how the impacts have been minimized and what coordination has occurred. Some examples of public facilities and services include health facilities, educational facilities, public and private utilities, emergency services, religious institutions, airports, transportation or public pedestrian and bicycle facilities.

Based on a desktop review, the aerial map of the project area (Appendix B-3), and the RFI report (Appendix E-3), there are three schools located within 0.5-mile of the project area. There is one recreational facility located within the 0.5-mile of the project area. There is one railroad located within the 0.5-mile of the project area. No other public facilities, within or adjacent to the project area, which was confirmed by the site visit on June 8, 2024 by Corradino, LLC. Therefore, no impacts are expected. Access to all properties will be maintained during construction.

The Clinton County Commissioners did not respond to the early coordination letter sent on October 27, 2023. No response from the school corporation was received, but based on a recommendation from the Abbreviated Engineer's Assessment, the designer agreed to add a For Further Consideration commitment, "Limit the construction season to when Rossville Consolidated School District schools are not in session." All applicable recommendations are included in the Environmental Commitments section of this CE document.

It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access.

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Yes	No
	X
X	

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

	X
	X

Will the project result in adversely high and disproportionate impacts to EJ populations?

Indicate if EJ issues were identified during project development. If an EJ analysis was not required, discuss why. If an EJ analysis was required, describe how the EJ population was identified. Include if the project has a disproportionately high or adverse effect on EJ populations and explain your reasoning. If yes, describe actions to avoid, minimize and mitigate these effects.

This analysis was performed for this project prior to the issuance of recent federal Executive Orders (EO) from January

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2025, including EO 14154, EO 14148, and EO 14173. As such, this analysis is included for transparency but is no longer applicable to the impacts analysis for federal projects and this impact was not considered in the federal decision. Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent right-of-way. The project will require no relocations and up to 1.34 acre of additional permanent ROW and no temporary ROW. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Clinton County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 9503. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the U.S. Census Bureau 2022 American Community Survey 5-year Estimates was obtained from <https://data.census.gov/cedsci/> on November 6, 2024. The data collected for minority and low-income populations within the AC are summarized in the below table.

	COC – Clinton County, Indiana	AC – Census Tract 9503
Percent Minority	19.44%	5.47%
125% of COC	24.30%	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	8.95%	8.71%
125% of COC	11.19%	AC < 125% COC
EJ Population of Concern		No

The AC Census Tract 9503 has a percent minority of 5.47% which is below 50% and below the 125% COC threshold. Therefore, AC Census Tract 9503 does not have a minority population of EJ concern.

The AC Census Tract 9503 has a percent low-income of 8.71% which is below 50% and is below the 125% COC threshold. Therefore, AC Census Tract 9503 does not contain a low-income population of EJ concern.

Conclusion

The census data sheets, map, and calculations can be found in Appendix I-20. No populations of concern for EJ occur within the Census Tract that includes this project, therefore no impacts are expected. No further environmental justice analysis is warranted.

Relocation of People, Businesses or Farms

Will the proposed action result in the relocation of people, businesses or farms?
Is a BIS or CSRS required?

Yes No

Number of relocations: Residences: _____ Businesses: _____ Farms: _____ Other: _____

Discuss any relocations that will occur due to the project. If a BIS or CSRS is required, discuss the results in the discussion below.
No relocations of people, businesses, or farms will take place as a result of this project.

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SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Documentation

Hazardous Materials & Regulated Substances (Mark all that apply)

- Red Flag Investigation (RFI)
- Phase I Environmental Site Assessment (Phase I ESA)
- Phase II Environmental Site Assessment (Phase II ESA)
- Design/Specifications for Remediation required?

X

Date RFI concurrence by INDOT SAM (if applicable): May 24, 2023

Include a summary of the potential hazardous material concerns found during review. Discuss in depth sites found within, directly adjacent to, or ones that could impact the project area. Refer to current INDOT SAM guidance. If additional documentation (special provisions, pay quantities, etc.) will be needed, include in discussion. Include applicable commitments.

Based on a review of GIS and available public records, the RFI was completed on May 23, 2023 by Corradino, LLC and INDOT SAM provided their concurrence on May 24, 2023. (Appendix E-4 to E-5). One National Pollutant Discharge Elimination Systems (NPDES) Facility, Rossville Consolidated Schools Site Improvements is located within 0.5 mile of the project area. This hazmat site identified will not be impacted. Further investigation for hazardous material concerns is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

Army Corps of Engineers (404/Section10 Permit)

- Nationwide Permit (NWP)
- Regional General Permit (RGP)
- Individual Permit (IP)
- Other

IN Department of Environmental Management (401/Rule 5)

- Nationwide Permit (NWP)
- Regional General Permit (RGP)
- Individual Permit (IP)
- Isolated Wetlands
- Construction Stormwater General Permit
- Other

X

IN Department of Natural Resources

- Construction in a Floodway
- Navigable Waterway Permit
- Other

Mitigation Required

US Coast Guard Section 9 Bridge Permit

Others (Please discuss in the discussion below)

List the permits likely required for the project and summarize why the permits are needed, including permits designated as "Other."

No water resources are located within the project area and a Section 404 Permit from USACE and Section 401 Water Quality Certification from IDEM are not expected. No public airports are within 3.8 miles of the project area, and an Indiana Tall Structure Permit is not required.

Total disturbed area of soil will be approximately 1.27 acre, which is above the 1.0 acre threshold for an IDEM Construction Stormwater General Permit (GSGP), formerly Rule 5 Storm Water Runoff Permit.

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Applicable recommendations provided by resource agencies are included in the Environmental Commitments section of this document. If permits are found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.

It is the responsibility of the project sponsor to identify and obtain all required permits.

ENVIRONMENTAL COMMITMENTS

List all commitments and include the name of agency/organization requesting/requiring the commitment(s). Listed commitments should be numbered.

Firm:

1. If the scope of work or permanent or temporary right-of-way amounts change, INDOT Environmental Services Division (ESD) and the Crawfordsville District Design/Environmental Manager will be contacted immediately. (INDOT ESD and INDOT Crawfordsville District)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction activity that would block or limit access. (INDOT ESD)
3. USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after June 8, 2025, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately (INDOT ESD)
4. General AMM1 – Ensure all employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
5. Lighting AMM1 – Direct temporary lighting away from suitable habitat during the active season. (USFWS)

For Further Consideration:

1. Limit the construction season to when Rossville Consolidated School District schools are not in session. (INDOT Crawfordsville District)
2. The new, replacement, or rehabbed structure should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR)

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Appendix A

INDOT Supporting Documentation

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Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 ¹
Section 106	Falls within guidelines of Minor Projects PA	“No Historic Properties Affected”	“No Adverse Effect”	-	“Adverse Effect” Or Historic Bridge involvement ²
Stream Impacts³	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit ⁴
Wetland Impacts³	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way⁵	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations⁶	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	“No Effect”, “Not likely to Adversely Affect” (With select AMMs ⁷)	“Not likely to Adversely Affect” (With any AMMs or commitments)	-	“Likely to Adversely Affect”	Project does not fall under Species Specific Programmatic ⁸
Threatened/Endangered Species (Any other species)*	Falls within guidelines of USFWS 2013 Interim Policy or “No Effect”	“Not likely to Adversely Affect”	-	-	“Likely to Adversely Affect”
Environmental Justice	No disproportionately high and adverse impacts	-	-	-	Potential ⁹
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any ¹⁰
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ¹¹
Approval Level					
• District Env. (DE)	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA
• Env. Serv. Div. (ESD)					
• FHWA					

¹ Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

² Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

³ Total permanent impacts to streams (linear feet) and wetlands (acres).

⁴ US Army Corps of Engineers Individual 404 Permit

⁵ Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.

⁶ If any relocations are within an area with a known or suspected Environmental Justice (EJ) or disadvantaged population, or has greater than 5 relocations, a conversation with FHWA, through INDOT ESD, is needed to confirm NEPA classification and outreach plan for the project.

⁷ Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

⁸ Projects that do not fall under a Species Specific Programmatic and results in a “Likely to Adversely Affect”. Other findings can be processed as a lower-level CE.

⁹ Potential for causing a disproportionately high and adverse impact.

¹⁰ Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

¹¹ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

Note: Substantial public or agency controversy may require a higher-level NEPA document.

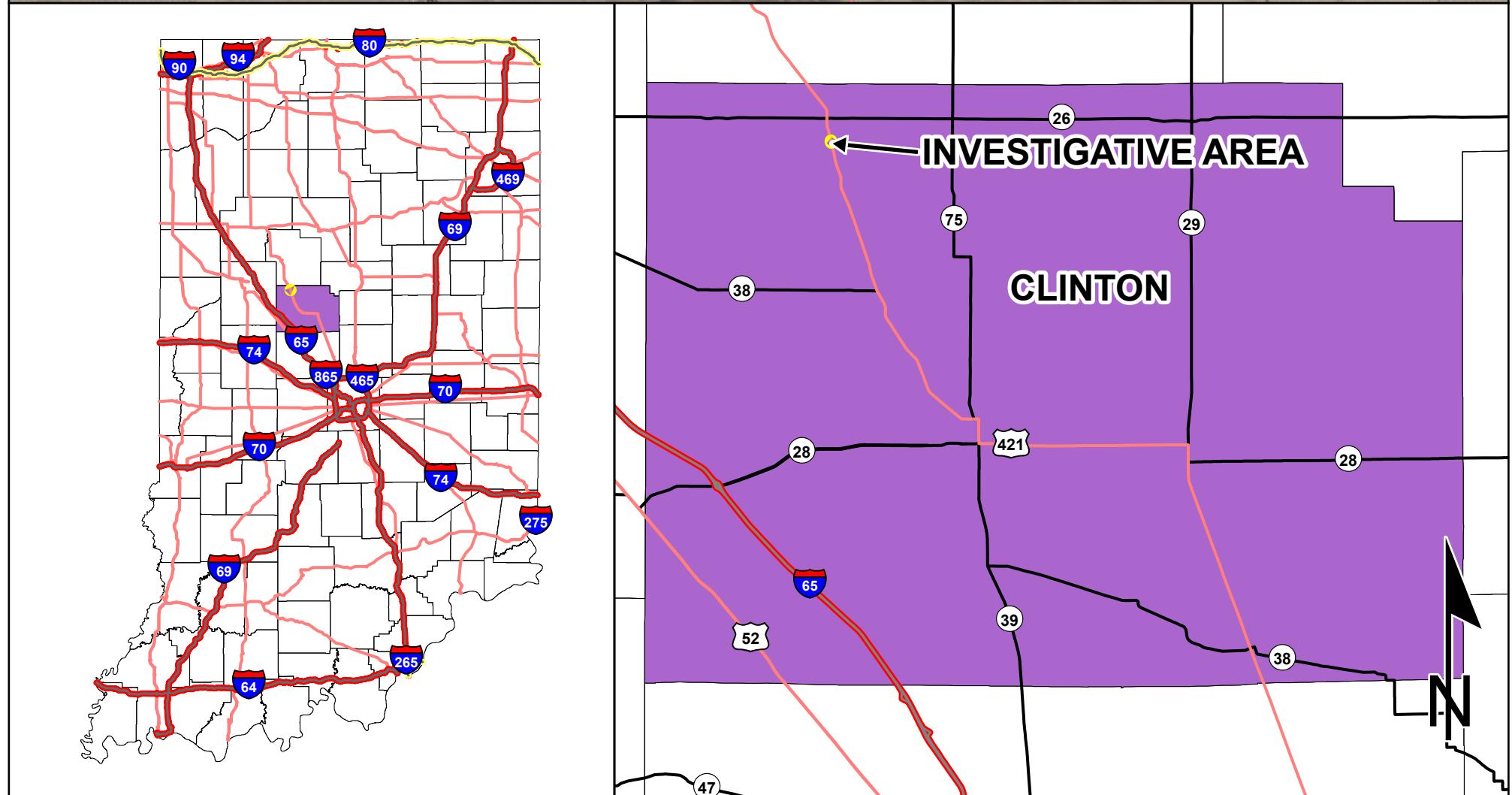
APPENDIX B

Graphics

Des. No. 2200665

Project Location Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources: 0.25 0.13 0 0.25 Miles
Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

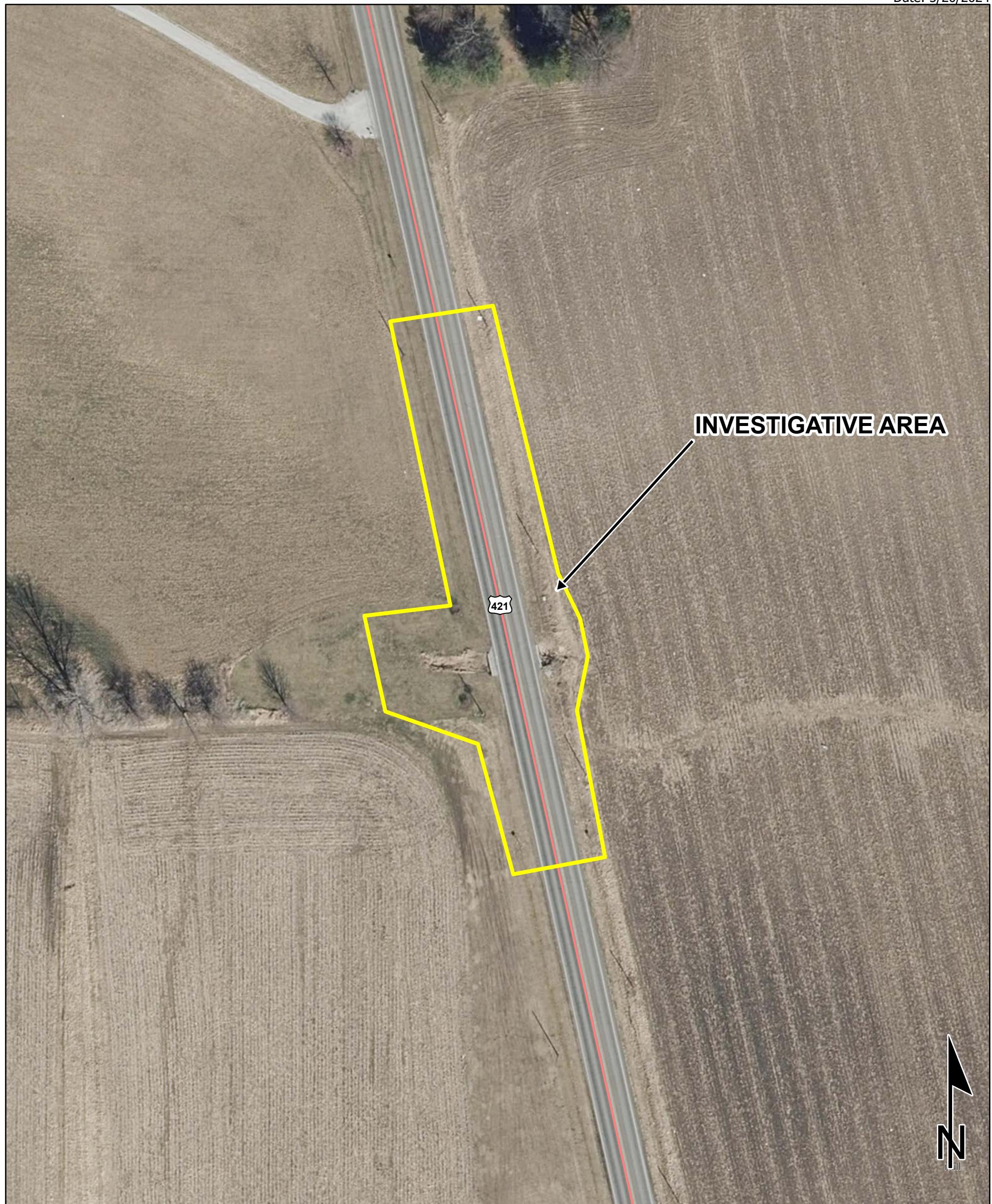
Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

INDIANA
STATEWIDE
GIS DATA

Aerial Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



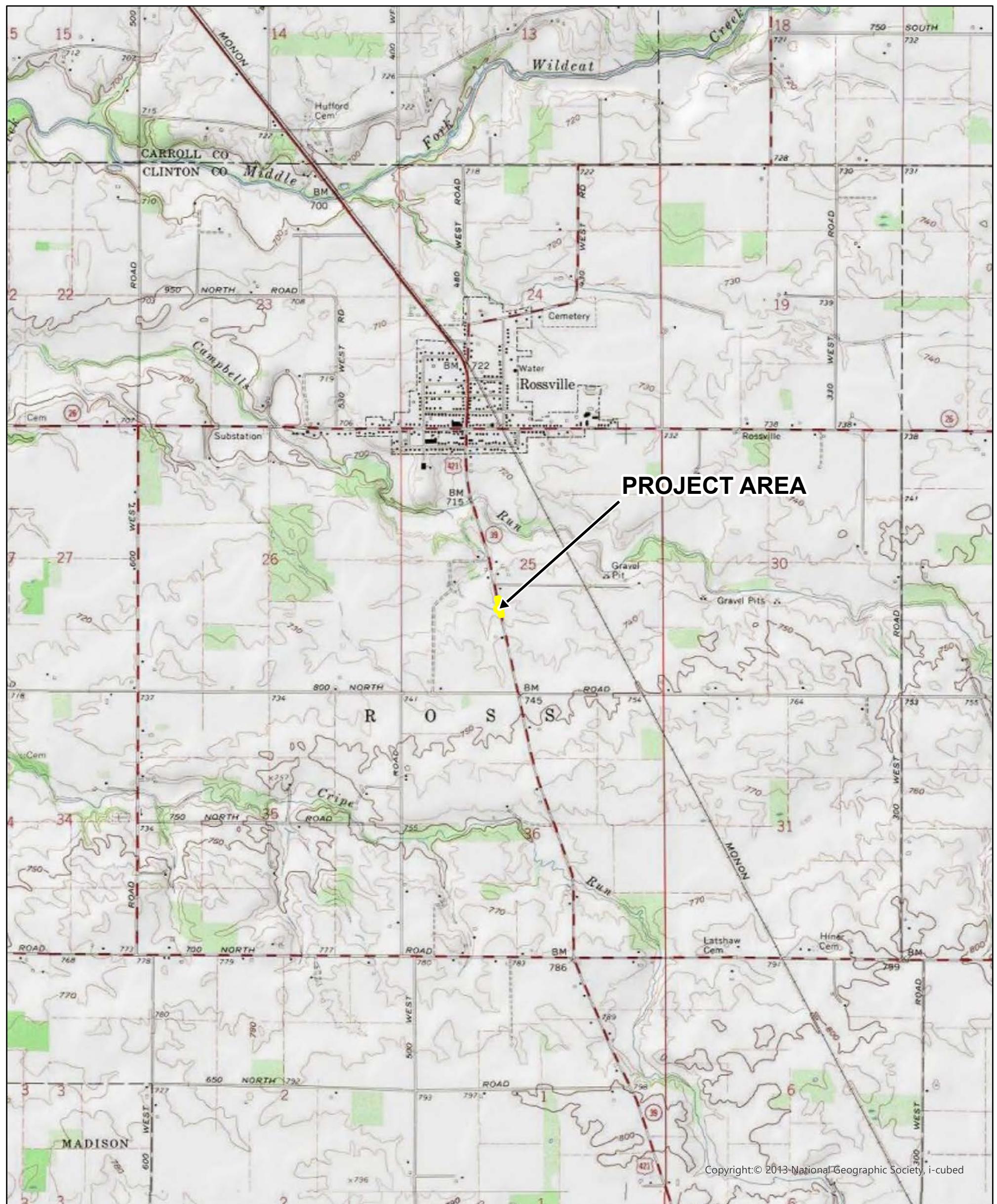
Sources: 0.01 0.01 0 0.01
Non Orthophotography  Miles
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N Map Datum: NAD83
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

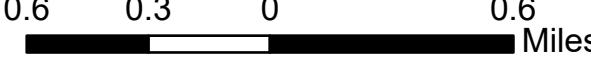
**INDIANA STATEWIDE
IMAGERY
(FLOWN 2022)**

Legend

 Project Area

Topographic Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana



Sources: 0.6 0.3 0 0.6 Miles
Non Orthophotography 

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

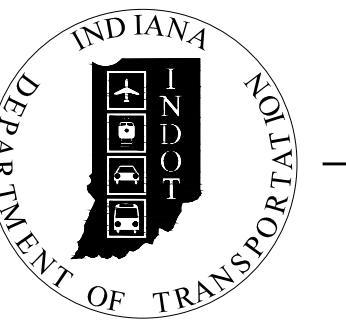
ROSSVILLE QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

PROJECT	DESIGNATION
2200682	2200665
CONTRACT	BRIDGE FILE
R-44376	N/A

CULVERT ASSETS	
DES. NO.	CULVERT ASSET ID

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
2200665	U.S. 421 OVER DRAINAGE SWALE SMALL STRUCTURE REPLACEMENT, 0.67 MILES SOUTH OF S.R. 26
2200667	U.S. 231 OVER ROADSIDE DITCH SMALL STRUCTURE REPLACEMENT, 1.44 MILES SOUTH OF S.R. 18
2200682 (LEAD)	S.R. 28 OVER C.B. WALLACE BRANCH 2 SMALL STRUCTURE PIPE LINING, 2.36 MILES WEST OF U.S. 421

INDIANA DEPARTMENT OF TRANSPORTATION



ROAD PLANS

ROUTE: U.S. 421 AT: RP 133+62

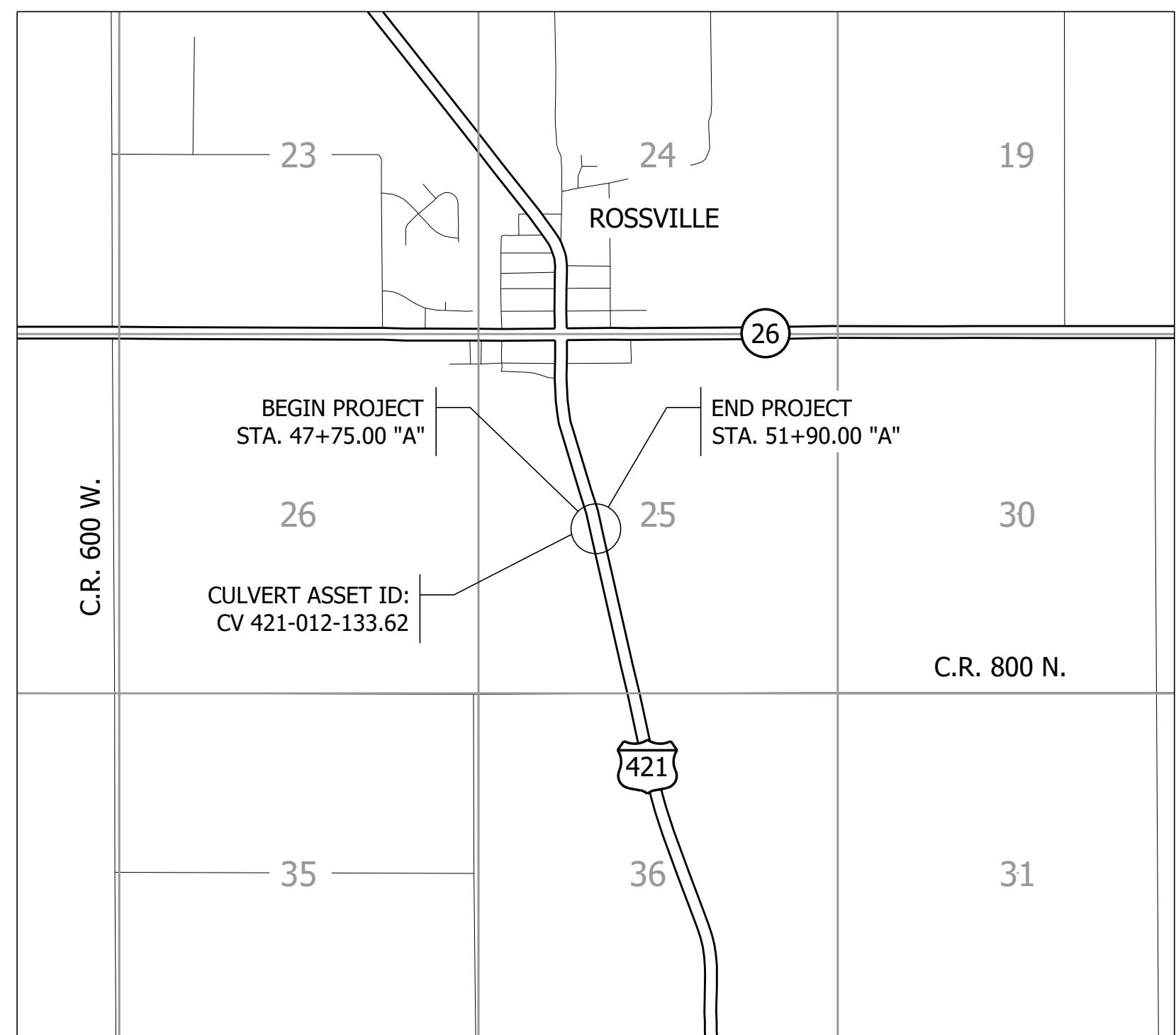
PROJECT NO.

2200665 P.E.

2200665 R/W

2200665 CONST.

SMALL STRUCTURE REPLACEMENT ON U.S. 421 OVER DRAINAGE SWALE, 0.67 MILES SOUTH OF S.R. 26 IN SECTION 25, T-23-N, R-2-W, ROSS TOWNSHIP, CLINTON COUNTY, INDIANA

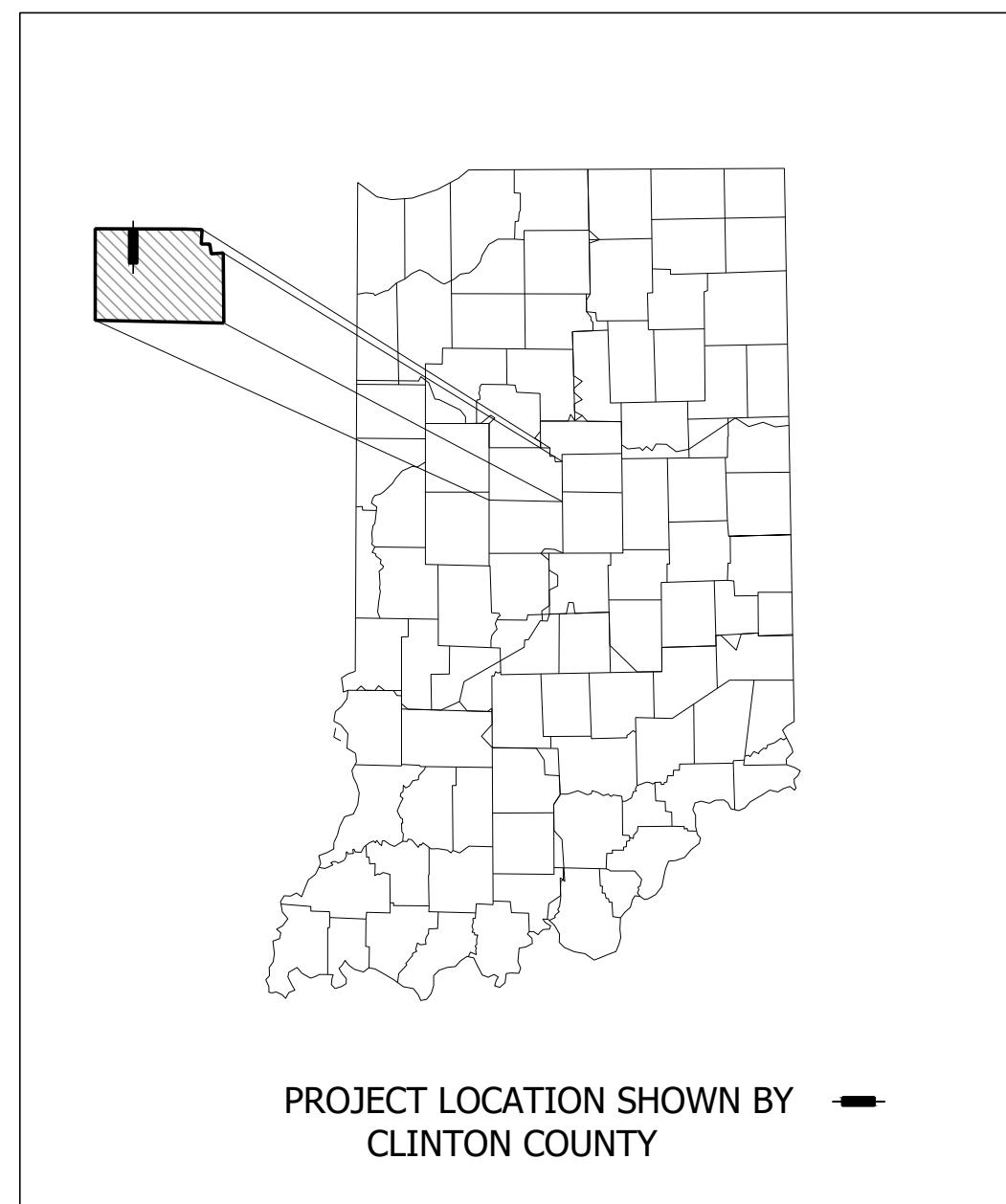


ENV. DOCUMENT PLANS
MARCH 2025

SCALE:
1" = 2000'

TRAFFIC DATA	U.S. 421
A.A.D.T. (2027)	2,765 V.P.D.
A.A.D.T. (2047)	3,295 V.P.D.
D.H.V. (2047)	352 V.P.H.
DIRECTIONAL DISTRIBUTION	54.3% NORTH
TRUCKS	5.4% D.H.V.
	10.8% A.A.D.T.

DESIGN DATA	
DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	MINOR ARTERIAL
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 40°24'25" N LONGITUDE: 86°35'33" W

BRIDGE LENGTH: 0.000 MI.
ROADWAY LENGTH: 0.079 MI.
TOTAL LENGTH: 0.079 MI.
MAX. GRADE: 1.44 %

H.U.C. 051201070203

CORRADINO
ENGINEERS ♦ PLANNERS ♦ CONSTRUCTORS

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2024 TO
BE USED WITH THESE PLANS.

PRELIMINARY

PLANS PREPARED BY: CORRADINO, LLC	317-488-2363
PHONE NUMBER	2200665
CERTIFIED BY:	DATE
APPROVED FOR LETTING:	DATE
INDIANA DEPARTMENT OF TRANSPORTATION	DATE

BRIDGE FILE	N/A
DESIGNATION	2200665
CONTRACT	1 of 16
PROJECT	R-44376

UTILITIES	
ELECTRIC:	DUKE ENERGY DON McDUFFY 1000 EAST MAIN STREET PLAINFIELD, IN 46168 317-776-5320 DEI-DLINE-COORD@DUKE-ENERGY.COM
COMMUNICATION:	BRIGHTSPEED MAX DOWNEY 248 W. MONROE STREET DECATUR, IN 46733 MAXWELL.K.DOWNEY@BRIGHTSPEED.COM 980-376-1443
	COMCAST DOUG FISHBURN 720 TAYLOR STREET FORT WAYNE, IN 46802 260-410-3504 WILLIAM_FISHBURN@COMCAST.COM
	MULBERRY TELECOMMUNICATIONS TONY STEWART 116 S. GLICK STREET MULBERRY, IN 46058 765-296-2885 MTCTONY@MINTEL.NET
DRAINAGE:	CLINTON COUNTY SURVEYOR'S OFFICE DAN SHEETS 165 COURTHOUSE SQUARE FRANKFORT, INDIANA 46041 765-659-6300 DSHEETS@CLINTONCO.COM
	
	

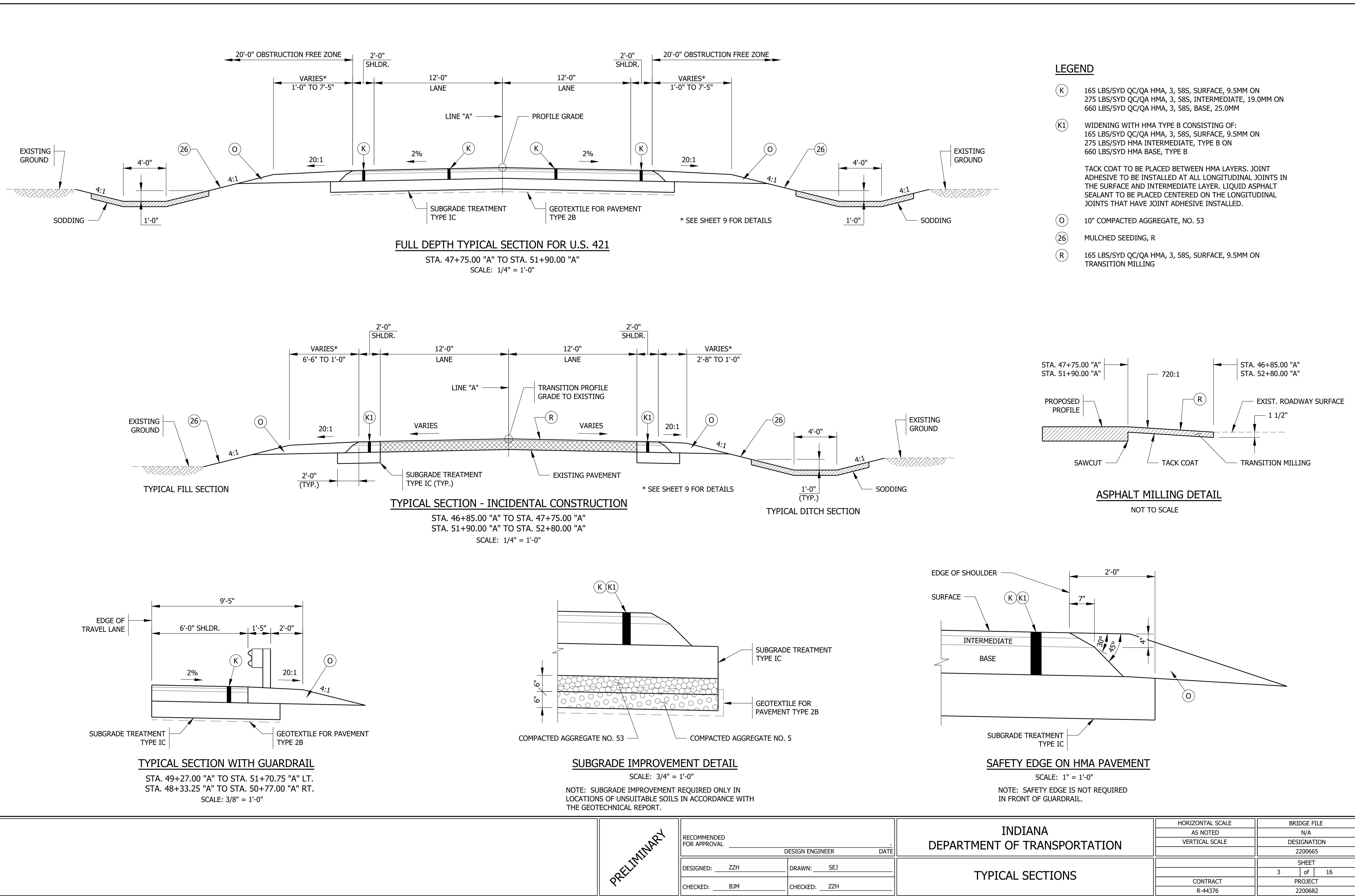
GENERAL NOTES

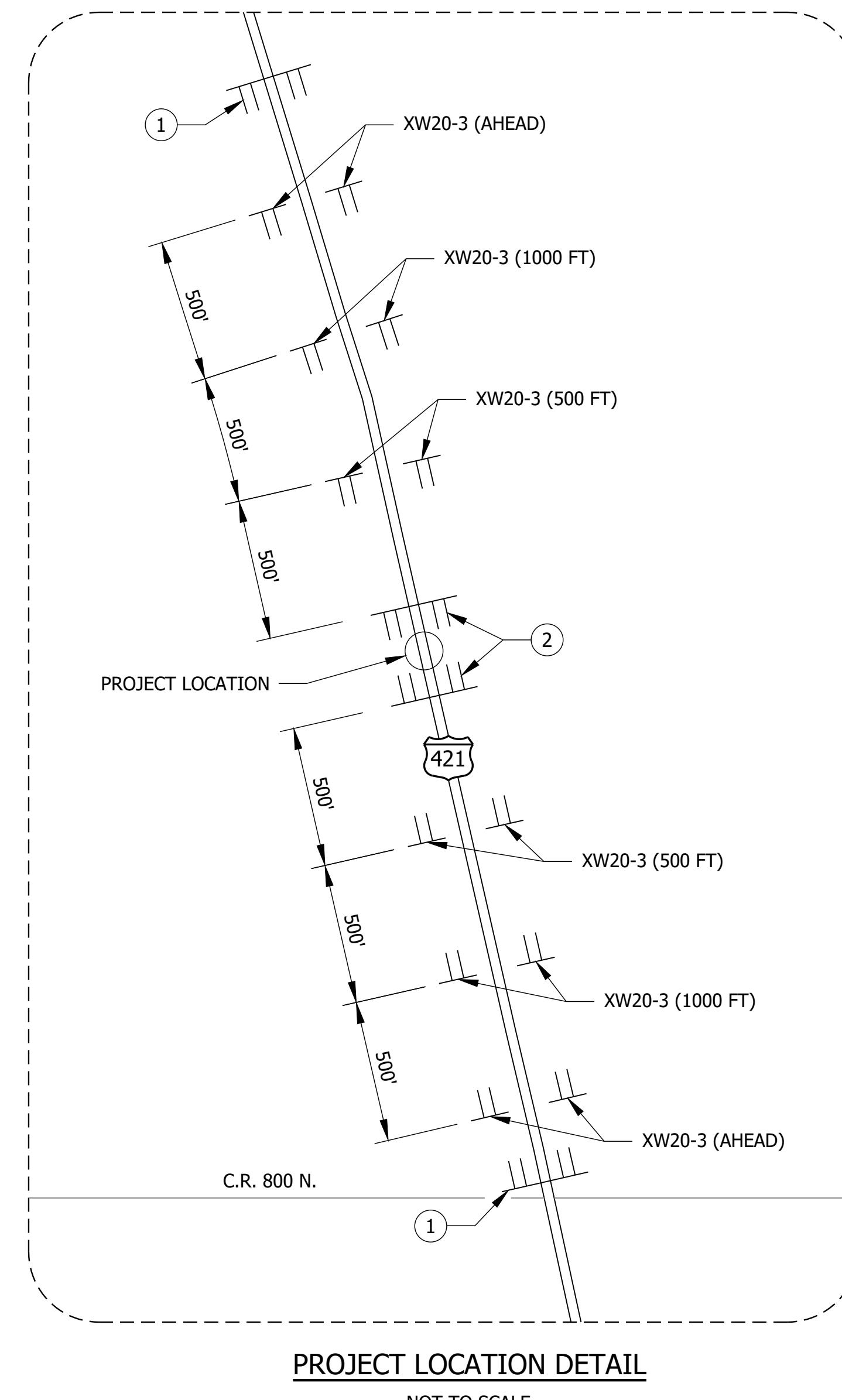
- ALL EARTHEN SHOULDERS, MEDIAN AREAS, AND CUT AND FILL SLOPES SHALL BE PLAIN OR MULCH SEDED EXCEPT WHERE SODDING IS SPECIFIED.

INDEX	
SHEET NO.	DESIGNATION
1	TITLE
2	INDEX AND GENERAL NOTES
3	TYPICAL SECTIONS
4	PLAT NO. 1
5 - 6	MAINTENANCE OF TRAFFIC
7	PLAN AND PROFILE
8	GENERAL PLAN
9	CONSTRUCTION DETAILS
10	EROSION CONTROL DETAILS
11	SUMMARY TABLES
12 - 16	CROSS SECTIONS

REVISIONS		
SHEET NO.	DATE	REVISED
.	.	.

	PRELIMINARY	RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE
		RECOMMENDED FOR APPROVAL	DESIGN ENGINEER				DATE	N/A	
	DESIGNED: ZZH	DRAWN: SEJ				INDEX AND GENERAL NOTES	VERTICAL SCALE	DESIGNATION	
	CHECKED: BJM	CHECKED: ZZH					2200665		
							SHEET		
							2 of 16		
							CONTRACT	PROJECT	
							R-44376	2200682	





LEGEND

- 1 24 LFT. OF TYPE III-B BARRICADES,
STAGGERED WITH ROAD CLOSURE SIGN
ASSEMBLY R11-4.
- 2 24 LFT. OF TYPE III-A BARRICADES WITH
ROAD CLOSURE SIGN ASSEMBLY R11-2.
- 3 24 LFT. OF TYPE III-B BARRICADES WITH
ROAD CLOSURE SIGN R11-3A AND
XM4-10 SIGN.

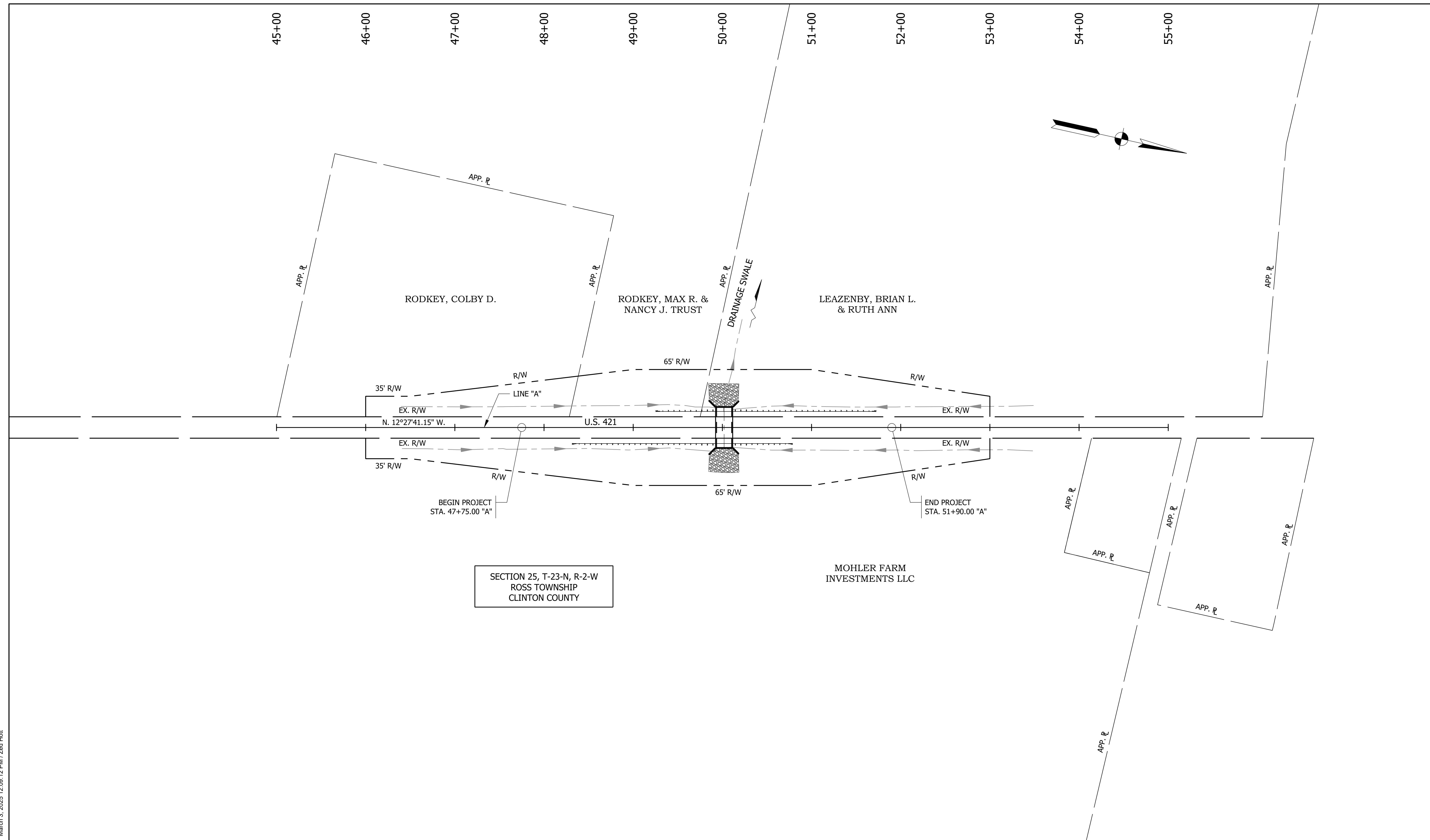
DETOUR ROUTE

TT SIGN ASSEMBLY

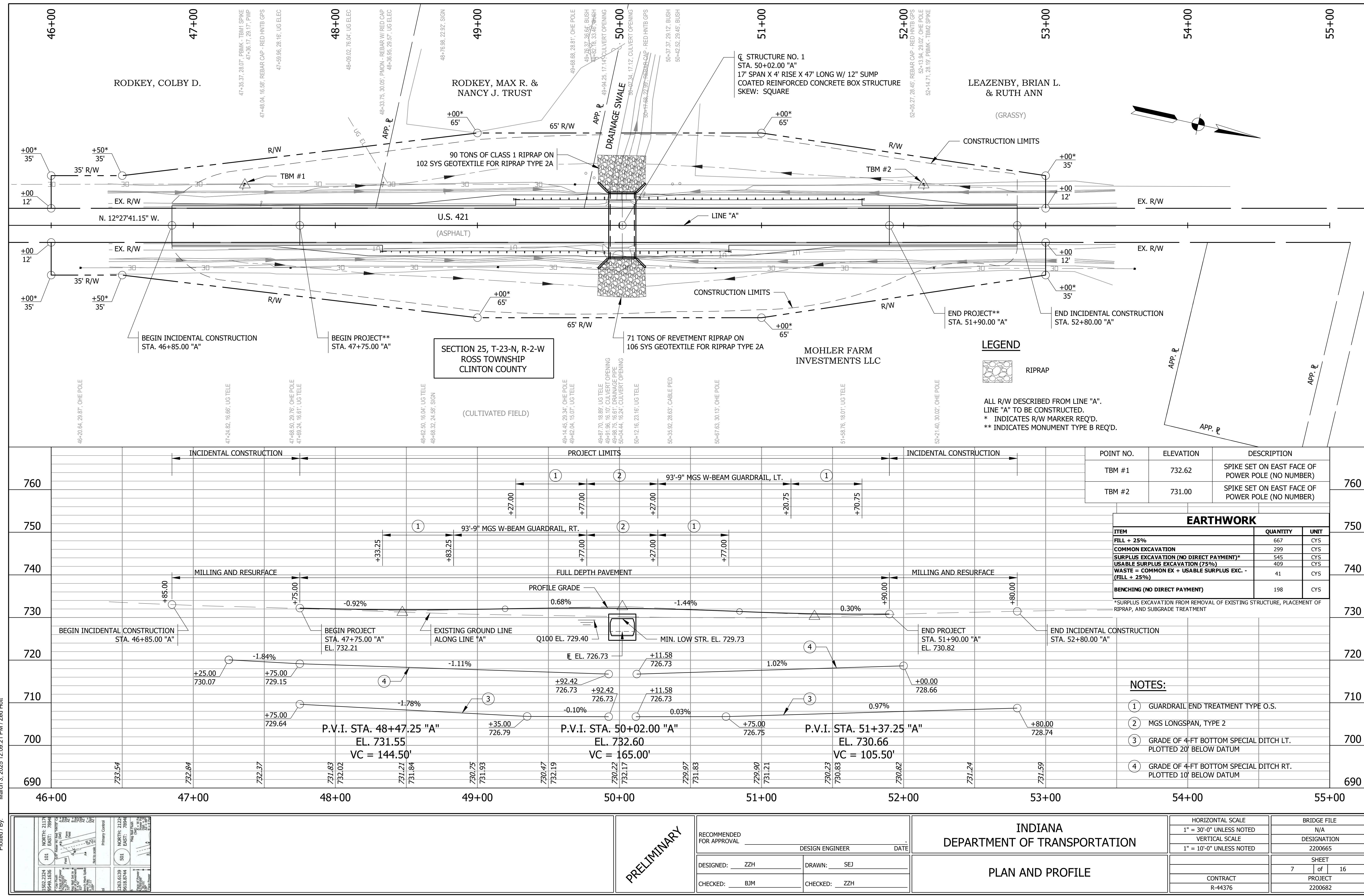
F:\4828 - Crawfordsville Small Str (3)\A - 22000665_US421\50 Plans\30 Sheet Drawings\10 Design Sheets\S-MOT-DETOUR-01.dwg - Layout1
August 12, 2024 9:42:36 AM / zhott
March 3, 2025 12:09:00 PM / Zed Hott

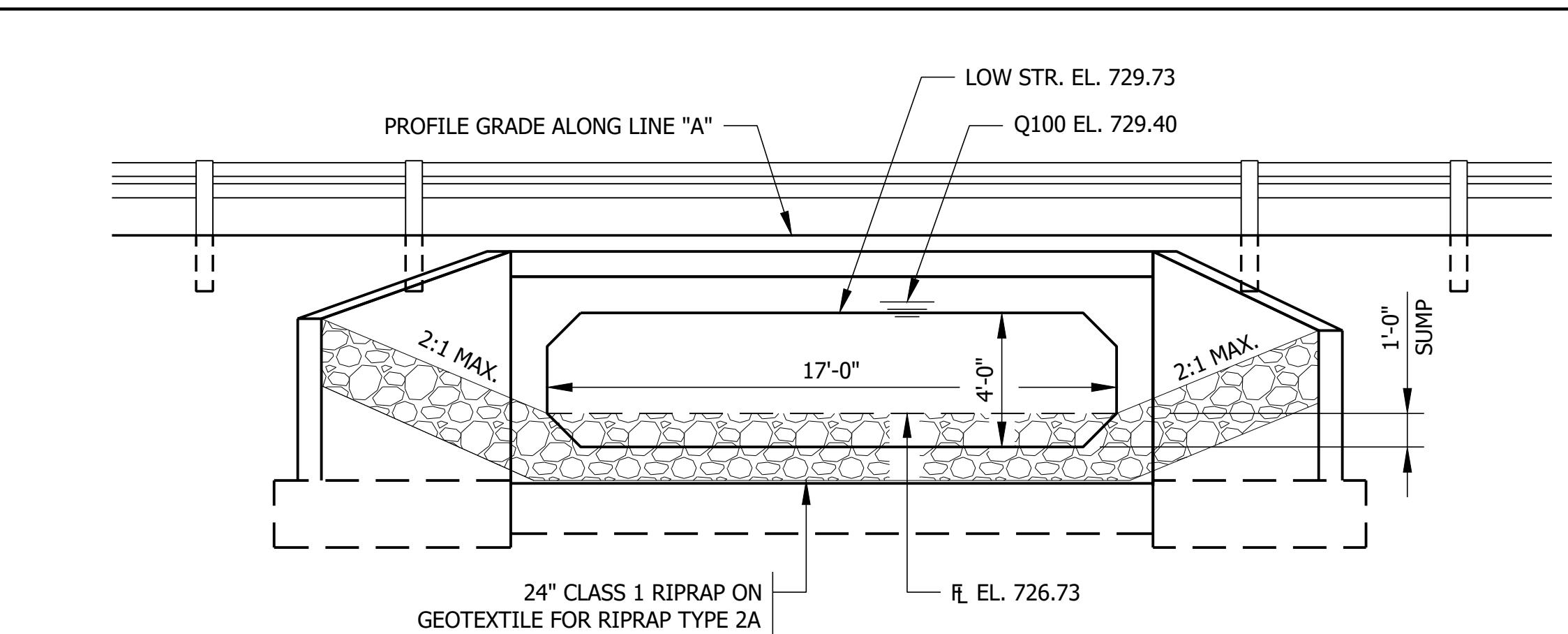
File Name: _____
Modified / By: _____
Plotted / By: _____

PRELIMINARY		INDIANA DEPARTMENT OF TRANSPORTATION	
		MAINTENANCE OF TRAFFIC	
RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
HORIZONTAL SCALE 1" = 400' UNLESS NOTED		BRIDGE FILE N/A	
VERTICAL SCALE		DESIGNATION 200655	
DESIGNED: ZZH		DRAWN: SE	
CHECKED: BJM		CONTRACT R-4376	
SHEET 5 of 16		PROJECT 220682	



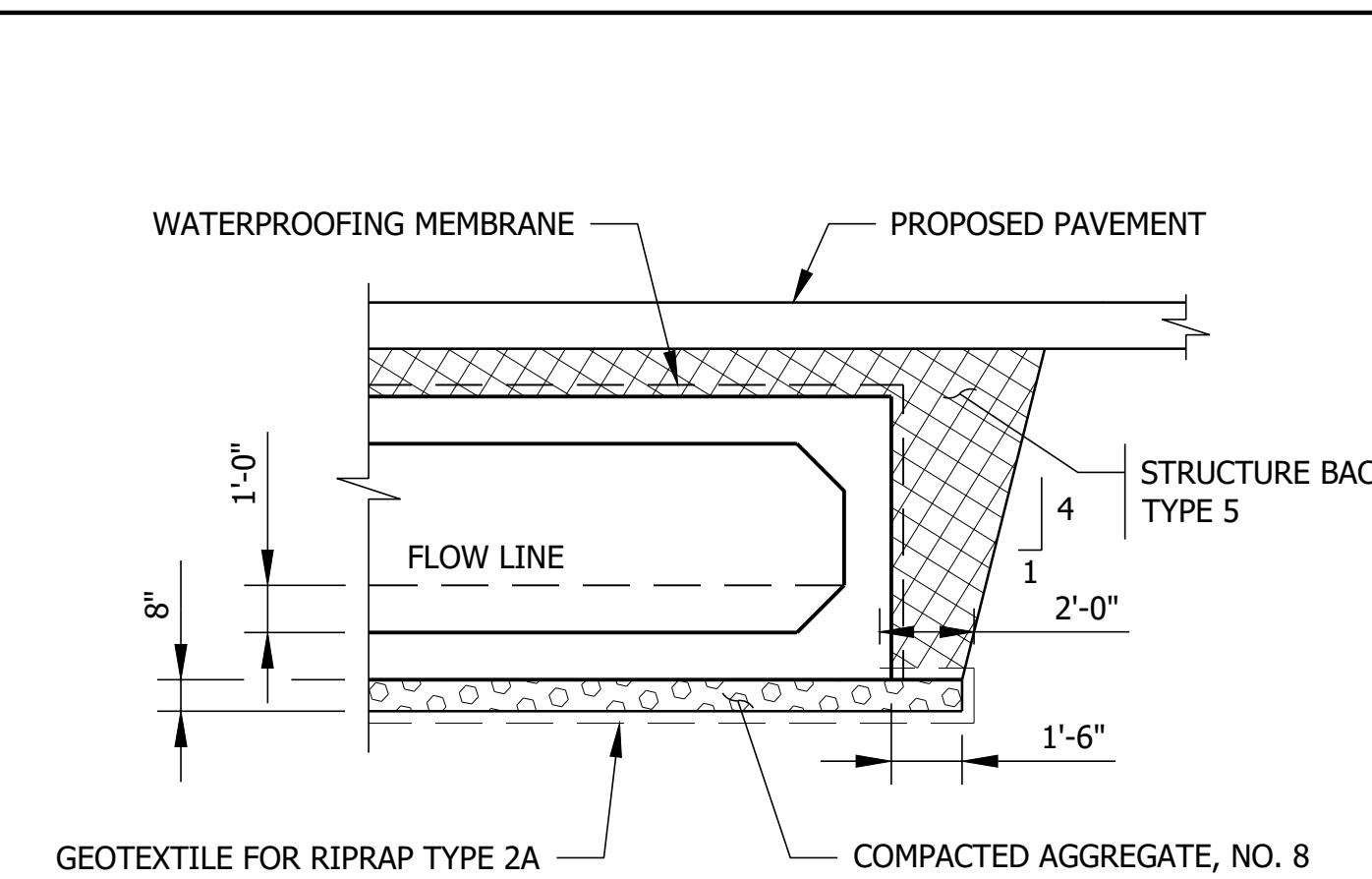
Plotted / By:	
PRELIMINARY	
INDIANA DEPARTMENT OF TRANSPORTATION	
PLAT NO. 1	
HORIZONTAL SCALE 1" = 50'0" UNLESS NOTED	
RECOMMENDED FOR APPROVAL	
DESIGN ENGINEER DATE	
VERTICAL SCALE	
20065.	
DESIGNED: ZZH DRAWN: SJ	
CHECKED: BJM CHECKED: ZZH	
R-4436	
SHEET 4 6 1	
CONTRACT PROJECT 200632	





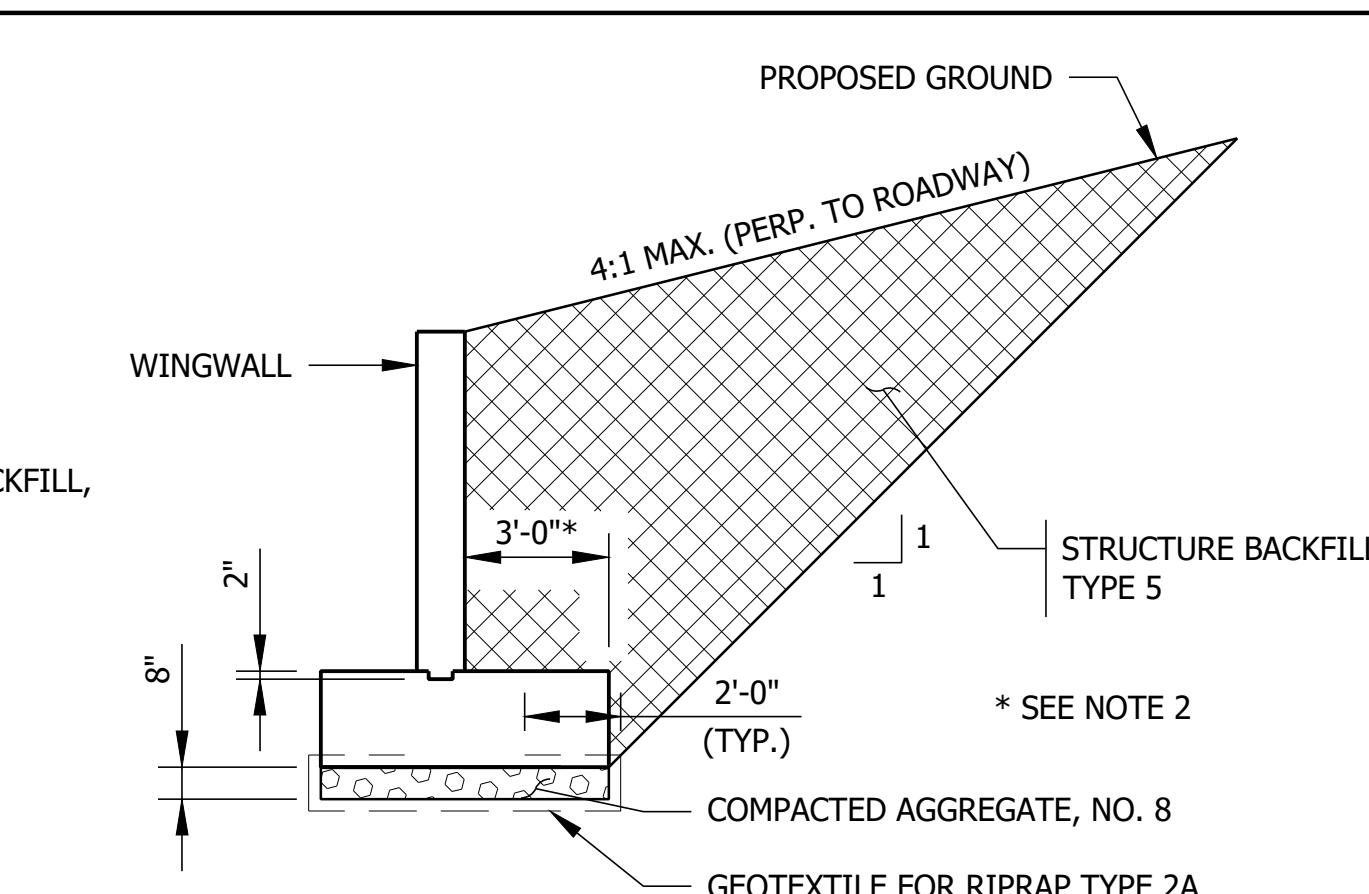
OUTLET ELEVATION

SCALE: 1/4" = 1'-0"



STRUCTURE BACKFILL AT STRUCTURE

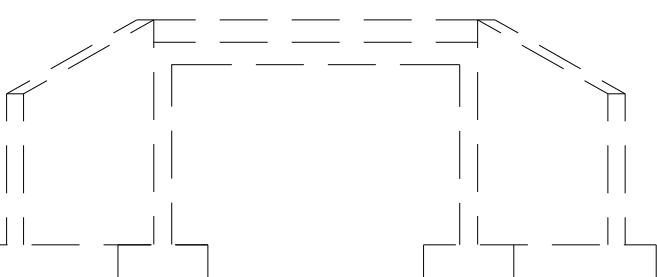
NOT TO SCALE



STRUCTURE BACKFILL AT WINGWALL

NOT TO SCALE

EXISTING STRUCTURE



THE EXISTING STRUCTURE IS A SINGLE SPAN REINFORCED CONCRETE SLAB TOP STRUCTURE WITH A 13' SPAN BY 2.5' RISE AND 0° SKEW. THE EXISTING STRUCTURE SHALL BE REMOVED.

DESIGN DATA

LIVE LOAD:

DESIGNED FOR HL-93 LOADING IN ACCORDANCE WITH SECTION 714 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD:

ACTUAL WEIGHT PLUS 35 PSF (COMPOSITE) FOR FUTURE WEARING SURFACE.

DESIGN STRENGTHS:

TO BE IN ACCORDANCE WITH SECTION 714 OF THE STANDARD SPECIFICATIONS.

HYDRAULIC DATA

DRAINAGE AREA: 0.58 SQ. MI.
Q100 DISCHARGE: 381.40 CFS
Q100 ELEVATION: 729.40 FT.
APPROXIMATE SKEW: 0°0'0"

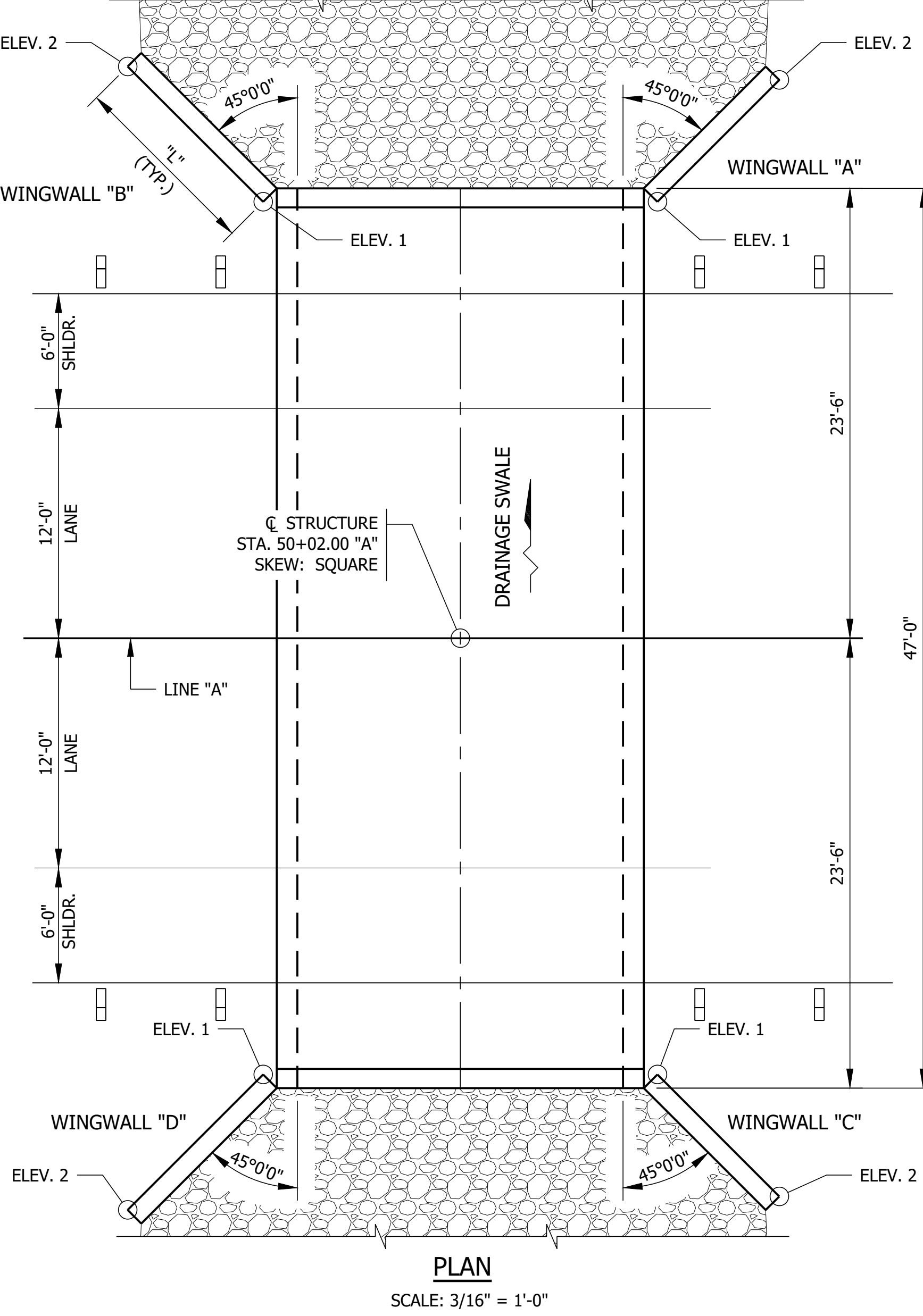
PROPOSED VELOCITY 8.02 FT./SEC.
PROPOSED BACKWATER 1.67 FT.

MINIMAL LOW STRUCTURE ELEVATION 729.73 FT.

EXISTING BACKWATER 2.22 FT.
EXISTING LOW STRUCTURE 727.75 FT.

NOTES:

1. BOTTOM OF FOOTING FOR THE PROPOSED WINGWALL SHALL BE 4'-0" BELOW THE FLOWLINE.
2. ASSUMED DIMENSION TO ESTABLISH NEAT LINE FOR STRUCTURAL BACKFILL QUANTITY. DIMENSION MAY VARY PER WORKING DRAWINGS. ADDITIONAL STRUCTURAL BACKFILL OUTSIDE OF THE NEAT LINE ESTABLISHED ON THIS SHEET WILL NOT BE PAID FOR DIRECTLY AND SHALL BE INCLUDED IN THE COST OF OTHER ITEMS.



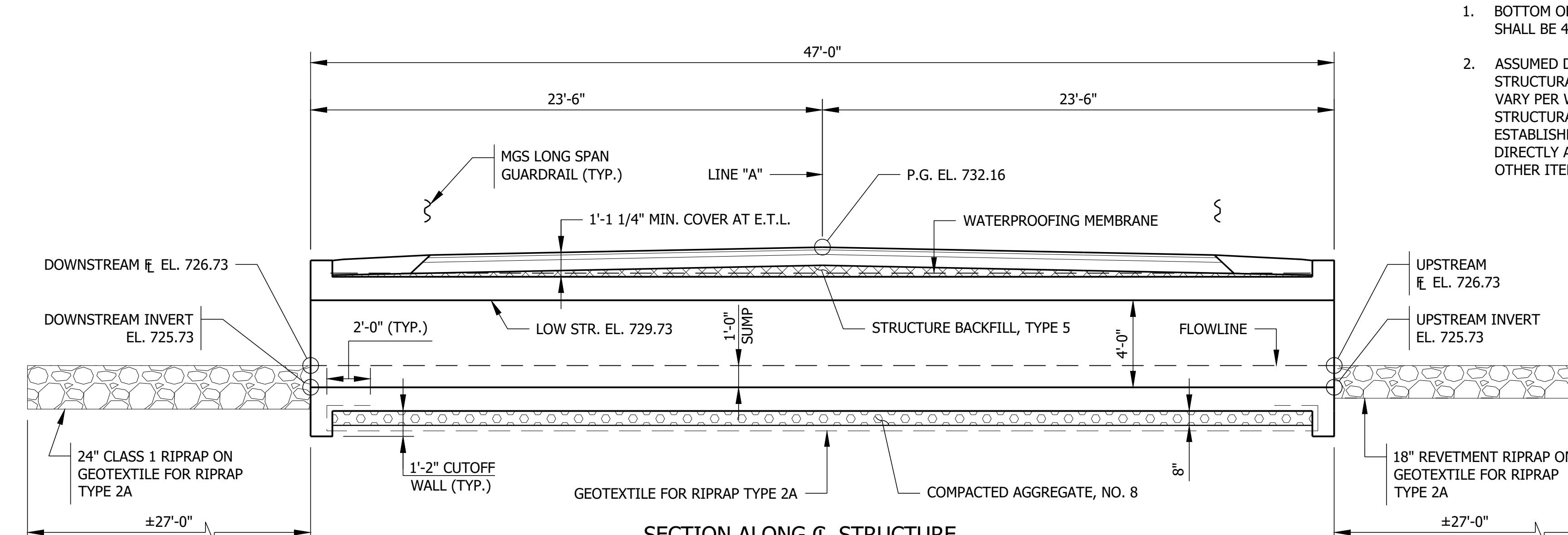
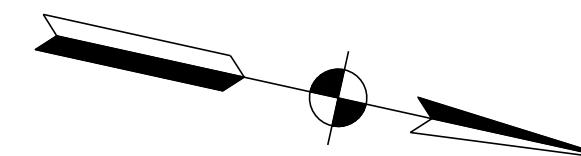
PLAN

SCALE: 3/16" = 1'-0"

WINGWALL TABLE

WING	"L"	ELEV. 1	ELEV. 2	AREA (SFT)
"A"	9.0 FT.	731.56	729.73	54.77
"B"	10.0 FT.	731.56	729.73	60.85
"C"	9.0 FT.	731.56	729.73	54.77
"D"	10.0 FT.	731.56	729.73	60.85

ESTIMATED QUANTITY OF HEADWALLS: 28.74 SFT.



SECTION ALONG C STRUCTURE

SCALE: 1/4" = 1'-0"

COATED REINFORCED CONCRETE BOX STRUCTURE SPAN: 17'-0" RISE: 4'-0" SKEW: SQUARE U.S. 421 OVER DRAINAGE SWALE CLINTON COUNTY

PRELIMINARY

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER

DATE

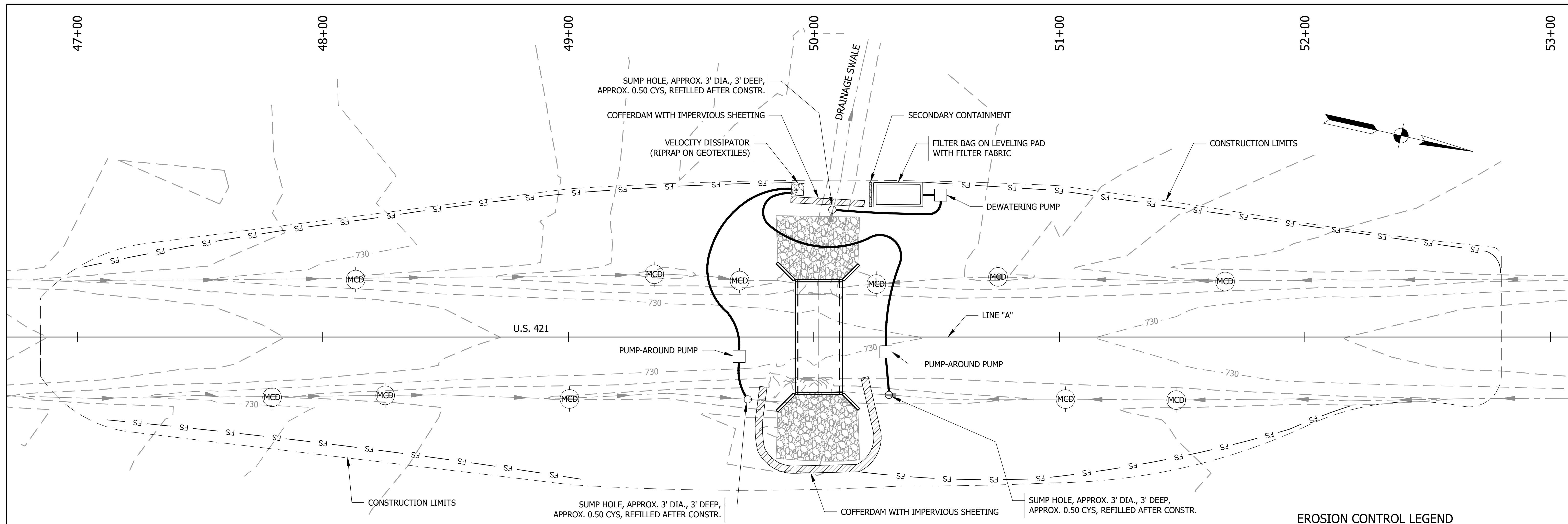
DESIGNED: ZZH DRAWN: SEJ

CHECKED: BJM

CHECKED: ZZH

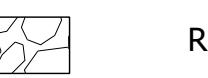
INDIANA DEPARTMENT OF TRANSPORTATION
GENERAL PLAN

HORIZONTAL SCALE	N/A
AS NOTED	
VERTICAL SCALE	DESIGNATION
	2200655
	SHEET
	CONTRACT
8	of 16
	PROJECT
	R-44376
	2200682

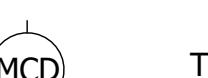


EROSION CONTROL LEGEND

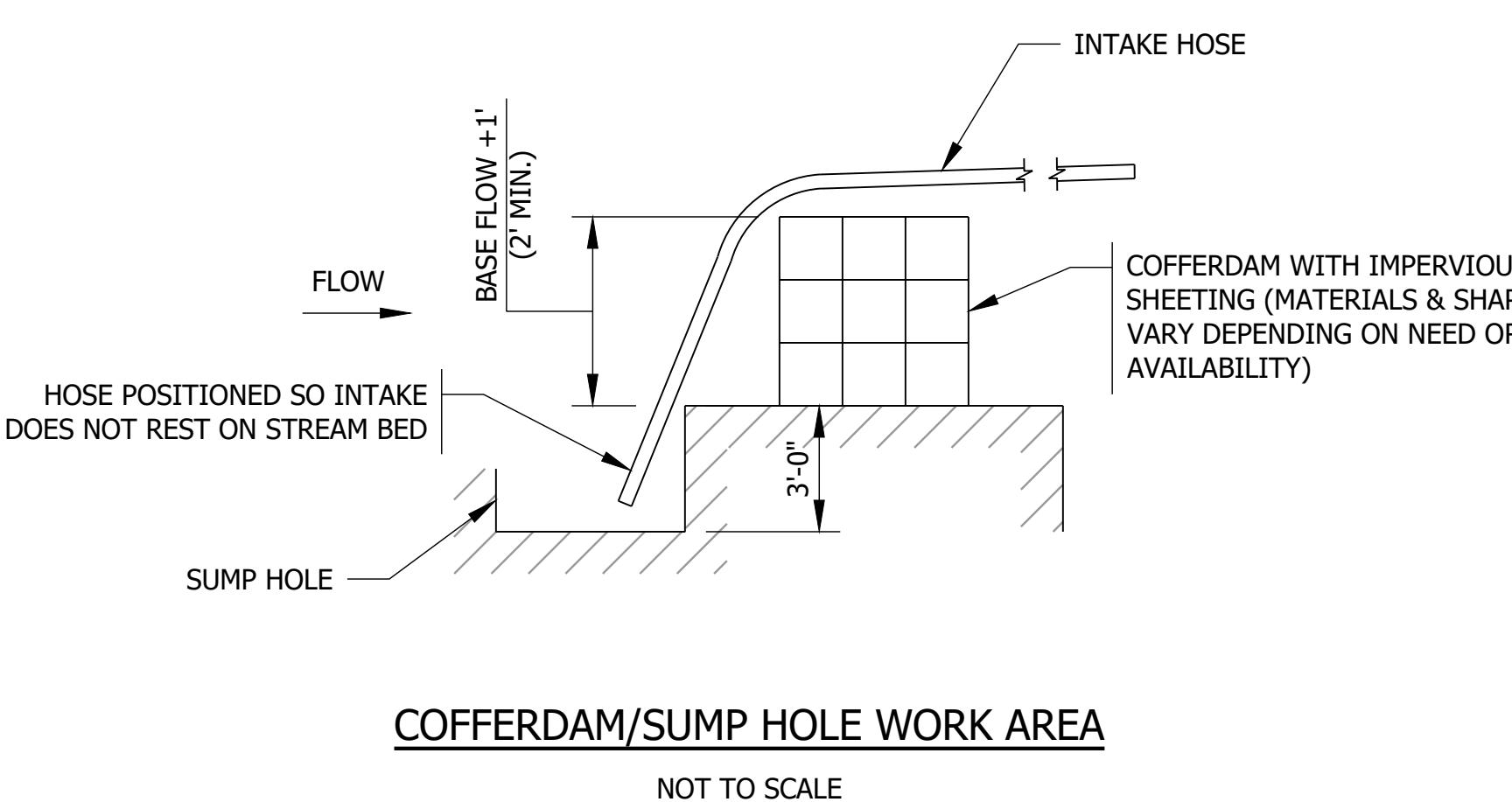
— FS — FILTER SOCK



CHARGE WATER MUST FILTER THROUGH A SEDIMENT
CAP OR OTHER SEDIMENT CONTROL MEASURES PRIOR
TO REACHING WATERWAY



TEMPORARY CHECK DAM, MODIFIED

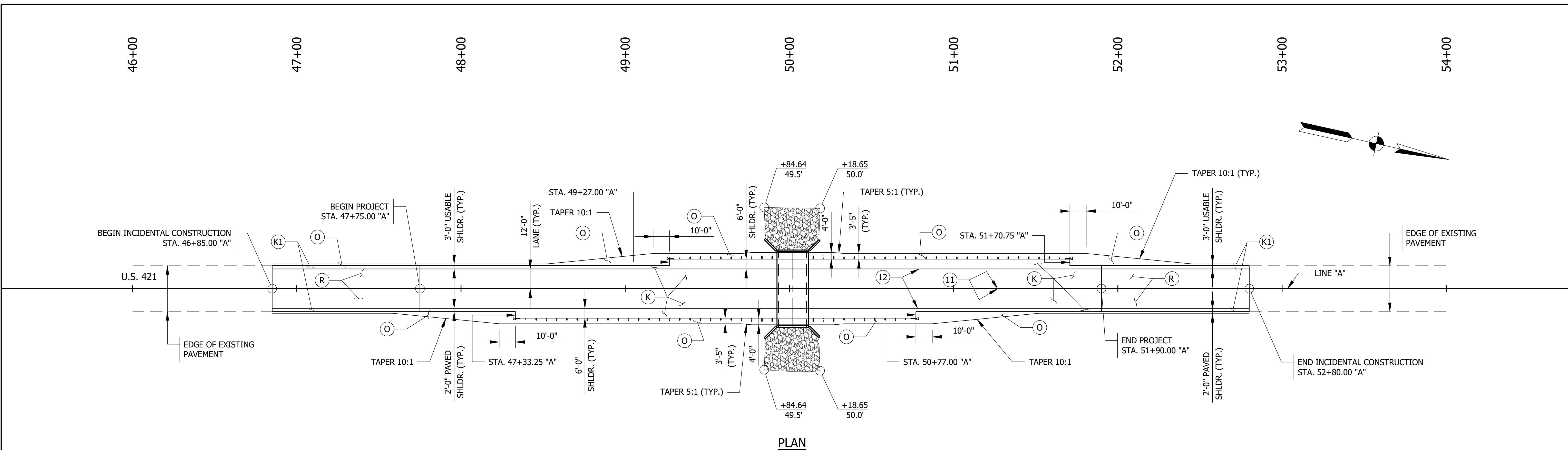


NOTI

1. ALL DISTURBANCES FROM CONSTRUCTION OPERATIONS ABOVE THE OHWM SHALL BE REFILLED AND RESEEDED WITH INDOT SEED MIX, TYPE R.
2. TEMPORARY DEWATERING MEASURES ARE EXPECTED TO BE IN PLACE FOR 6 WEEKS.
3. FILTER SOCK SHALL NOT CROSS STREAM

TEMPORARY EROSION CONTROL																
LOCATION				* FILTER SOCK	* TEMPORARY CHECK DAMS STRAW BALES	* TEMPORARY CHECK DAMS REVETMENT RIPRAP	* TEMPORARY FILTER STONE	* TEMPORARY GEOTEXTILES	* TEMPORARY REVETMENT RIPRAP	* TEMPORARY SLOPE DRAIN	* TEMPORARY SEEDING	* TEMPORARY MULCH	* TEMPORARY MULCH STABILIZATION	* TEMPORARY INLET PROTECTION	* MOBILIZATION AND DEMOBILIZATION FOR SURFACE STABILIZATION	* NO. 2 STONE FOR CONSTRUCTION ENTRANCE
FROM STATION	TO STATION	LEFT	RIGHT													
				FT	FT	TON	TON	SYS	TON	FT	LBS	TON	SYS	EACH	TON	
46+85.00 "A"	52+80.00 "A"	X		550		30	1.0	150	5		89	1.5				
46+85.00 "A"	52+80.00 "A"		X	400		35	1.5	175			89	1.5				
CONSTRUCTION ENTRANCE								120							100	
TOTALS				1025		65	2.5	445	5		178	3.0			1	100

*QUANTITY SHOWN FOR INFORMATION ONLY. COST INCLUDED IN "STORM WATER MANAGEMENT BUDGET".



LEGEND

- (K) 165 LBS/SYD QC/QA HMA, 3, 58S, SURFACE, 9.5MM ON
275 LBS/SYD QC/QA HMA, 3, 58S, INTERMEDIATE, 19.0MM ON
660 LBS/SYD QC/QA HMA, 3, 58S, BASE, 25.0MM
- (K1) WIDENING WITH HMA TYPE B CONSISTING OF:
165 LBS/SYS QC/QA HMA, 3, 58S, SURFACE, 9.5 MM ON
275 LBS/SYD HMA INTERMEDIATE, TYPE B ON
660LBS/SYD HMA BASE, TYPE B
- (R) 165 LBS/SYD QC/QA HMA, 3, 58S, SURFACE, 9.5MM ON
TRANSITION MILLING

TACK COAT TO BE PLACED BETWEEN HMA LAYERS. JOINT ADHESIVE TO BE INSTALLED AT ALL LONGITUDINAL JOINTS IN THE SURFACE AND INTERMEDIATE LAYER. LIQUID ASPHALT SEALANT TO BE PLACED CENTERED ON THE LONGITUDINAL JOINTS THAT HAVE JOINT ADHESIVE INSTALLED.

- (O) 10" COMPACTED AGGREGATE, NO. 53
- (11) LINE, PAINT, SOLID, YELLOW, 6IN
- (12) LINE, PAINT, SOLID, WHITE, 6IN



RIRAP



SHEET SIGN, MAILBOX, AND POST SUMMARY

SHEET SIGN, MAILBOX, AND POST SUMMARY										
LINE	SIGN LOCATION (STA.)	SIGN CODE	SIGN SIZE (IN X IN)	SIGN			POSTS		MAILBOX APPROACHES	REMARKS
				SIGN, SHEET, WITH LEGEND, 0.080 IN. THICKNESS	SIGN, GROUND MOUNTED, RESET	SIGN, DO NOT MOW OR SPRAY	SQUARE, TYPE 1, UNREINFORCED ANCHOR BASE			
				SFT	EACH	EACH	LENGTH	NUMBER	TOTAL	EACH
"A"	48+00.00, 25.0' LT.	R8-1	30 x 20		1.0		11	1	11	
"A"	48+00.00, 26.5' LT.	R8-1	30 x 20		1.0		11	1	11	
TOTALS					20			220		

PAVEMENT MARKINGS TABLE

PAVEMENT MARKINGS TABLE						
LOCATION						
FROM STATION	TO STATION	LEFT	CENTER	RIGHT	LINE, PAINT, SOLID, WHITE, 6 IN.	LINE, PAINT, SOLID, YELLOW, 6 IN.
46+85.00 "A"	52+80.00 "A"	X			595	LFT
46+85.00 "A"	52+80.00 "A"		X			1190
46+85.00 "A"	52+80.00 "A"			X	595	
TOTALS					1190	1190

File Name:
Modified / By:
Plotted / By:

F:\4828 - Crawfordsville Small Str (3)\A - 22000665_US421\50 Plans\30 Sheet Drawings\10 Design Sheets\S-CONSTR-DTLS-01.dwg - Layout1

PRELIMINARY		INDIANA DEPARTMENT OF TRANSPORTATION	
		CONSTRUCTION DETAILS	
RECOMMENDED FOR APPROVAL		HORIZONTAL SCALE 1" = 30'-0" UNLESS NOTED	BRIDGEFILE N/A
DESIGN ENGINEER		DATE	DESIGNATION 200655
DESIGNED: ZZH		DRAWN: SE	SHEET 9 of 16
CHECKED: BJM		CHECKED: ZZH	CONTRACT R-4376
R-4376		PROJECT 220682	

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH FT	LENGTH FT	RADII in/out	DISTANCE BEYOND R/W LINE	SURFACE BEYOND R/W LINE			GRADE (LESS THAN 10% NOT SHOWN)	EXCAVATION	PAVEMENT QUANTITES AND APPROACH TABLE			REMARKS			
						COMPACTED AGGREGATE					HMA						
						CONCRETE					HMA						
						1 %	2 %	CYS	165 TON	275 TON	660 TON	TON	TON	TON			
U.S. 421 LINE "A"		36	415						299 TON	533 TON	171 TON	210 TON	511 TON	53 TON	1 TON		
TOTALS									299 TON	533 TON	171 TON	210 TON	511 TON	53 TON	1 TON	480 TON	

STRUCTURE NUMBER	STATION	LOCATION		PIPE TYPE	DESCRIPTION		SIZE	LENGTH	UPSTREAM	DOWNSTREAM	SERVICE LIFE	STRUCTURE DATA												REMARKS							
		LEFT	RIGHT		CROSS	OFFSET						STRUCTURE BACKFILL, TYPE 1	STRUCTURE BACKFILL, TYPE 2	STRUCTURE BACKFILL, TYPE 5	SCOUR PROTECTION	ASPHALT FOR TACK COAT	COMPACTED AGGREGATE NO. 5	COMPACTED AGGREGATE NO. 53	GEOTEXTILE FOR PNT, TYPE 1B	COMPACTED AGGREGATE No. 53	SUBGRADE TREATMENT, TYPE IC	GEOTEXTILE FOR PAVEMENT, TYPE 2B	HMA FOR APPROACHES, TYPE B	COMPACTED AGGREGATE No. 53	SUBGRADE TREATMENT, TYPE IC	GEOTEXTILE FOR PAVEMENT, TYPE 2B	HMA FOR APPROACHES, TYPE B	COMPACTED AGGREGATE No. 53	JOINT ADHESIVE	Liquid Asphalt Sealant	
FT	FT	LFT	LFT		FT.	FT.						CYS	CYS	CYS	TON	TON	SYS	IN.	CYS	CYS	SYS	TON	CYS	SYS	TON	CYS	SYS	LFT	LFT	LFT	
1	50+02.00 "A"	X	17 X 4		REINFORCED CONCRETE BOX STRUCTURE	47	0'	1.33	1.11	726.73	726.73	75							134	71	90	208	12	31			190	1481		CV 421-012-133.62	EPOXY COATED REINFORCEMENT

A QUANTITY OF 50 LFT OF PIPE, DRAIN TILE TERMINAL SECTION, DIAMETER 8 IN. AND 50 LFT OF PIPE, DRAIN TILE TERMINAL SECTION, DIAMETER 12 IN. HAS BEEN PROVIDED TO PERPETUATE FIELD TILES DISTURBED DURING CONSTRUCTION

GUARDRAIL SUMMARY TABLE									
LOCATION				MGS GUARDRAIL					
FROM STATION	TO STATION	STANDARD POST AT 6 FT. 3 IN. SPA.	MGS LONGSPAN, TYPE 2	GUARDRAIL END TREATMENT, TYPE OS					
		LFT	EACH	EACH					
49+27.00 "A"	49+77.00 "A"	X							1.0
49+77.00 "A"	50+27.00 "A"	X							
50+27.00 "A"	51+20.75 "A"	X	93.75						
51+20.75 "A"	51+70.75 "A"	X							1.0
48+33.25 "A"	48+83.25 "A"	X							1.0
48+83.25 "A"	49+77.00 "A"	X	93.75						
49+77.00 "A"	50+27.00 "A"	X		1.0					
50+27.00 "A"	50+77.00 "A"	X							1.0
TOTALS		187.50	2.0	4.0					

MONUMENT SUMMARY TABLE									
LOCATION				MONUMENT, TYPE B					
STATION	OFFSET	LEFT	RIGHT	RIGHT-OF-WAY MARKER					
		FT	FT						
47+75.00 "A", BEGIN PROJECT									
51+90.00 "A", END PROJECT									
46+00.00 "A"	35	X							
46+50.00 "A"	35	X							
49+00.00 "A"	65	X							
51+00.00 "A"	65	X							
53+00.00 "A"	35	X							
46+00.00 "A"	35		X						
46+50.00 "A"	35		X						
49+00.00 "A"	65		X						
51+00.00 "A"	65		X						
53+00.00 "A"	35		X						
TOTALS				2	10				

RIPRAP, SEEDING, AND SODDING SUMMARY TABLE									
LOCATION				RIPRAP, SEEDING, AND SODDING					
FROM STATION	TO STATION	LEFT	MEDIAN	RIPRAP		SEEDING		SODDING	
		LFT	SYS	TON	TON	TON	TON	TON	

Photo Key Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Rachel Pluckebaum
Date: 3/5/2025



Sources: 0.01 0 0 0.01 Miles
Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

INDIANA STATEWIDE
IMAGERY
(FLOWN 2022)

Legend

- Investigative Area
- RSD

Photos taken on June 8, 2023.



Photo 1: View from project area looking southbound.



Photo 2: View from project area looking northbound.



Photo 3: The small structure is showing effloresce.



Photo 4: View of small structure looking east.



Photo 5: View under the small structure.



Photo 6: View of the west side of the small structure and adjacent property.



Photo 7: View of adjacent property (east side)



Photo 8: View of adjacent property (east side)

APPENDIX C

Early Coordination

Des. No. 2200665



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
(855) INDOT4U

Eric Holcomb, Governor
Michael Smith, Commissioner

October 25, 2023

Federal Highway Administration
Federal Office Building, Room 254
575 North Pennsylvania Street
Indianapolis, IN 46204

Re: Designation Number: 2200665, US 421, 0.67 Mile South of SR 26, Clinton County, Indiana
Environmental Early Coordination

Dear Environmental Coordinator:

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with the small structure project in Boone County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

This project is located on US 421, 0.67 mile south of SR 26, in Clinton County, Indiana. This section of US 421 is a *Minor Arterial*. The existing US 421 section consists of asphalt with a 12-foot-wide northbound driving lane and a 12-foot-wide southbound driving lane with 2-foot-wide usable shoulders, 1-foot of which are paved. The existing small structure is a 13-foot span with a 2.6-foot rise three-sided slab top structure. The length of the structure is 32-foot. The draft need is due to the deterioration of the structure rated a 4 (poor condition) out of 9 (excellent condition). The draft purpose is to have a structure with a condition rating of at least 7 (good condition) out of 9 (excellent condition). The approximate existing right-of-way is 30 feet each side of the centerline throughout the project.

The proposed project is anticipated to replace the small structure over UNT to Campbells Run. The replacement structure is anticipated to be a 17-foot span, 4-foot rise, 47-foot long, reinforced concrete box. Revetment riprap will be placed at the inlet and outlet of the proposed structure. To construct the replacement structure, a raise in vertical profile of approximately 16-inches will be required. The project requires up to 0.40 acre of permanent right-of-way and up to 0.10 acre of temporary right-of-way. The project will be approximately 600 feet in length. The proposed method of traffic maintenance is a signed detour. Less than 0.5 acre of trees are anticipated to be cleared for this project. The project is anticipated to begin construction in Summer or Fall of 2026.

Land use in the vicinity of the project is primarily agricultural. Corradino, LLC will perform waters and wetlands determinations to identify water resources that may be present. The project is anticipated to qualify for the Rangewide Programmatic Agreement for the Indiana bat and northern long-eared bat by completing the Information for Planning and Consultation (IPaC). Coordination will occur with INDOT Cultural Resources Office (CRO) to evaluate the project area for archaeological and historic resources and for Section 106 compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence as appropriate.

Should we not receive your response **within thirty (30) calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact Zed Hott of Corradino LLC, at 317-488-2363 or zhott@corradino.com and or the Project Manager, Amy Watts, of INDOT at awatts@indot.ingov. Thank you in advance for your input.

Sincerely,



Zed Hott
Corradino LLC
200 South Meridian Street, Suite 330
Indianapolis, IN 46225

Attachments:

- A. Project Location Maps
- B. Site Photos

The following agencies received Early Coordination Letters

Federal Highway Administration
Federal Office Building, Room 254
575 North Pennsylvania Street
Indianapolis, Indiana 46204

State Conservationist
Natural Resource Conservation Service
6013 Lakeside Boulevard
Indianapolis, IN 46278

Indiana Geological and Water Survey
611 North Walnut Grove
Bloomington, IN 47405

Environmental Coordinator
Indiana Department of Natural Resources
Division of Fish and Wildlife
402 West Washington Street, Rm. W273
Indianapolis, IN 46204

IDE�
Automatic coordination website

IDE� – Groundwater Section
Electronic Submittal

Field Environmental Officer
Chicago Regional Office
US Department of Housing & Urban Development
Metcalf Fed. Bldg.
77 W. Jackson Blvd. Room 2401
Chicago, IL 60604

Regional Environmental Coordinator
Midwest Regional Office
National Park Service
601 Riverfront Drive
Omaha, Nebraska 68102

Indiana Department of Transportation
Environmental Policy Manager
100 N. Senate Ave.
Indianapolis, IN 46204

U.S. Army Corps of Engineers
Louisville District, Indpls. Regulatory Office
Indianapolis, IN 46216

Indiana Department of Transportation
Crawfordsville District
414 West 300 North
Crawfordsville, IN 47933

Wellhead Proximity Determinator

Field Supervisor
US Fish and Wildlife Service
Northern Indiana Suboffice
P.O. Box 2616
Chesterton, IN 46304

Clinton County Highway Superintendent
2095 Burlington Ave.,
Frankfort, IN 46041

Clinton County Surveyor
165 Courthouse Square
Frankfort, IN 46041

Clinton County Council
ATTN: Joe Mink
225 Courthouse Square
Frankfort, IN 46041

Clinton County Commissioners
125 Courthouse Square
Frankfort, IN 46041

Clinton County Treasurer
220 Courthouse Square
Frankfort, IN 46041

Clinton County EMA
Darrell Sanders
1859 S. Jackson St.,
Frankfort, IN 46041

Rossville Consolidated School District
1 Robert Egly Drive
Rossville, Indiana 46065

Clinton County EMS
1501 S. Jackson St.,
Frankfort, IN 46041

From: [McCloskey, Elizabeth](#)
To: [Rachel Pluckebaum](#)
Subject: Re: [EXTERNAL] Environmental Early Coordination Letter - Des. No. 2200665 (US 421, 0.67 mile south of SR 26)
Date: Thursday, October 26, 2023 1:32:14 PM

Good afternoon, because the proposed project will have minor impacts on natural resources, and no Federally listed endangered species are known to be present, the U.S. Fish and Wildlife Service will not be providing a comment letter.

Elizabeth McCloskey
U.S. Fish and Wildlife Service
Northern Indiana Suboffice
Ecological Services
Chesterton, Indiana

From: Rachel Pluckebaum <rpluckebaum@CORRADINO.com>
Sent: Thursday, October 26, 2023 11:37 AM
To: McCloskey, Elizabeth <elizabeth_mccloskey@fws.gov>
Subject: [EXTERNAL] Environmental Early Coordination Letter - Des. No. 2200665 (US 421, 0.67 mile south of SR 26)

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello,

I hope you are having a good day. Attached for your review is the Early Coordination Letter for DES 2200665. The roadway project is located at US 421, 0.67 mile south of SR 26 in Clinton County, Indiana. If you have comments or commitments for this project, please respond within 30 days.

Thank you in advance.

Sincerely,

Rachel Pluckebaum Frasier
The Corradino Group
w. 317.956.5047
c. 317.518.9890

THIS IS NOT A PERMIT

**State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment**

DNR#: ER-26051

Request Received: October 26, 2023

Requestor:

Zed Hott
The Corradino Group, Inc.
200 South Meridian Street, Suite 330
Indianapolis, IN 46225

Project:

US 421 small structure replacement over UNT Campbells Run, 0.67 miles south of SR 26; Des #2200665

County/Site Info: Clinton County

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment:

Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database:

The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish and Wildlife Comments:

Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

A) Small Structure Replacement

Bridges are preferred over culverts, and three-sided culverts are preferred over box or pipe culverts. Multiple culverts or culverts with multiple openings are not recommended for approval. These types of structures are often problematic for fish and wildlife passage as they tend to accumulate debris and become blocked. If box and pipe culverts are used, the culvert bottoms should be sumped a minimum of 6" (or 20% of the culvert height or diameter, whichever is greater up to a maximum of 2') below the stream bed elevation. Sumping is not required for bridges or three-sided culverts. Crossings must span the entire channel width (a minimum of 1.2 times the ordinary high-water mark width). Crossings must maintain the natural stream substrate within the structure (natural stream substrate must be replaced in sumped box and pipe culverts up to the existing flowline). Scour protection at the inlet and outlet must not extend above the existing flowline elevation. Stream depth, channel width and water velocities in the crossing structure during low-flow conditions must approximate those in the natural stream channel.

The new/replacement/rehabilitated crossing structure, and any bank stabilization under or around the structure, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. Upgrading wildlife passage for replacement/rehabilitated structures is recommended whenever possible to improve wildlife/vehicle safety. White-tailed deer passage must be incorporated into all new structures where no structure previously existed. Minimum structure dimensions for white-tailed deer passage are 20 feet of width clearance (overall span of the structure) and 8 feet of height clearance measured from the ordinary high-water mark (OHWM). Bank lines must be maintained or restored within structures to allow for wildlife passage above the OHWM. All wildlife passage designs must include a smooth level pathway a minimum of 1-3 feet in width composed of natural substrate (soil, sand, gravel, etc.) or compacted aggregate fill over riprap (#2, #53, #73, etc.) tied into existing elevations both upstream and downstream. The width and location of the wildlife pathway is dependent on the wildlife species using the area.

There are several techniques and materials for incorporating wildlife passage into the design of a crossing structure if maintaining or restoring banklines is not possible. Coordination with a Regional Environmental Biologist to address wildlife passage issues before submitting a permit application (if required) is encouraged to avoid delays in the permitting process. The following links are good resources to consider in the design of stream crossing structures to maintain fish and wildlife passage:

<https://www.fs.usda.gov/ccrc/tool/fishxng-fish-passage-learning-systems>
<https://www.fs.usda.gov/wildlifecrossings/library/index.php>
https://www.fhwa.dot.gov/clas/ctip/wildlife_crossing_structures/
<https://www.fhwa.dot.gov/engineering/hydraulics/pubs/11008/hif11008.pdf>

B) Streambank Stabilization

Some form of bank stabilization is almost always needed with the construction, repair, replacement, or modification of a stream channel or crossing structure. For streambank stabilization and erosion control, regrading to a stable slope (2:1 or shallower) and establishing native vegetation along the banks are typically the most effective techniques and allow a vegetated stream bank to develop. A variety of methods to accomplish this include planting plugs, whips, container stock, seeding, and live stakes. In addition to vegetation establishment, some additional level of bioengineered bank stabilization may be needed under certain circumstances (inability to regrade to a stable slope, flow velocities that exceed the limits of vegetation alone, etc.). Combining vegetation with any of the following bank stabilization methods can provide additional bank protection while not compromising benefits to fish, wildlife, and botanical resources:

- Geotextiles (erosion control blankets and/or turf reinforcement mats that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles)
- Vegetated geogrids or soil lifts, fiber rolls, glacial stone, or riprap.

Riprap or other hard bank stabilization materials should be used only at the toe of the sideslopes up to the ordinary high-water mark (OHWM) with the exception of areas directly under bridges for instance. The banks above the OHWM should be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to Central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. Information about bioengineering techniques can be found at the following link to a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: https://efotg.sc.egov.usda.gov/references/public/IA/Chapter-16_Streambank_and_Shoreline_Protection.pdf.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits in-channel disturbance and the clearing of trees and brush.

3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
5. Use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
6. Do not use broken concrete as riprap.
7. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
8. Minimize the movement of resuspended bottom sediment from the immediate project area.
9. Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway. Any incidental fallen material or debris in the waterway must be removed within 24 hours using best management practices, particularly lifting material out of the waterway and not dragging it across the streambed whenever possible.
10. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
11. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or 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); seed and apply mulch on all other disturbed areas.

Contact Staff:

Our agency appreciates this opportunity to be of service. Please contact me at RVanVoorhis@dnr.IN.gov or (317) 232-8163 if we can be of further assistance.

Rachel Van Voorhis

Rachel Van Voorhis
Environmental Coordinator
Division of Fish and Wildlife

Date: November 21, 2023



United States
Department of
Agriculture

Farm
Production
and
Conservation

Natural
Resources
Conservation
Service

Indiana State Office
6013 Lakeside Boulevard
Indianapolis, Indiana 46278
317-295-5800

November 20, 2023

Rachel Frasier
200 South Fifth, Suite 503N
Louisville, Kentucky 40202

Dear Ms. Frasier:

The proposed roadway project located at US-421 in Clinton County, Indiana (Des. No. 2200665), as referred to in your letter received on November 10, 2023, will cause a conversion of prime farmland.

The attached packet of information is for your use competing Parts VI and VII of the AD-1006. After completion, the federal funding agency needs to forward one copy to NRCS for our records.

If you need additional information, please contact John Allen at 317-295-5859 or
john.allen@usda.gov.

Sincerely,

JOHN ALLEN

JOHN ALLEN
State Soil Scientist

Digitally signed by JOHN ALLEN
Date: 2023.11.21 07:47:13 -05'00'

Enclosers

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request					
Name of Project		Federal Agency Involved					
Proposed Land Use		County and State					
PART II (To be completed by NRCS)		Date Request Received By NRCS			Person Completing Form:		
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)				YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)		Farmable Land In Govt. Jurisdiction Acres: %			Amount of Farmland As Defined in FPPA Acres: %		
Name of Land Evaluation System Used		Name of State or Local Site Assessment System			Date Land Evaluation Returned by NRCS		
PART III (To be completed by Federal Agency)		Alternative Site Rating					
A. Total Acres To Be Converted Directly		Site A	Site B	Site C	Site D		
B. Total Acres To Be Converted Indirectly							
C. Total Acres In Site							
PART IV (To be completed by NRCS) Land Evaluation Information							
A. Total Acres Prime And Unique Farmland							
B. Total Acres Statewide Important or Local Important Farmland							
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted							
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value							
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)							
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C	Site D	
1. Area In Non-urban Use		(15)					
2. Perimeter In Non-urban Use		(10)					
3. Percent Of Site Being Farmed		(20)					
4. Protection Provided By State and Local Government		(20)					
5. Distance From Urban Built-up Area		(15)					
6. Distance To Urban Support Services		(15)					
7. Size Of Present Farm Unit Compared To Average		(10)					
8. Creation Of Non-farmable Farmland		(10)					
9. Availability Of Farm Support Services		(5)					
10. On-Farm Investments		(20)					
11. Effects Of Conversion On Farm Support Services		(10)					
12. Compatibility With Existing Agricultural Use		(10)					
TOTAL SITE ASSESSMENT POINTS		160					
PART VII (To be completed by Federal Agency)							
Relative Value Of Farmland (From Part V)		100					
Total Site Assessment (From Part VI above or local site assessment)		160					
TOTAL POINTS (Total of above 2 lines)		260					
Site Selected:		Date Of Selection			Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>		
Reason For Selection:							
Name of Federal agency representative completing this form: (See Instructions on reverse side)					Date: Form AD-1006 (03-02)		

Organization and Project Information

Project ID: Des. No. 2200665
Des. ID: US 421, 0.67 Mile South of SR 26, Clinton Co., IN
Project Title: US 421 over UNT to Campbells Run
Name of Organization: Corradino, LLC
Requested by: Rachel Pluckebaum

Environmental Assessment Report

1. Geological Hazards:

- Moderate liquefaction potential
- 1% Annual Chance Flood Hazard

2. Mineral Resources:

- Bedrock Resource: Moderate Potential
- Sand and Gravel Resource: Low Potential

3. Active or abandoned mineral resources extraction sites:

- None documented in the area

*All map layers from Indiana Map (maps.indiana.edu)

DISCLAIMER:

This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

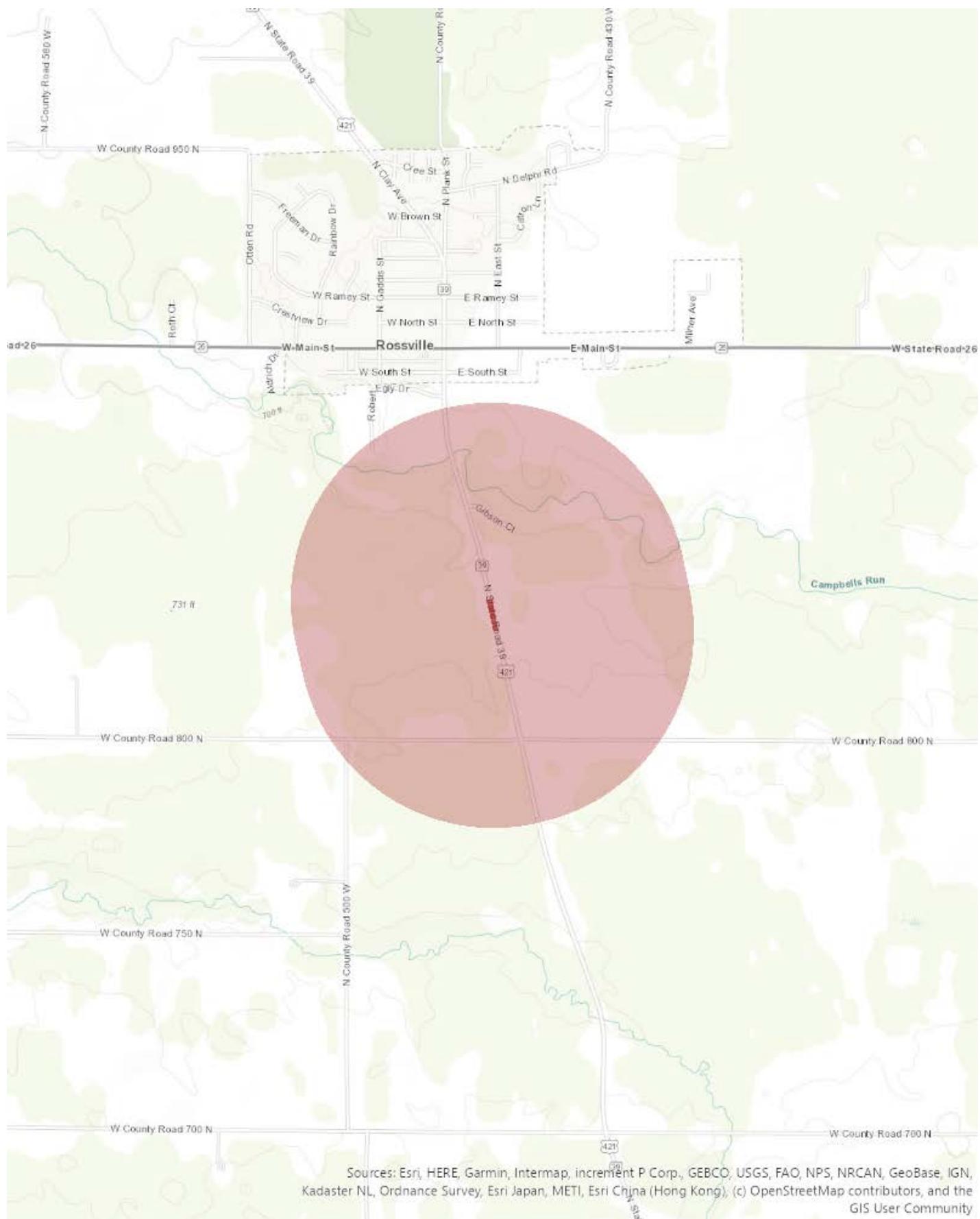
This information was furnished by Indiana Geological Survey

Address: 1001 E. 10th St., Bloomington, IN 47405

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: November 08, 2023





Metadata:

- https://portal.igs.indiana.edu/arcgis/rest/services/Seismic_Earthquake_Liquefaction_Potential/MapServer/info/metadata/metadata.xml?format=default&output=html
- https://portal.igs.indiana.edu/arcgis/rest/services/Industrial_Minerals_SandAndGravel_Resources/MapServer/info/metadata/metadata.xml?format=default&output=html
- https://gisdata.in.gov/server/rest/services/Hosted/FIRM_Flood_Hazard_Zones_2023/FeatureServer/info/metadata
- https://portal.igs.indiana.edu/arcgis/rest/services/Bedrock_Geology//MapServer/info/metadata/metadata.xml?format=default&output=html





United States Department of the Interior

FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273



In Reply Refer To:

09/16/2024 16:15:49 UTC

Project Code: 2024-0011933

Project Name: Des. No. 2200665, US 421, 0.67 Mile South of SR 26 over unnamed tributary

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of

Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Indiana Ecological Services Field Office

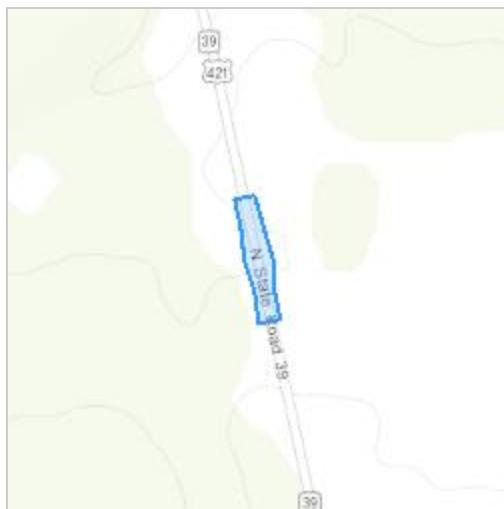
620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

PROJECT SUMMARY

Project Code: 2024-0011933
Project Name: Des. No. 2200665, US 421, 0.67 Mile South of SR 26 over unnamed tributary
Project Type: Culvert Repair/Replacement/Maintenance
Project Description: This project is located on US 421, 0.67 mile south of SR 26 in Clinton County, Indiana. The small structure carries US 421 over a potential unnamed tributary to Campbells Run. The current structure is a 8-foot span with 4-foot rise reinforced concrete box structure. There is heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The head walls have spalling with exposed rebar. The channel beams have cracking with efflorescence and spalling with rebar exposed. There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure. Excavation will occur at approximately 10 feet deep. Excavation will be required to remove and replace the existing structure and place scour protection measures. Riprap will be placed at inlet and outlet of the new structure as scour protection. INDOT The structural evaluation rating from the culvert inspection is a 4 (poor condition) out of 9 (excellent condition). Due to the severity of the deterioration of the small structure, the proposed scope for this project is a small structure replacement. No trees will be cleared for this project. Known suitable bat habitat surrounds the project area. The project is anticipated to begin construction in Summer 2027 and construction will last 4 months. The INDOT Crawfordsville District responded on April 3, 2023 indicating no presence of federally endangered species within 0.5 mile of the project area. The most recent culvert inspection, done on July 13, 2022 did not find evidence of bat use. No permanent lighting will be installed, and it is unknown whether temporary lighting will be needed, thus temporary lighting will be assumed.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.4069668,-86.592387665365,14z>



Counties: Clinton County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i>	Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: <https://ecos.fws.gov/ecp/species/5949>

BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i>	Experimental Population, Non-Essential

Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY)
No critical habitat has been designated for this species.
Species profile: <https://ecos.fws.gov/ecp/species/758>

CLAMS

NAME	STATUS
Salamander Mussel <i>Simpsonaias ambigua</i>	Proposed Endangered

There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: <https://ecos.fws.gov/ecp/species/6208>

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i>	Candidate

No critical habitat has been designated for this species.
Species profile: <https://ecos.fws.gov/ecp/species/9743>

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

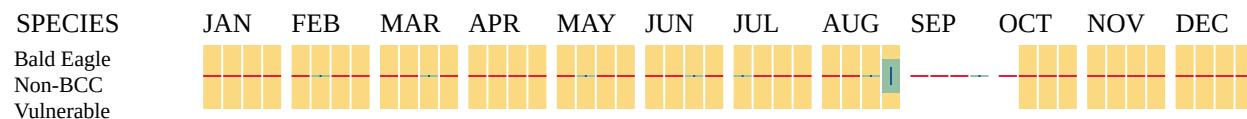
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

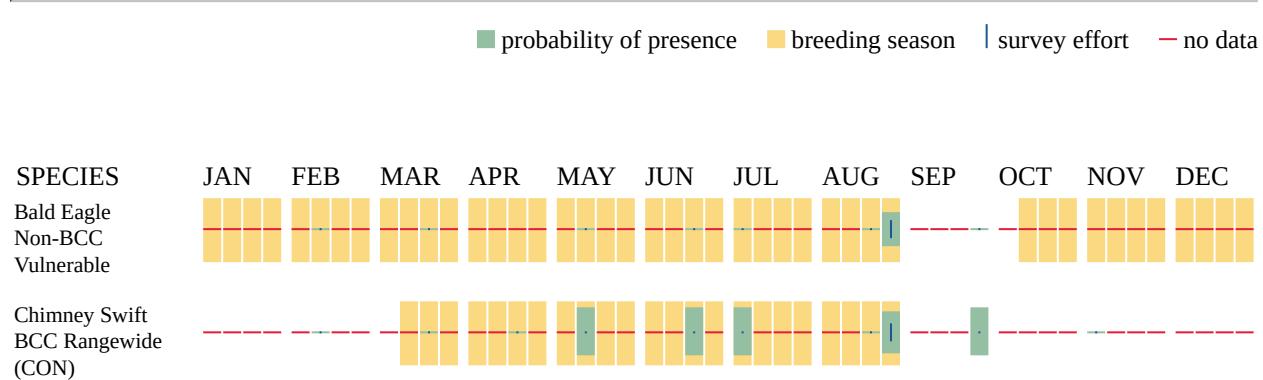
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

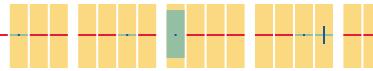
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.



Red-headed
Woodpecker
BCC Rangewide
(CON)



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Rachel Pluckebaum

Address: 200 South Meridian Street Suite 330

City: Indianapolis

State: IN

Zip: 46225

Email: rpluckebaum@corradino.com

Phone: 3174882363



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:

09/27/2024 15:31:08 UTC

Project code: 2024-0011933

Project Name: Des. No. 2200665, US 421, 0.67 Mile South of SR 26 over unnamed tributary

Subject: Concurrence verification letter for the 'Des. No. 2200665, US 421, 0.67 Mile South of SR 26 over unnamed tributary' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated September 27, 2024 to verify that the **Des. No. 2200665, US 421, 0.67 Mile South of SR 26 over unnamed tributary** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures. **At least one of the qualification interview questions indicated an activity or portion of your project is consistent with a not likely to adversely affect determination therefore, the overall determination for your project is, may affect, and is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*).** Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period

allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:

If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

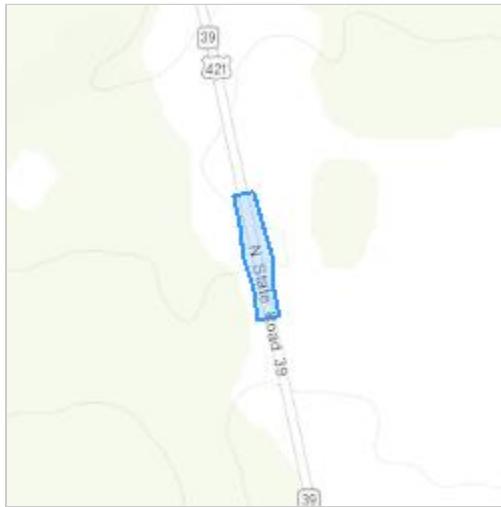
NAME

Des. No. 2200665, US 421, 0.67 Mile South of SR 26 over unnamed tributary

DESCRIPTION

This project is located on US 421, 0.67 mile south of SR 26 in Clinton County, Indiana. The small structure carries US 421 over a potential unnamed tributary to Campbells Run. The current structure is a 8-foot span with 4-foot rise reinforced concrete box structure. There is heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The head walls have spalling with exposed rebar. The channel beams have cracking with efflorescence and spalling with rebar exposed. There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure. The structural evaluation rating from the culvert inspection is a 4 (poor condition) out of 9 (excellent condition). Due to the severity of the deterioration of the small structure, the proposed scope for this project is a small structure replacement. Excavation will be required to remove and replace the existing structure and place scour protection measures. Excavation will occur at approximately 10 feet deep. Riprap will be placed at inlet and outlet of the new structure as scour protection. No trees will be cleared for this project. Suitable bat habitat is within 1000 feet of the project area. The project is anticipated to begin construction in Spring/Summer 2027 and construction will last 4 months. The INDOT Crawfordsville District responded on April 3, 2023 indicating no presence of federally endangered species within 0.5 mile of the project area. The most recent culvert inspection, done on June 8, 2023 did not find evidence of bat use. No permanent lighting will be installed, and it is unknown whether temporary lighting will be needed, thus temporary lighting will be assumed.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.4069668,-86.592387665365,14z>



DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

Yes

2. Is the project within the range of the northern long-eared bat^[1]?

[1] See [northern long-eared bat species profile](#)

Automatically answered

No

3. Which Federal Agency is the lead for the action?

A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

No

9. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

No

10. Does the project include slash pile burning?

No

11. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

Yes

12. Is there *any* suitable habitat^[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's current [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

13. Has a bridge assessment^[1] been conducted **within** the last 24 months^[2] to determine if the bridge is being used by bats?

[1] See [User Guide Appendix D](#) for bridge/structure assessment guidance

[2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

Yes

SUBMITTED DOCUMENTS

- DES 2200665 Bat Assessment Form.pdf <https://ipac.ecosphere.fws.gov/project/O2TNTEG3Z5G5FPLK22UCAYB3XQ/projectDocuments/149578547>

14. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)^[1]?

[1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

No

15. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

No

16. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

No

17. Will the project involve the use of **temporary** lighting *during* the active season?

Yes

18. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

Yes

19. Will the project install new or replace existing **permanent** lighting?

No

20. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?

No

21. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage, rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

22. Will the project raise the road profile **above the tree canopy**?

No

23. Is the location of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the project action area is not within suitable Indiana bat and/or NLEB summer habitat and is outside of 0.5 miles of a hibernaculum.

24. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

25. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

26. **Lighting AMM 1**

Will *all temporary* lighting be directed away from suitable habitat during the active season?

Yes

PROJECT QUESTIONNAIRE

1. Please describe the proposed bridge work:

This project is located on US 421, 0.67 mile south of SR 26 in Clinton County, Indiana. The small structure carries US 421 over a potential unnamed tributary to Campbells Run. The current structure is a 8-foot span with 4-foot rise reinforced concrete box structure. There is heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The head walls have spalling with exposed rebar. The channel beams have cracking with efflorescence and spalling with rebar exposed. There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure. The structural evaluation rating from the culvert inspection is a 4 (poor condition) out of 9 (excellent condition). Due to the severity of the deterioration of the small structure, the proposed scope for this project is a small structure replacement. Excavation will be required to remove and replace the existing structure and place scour protection measures. Excavation will occur at approximately 10 feet deep. Riprap will be placed at inlet and outlet of the new structure as scour protection.

2. Please state the timing of all proposed bridge work:

Construction Season of 2027

3. Please enter the date of the bridge assessment:

June 8, 2023

4. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

Yes

5. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

No

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on October 30, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion \(dated March 23, 2023\) for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Robabeh Asadpour

Address: 41 West 300 North

City: Crawfordsville

State: IN

Zip: 47933

Email: rasadpour@indot.in.gov

Phone: 7653615621

Rachel Pluckebaum

From: Neild, Benjamin <BNeild@indot.IN.gov>
Sent: Monday, April 3, 2023 9:50 AM
To: Rachel Pluckebaum
Cc: Kurtz, Randy
Subject: RE: Clinton County (Des. No. 2200665) - Bat and Heritage Database Check

Follow Up Flag: Follow up
Flag Status: Flagged

Good morning,

A review of the USFWS GIS database for Indiana bat and Northern long-eared bat roosting, hibernacula, and capture sites was conducted for Des No. 2200665 on 4/3/2023. There are no documented sites within a half mile of the project area. The USFWS Information for Planning and Conservation (IPaC) website must be consulted and a new project created to obtain an official species list and complete the project questionnaire to determine the programmatic consultation's applicability. The IPaC-generated documents must be forwarded to the USFWS for verification if needed.

Benjamin Neild

Environmental Manager 2, Capital Program Management Division
41 West 300 North
Crawfordsville, IN 47933
Phone: (765) 361-5259
Email: bneild@indot.in.gov



From: Rachel Pluckebaum <rpluckebaum@CORRADINO.com>
Sent: Tuesday, March 28, 2023 4:06 PM
To: Neild, Benjamin <BNeild@indot.IN.gov>
Subject: Clinton County (Des. No. 2200665) - Bat and Heritage Database Check

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hi Ben,

I hope you're having a great day. I am requesting a database review for the Indiana Bat and Northern Long-eared Bat records and a Natural Heritage Database review for the following Des. No.: Des. No. 2200665 (US 421, 0.67 mi. south of SR 26, Clinton County)

Please let me know if you have any issues with the maps. I can send others if needed.

APPENDIX D

Section 106 of the NHPA

Des. No. 2200665

Minor Projects PA Project Submittal and Assessment Form

SECTION 1

Submittal of this form is only required for projects where Category B applies. Projects qualifying under Category A do not require submittal of this form. SECTION 2 (for Conditions of Category B.1 for curb/sidewalk) or SECTION 3 (for Conditions of Category B.9 for drainage structures) may be required as determined by INDOT-Cultural Resources Office (INDOT-CRO) review. INDOT-CRO will notify applicant if the Minor Projects PA does not apply.

Part I: Project Information-Completed by Applicant (Consultant/PM/Project Sponsor/INDOT District Staff)*

**A qualified professional historian (QP) is not required to complete Part I. INDOT-Cultural Resources Office (INDOT-CRO) staff will be responsible for completion of Part II.*

Original Submission Date: August 9, 2023

Amended Submission Date*:

**Consult with INDOT-CRO to determine whether an amendment is required. For revisions/updates to original form, please detail in applicable sections below. Please use red font to distinguish the revisions/updates.*

Submitted By (Provide Name and Firm/Organization): Rachel Pluckebaum, Corradino, LLC

Project Designation Number: Des. No. 2200665

Route Number: US (United States) 421

Feature crossed (if applicable): Potential UNT to Campbells Run

City/Township: Ross

County: Clinton

Project Description: This project is located on US 421, 0.67 mile south of SR 26 in Clinton County, Indiana. The small structure carries US 421 over a potential unnamed tributary to Campbells Run. The current structure is a 13-foot span with a 2.5-foot rise reinforced concrete box structure. There is heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The headwalls have spalling with exposed rebar. The channel beams have cracking with efflorescence and spalling with rebar exposed. There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure. There are above ground and below ground utilities adjacent to the project area. Excavation will occur at approximately 10 feet deep. Excavation will be required to remove and replace the existing structure and place scour protection measures. Riprap will be placed at inlet and outlet of the new structure as scour protection. The structural evaluation rating from the culvert inspection is a 4 (poor condition) out of 9 (excellent condition). Due to the severity of the deterioration of the small structure, the proposed scope for this project is a small structure replacement. The replacement structure will be a 17-foot span, 4-foot rise reinforced concrete box culvert structure. The vertical alignment of US 421 will be raised to accommodate cover to the replacement structure. Guardrail will be placed for roadside protection.

If the project includes any curb, curb ramp, or sidewalk work, please specify the location(s) of such work: N/A

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type:

Feature Crossed: Potential unnamed tributary to Campbells Run

Structure Number: CV 421-012-133.62

For bridge projects, is the bridge included in INDOT's Historic Bridge Inventory (<https://www.in.gov/indot/2531.htm>)?

Yes

No

Minor Projects PA Project Submittal and Assessment Form

If yes, did the inventory determine the bridge eligible for or listed in the National Register of Historic Places? Please provide page # of entry in Historic Bridge Inventory.

Yes No

Inventory Page # _____

Will there be right-of-way acquisition as part of this project?

Yes No

If yes was checked above, please check all that apply:

Permanent Temporary Reacquisition

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way: There will be permanent and reacquired right-of-way (ROW) taken for this project. There will be up to 1.1 acres of permanent ROW, 0.63 acre of reacquisition of existing ROW, and no temporary ROW acquired for this project. The permanent ROW will be acquired in all four quadrants of the structure.

Is there any potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?

Yes No

Archaeology (check one):

All proposed activities are presumed to occur in previously disturbed soils*
*INDOT-CRO will notify you if project area includes undisturbed soils and requires an archaeological reconnaissance.

Project takes place in undisturbed soils and the archaeology report is included in submission or will be forthcoming*

* If an archaeology report is required, the Minor Projects PA Form will not be finalized until the report is reviewed and approved by INDOT-CRO. For INDOT-sponsored projects, INDOT-CRO may be able to complete the archaeological investigation. If you would like to request that INDOT-CRO complete an archaeological investigation, please contact the INDOT-CRO archaeology team lead. See CRM Pt. 1 Ch. 3 for current contact information.

Please specify all applicable categories and condition(s) (highlight applicable conditions in yellow)*:

B-4. Installation of new safety appurtenances, including but not limited to, guardrails, barriers, glare screens, and crash attenuators, under the following conditions **[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]**:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (EITHER Condition I or Condition ii must be satisfied):

- i. Work occurs in previously disturbed soils; *OR*
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form

Minor Projects PA Project Submittal and Assessment Form

information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

B-9. Installation, replacement, repair, lining, or extension of culverts and other drainage structures under the conditions listed below [***BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied***]:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work occurs in previously disturbed soils; **OR**
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site for information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

One of the conditions below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work does not involve installation of a new culvert and other drainage structure, and there are no impacts to unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under one of the following conditions (*Condition a, Condition b, or Condition c must be satisfied*):
 - a. The structure exhibits no wood, stone, or brick structures or parts therein; **OR**
 - b. The structure exhibits only modern wood, stone, or brick structures or parts therein; **OR**
 - c. The structure exhibits non-modern wood, stone, or brick structures or parts therein and the following conditions are met (*BOTH Condition 1 AND Condition 2 must be met*):
 1. Work does not occur adjacent to or within a National Register-listed or National Register eligible district or individual above-ground resource; **AND**
 2. The structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.
- ii. Work involves the installation of a new culvert and other drainage structures **AND/OR** there may be impacts to unusual features, including historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under the following conditions (*BOTH Condition a and Condition b must be satisfied*):
 - a. Work does not occur adjacent to or within a National Register-listed or National Register eligible district or individual above-ground resource; **AND**
 - b. The subject structure exhibits one of the characteristics described below (*Condition 1, Condition 2 or Condition 3 must be satisfied*).
 1. The structure exhibits no wood, stone, or brick structures or parts therein; **OR**

Minor Projects PA Project Submittal and Assessment Form

2. The structure exhibits only modern wood, stone, or brick structures or parts therein; OR
3. The structure exhibits non-modern wood, stone, or brick structures or parts therein but lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.

Check if SECTION 2: Minor Projects PA Category B-1, Condition B-ii Submission is included

Check if SECTION 3: Minor Projects PA Category B-9, Condition B-i-c-2 or B-ii-b-3 Submission is included

Part II: Completed by INDOT-CRO

Amendments will be shown in red font.

Information reviewed (please check all that apply):

General project location map USGS map Aerial photograph Soil survey data

General project area photos Archaeology Reports Historic Property Reports

Indiana Historic Buildings, Bridges, and Cemeteries Map/Interim Report

Bridge inspection information/BIAS Historic Bridge Inventory Database

SHAARD SHAARD GIS Streetview Imagery County GIS Data/Property Cards

Other (please specify):

Walton, David P.

2024 A Phase Ia Archaeological Reconnaissance Survey for a Small Structure Project on US 421 Over an Unnamed Tributary to Campbell's Run Located 0.67 Mile South of SR 26 in Clinton County, Indiana (INDOT Des. No. 2200665). Indiana Department of Transportation, Indianapolis. Document on file at INDOT-CRO.

Are there any commitments associated with this project? If yes, please explain and include in the Additional Comments Section below. yes no

Does the project result in a de minimis impact to a Section 4(f) protected historic resource? If yes, please explain in the Additional Comments Section below. yes no

Additional Comments:

Minor Projects PA Project Submittal and Assessment Form

Above-ground Resources

An INDOT-CRO historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 performed a desktop review of the surrounding area. Based on a review of online street-view imagery and aerial photography, the area immediately adjacent to the subject structure consists of agricultural fields. An early twentieth-century house is located outside of the project area to the southwest of the project on the west side of US 421. A large, modern (c. 2022—as evidenced by available street view imagery) horse barn is located on the north side of the property, and the structure serves to reduce views from the house toward the project location. Similarly, some mature deciduous trees present on the north side of the house help to shield the property from views of the project location. No unusual features are present that may be impacted by the project.

According to BIAS data, the subject structure (CV 421-012-133.62) is a three-sided reinforced concrete box culvert; the construction date of the culvert is unknown. Examination of BIAS reports and photos provided confirm that the structure exhibits no wood, stone, or brick structures or parts therein. In addition, there is no evidence to suggest that it possesses historical or engineering significance.

Based on the available information as summarized above, no above-ground concerns exist as long as the project scope does not change.

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 completed a Phase Ia field reconnaissance survey report (Walton 2024). There are no previously recorded archaeological sites within or adjacent to the proposed project area. A 0.91-hectare (2.25-acre) survey area divided into east and west fields, respectively, was investigated via a combination of visual inspection of obviously disturbed areas, systematic shovel probing (n= 14) at 15-meter intervals in the west field, and pedestrian survey at 10-meter intervals in the east field, which was recently tilled, rain washed, and planted. No archaeological resources were documented as a result of the survey, and no additional investigation is recommended.

Therefore, there are no archaeological concerns provided the project scope and footprint do not change.

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction within 100 feet of the discovery will be stopped, and INDOT-CRO and the Indiana Department of Natural Resources-Division of Historic Preservation and Archaeology (IDNR-DHPA) will be notified immediately.

INDOT-CRO staff reviewer(s): Susan Branigin and David Walton

INDOT Approval Date: June 17, 2024

Amendment Approval Date (if applicable):

****Be sure to attach this form to the National Environmental Policy Act documentation for this project. Also, the NEPA documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.*

Minor Projects PA Project Submittal and Assessment Form

Please attach the following to this form:

- **General Location Map.** This map should allow the INDOT-CRO reviewer to quickly locate the project.
- **Aerial photography map(s) of project area.** This map must include project limits. It may also include SHAARD data, but SHAARD data is not required.
- **If bridge or small structure project, please attach photographs of bridge or small structure.** Photographs can be found in inspection reports located in INDOT's Bridge Inspection Application System (BIAS), as well as other project documents, such as engineering assessments or mini-scopes.

Map depicting potential temporary and/or permanent right-of-way acquisitions. In the email submission to INDOT-CRO, please also include:

- **A GIS polygon shapefile or KMZ file of the project area** (shapefiles are preferred). Shapefiles should use "NAD_1983_UTM" projected coordinate system. In addition, these files should contain the following *text* attribute field: DES_NO. The project designation number should be entered in this field.
- **If the project takes place in undisturbed soils, attach the results of the archaeological investigation, if completed.** *Note: The MPPA Submission Form may be submitted before the archaeology report. INDOT-CRO staff will process the above-ground portion of the form in advance of the archaeological portion of the form. However, a completed determination form will not be returned to the applicant until after the archaeology report has been reviewed and approved by INDOT-CRO.*



**INDIANA ARCHAEOLOGICAL
SHORT REPORT**

State Form 54566 (R3 / 3-22)

**INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF HISTORIC PRESERVATION AND ARCHAEOLOGY**
402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739
Telephone Number: (317) 232-1646
Fax Number: (317) 232-0693
E-mail: dhpain.dnr.IN.gov

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology (DHPA).

Name(s) of author(s) David P. Walton	Date (month, day, year) June 17, 2024
Title of project A Phase Ia Archaeological Reconnaissance Survey for a Small Structure Project on US 421 Over an Unnamed Tributary to Campbell's Run Located 0.67 Mile South of SR 26 in Clinton County, Indiana (INDOT Des. No. 2200665)	
This document is being used to report on the results of: <input type="checkbox"/> Records check only <input checked="" type="checkbox"/> Records check and Phase 1a archaeological reconnaissance <input type="checkbox"/> An addendum to a previous archaeological report. For an addendum, provide the following information.	
Name(s) of author(s) of previous report N/A	
Title of previous report N/A	
Date of previous report (month, day, year) N/A	DHPA number N/A

PROJECT OVERVIEW

Description of project

This project is located on US 421, 0.67 mile south of SR 26 in Clinton County, Indiana. The small structure carries US 421 over a potential unnamed tributary to Campbells Run. The current structure is a 13-foot span with a 2.5-foot rise reinforced concrete box structure. There is heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The headwalls have spalling with exposed rebar. The channel beams have cracking with efflorescence and spalling with rebar exposed. There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure. There are above ground and below ground utilities adjacent to the project area. Excavation will occur at approximately 10 feet deep. Excavation will be required to remove and replace the existing structure and place scour protection measures. Riprap will be placed at the inlet and outlet of the new structure as scour protection. The structural evaluation rating from the culvert inspection is a 4 (poor condition) out of 9 (excellent condition). Due to the severity of the deterioration of the small structure, the proposed scope for this project is a small structure replacement. The replacement structure will be a 17-foot span, 4-foot rise reinforced concrete box culvert structure. The vertical alignment of US 421 will be raised to accommodate cover to the replacement structure. Guardrail will be placed for roadside protection.

There will be up to 1.1 acres of permanent ROW, 0.63 acre of reacquisition of existing ROW, and no temporary ROW acquired for this project. The permanent ROW will be acquired in all four quadrants of the structure.

INDOT designation number(s) 2200665	Project number	DHPA number	DHPA plan number
Prepared for: (Company / Institution / Agency) Indiana Department of Transportation - Crawfordsville District			
Name of contact Amy Watts			
Address (number and street, city, state, and ZIP code) 41 W 300N Crawfordsville, IN 47933			
Telephone number (765) 361-5237	E-mail address awatts@indot.in.gov		
Name of principal investigator David P. Walton			
Name of company / institution Indiana Department of Transportation			
Address (number and street, city, state, and ZIP code) 100 North Senate Ave., N758—Cultural Resources Office, Indianapolis, IN 46204			
Telephone number (317) 601-2110	E-mail address dwalton@indot.in.gov		
Signature of principal investigator (Required) 		Date (month, day, year) June 17, 2024	

PROJECT LOCATION						
County Clinton	USGS 7.5' series topographic quadrangle Rossville				Civil township Ross	
Legal Location						
Grid alignment GIS						
1/4	1/4	1/4	1/4	Section	Township	Range
	SW	NE	SW	25	23N	2W
	SE	NE	SW	25	23N	2W
	NE	SE	SW	25	23N	2W
Comments						
Figure 1 depicts the project area on the Rossville 7.5' series topographic quadrangle map (USGS 2022) with an inset map of the State of Indiana with Clinton County outlined in blue and the project area outlined in red.						
Appendix A presents the stage 1 construction plans for the proposed project.						
Property ownership (Check all that apply)						
<input checked="" type="checkbox"/> Private <input type="checkbox"/> Local Government <input type="checkbox"/> State Government <input checked="" type="checkbox"/> Federal Government <input type="checkbox"/> Other						
Name of owner						
Address of owner (number and street, city, state, and ZIP code)						

PROJECT AREA DETAILS	
See Short Report instructions for required references to be consulted.	
Size of project area (hectares) 0.73	Size of project area (acres) 1.81
Natural region Central Till Plain	Topography Upland flats
Soil(s) information Fincastle-Crosby silt loams, 0 to 2 percent slopes (FdA), somewhat poorly drained Martinsville silt loam, 2 to 6 percent slopes, eroded (McB2), well drained Sloan silt loam (Su), very poorly drained (hydric) Treaty silt loam, 0 to 2 percent slopes (Ty), poorly drained (hydric) (United States Department of Agriculture 2023)	Watershed Wildcat
Current land usage Paved two-lane road (US 421), residential lawn, and agricultural fields	
Comments Fincastle and Crosby series soils formed in loess or other silty material and in the underlying loamy till on till plains. Since they were formed in glacial till, they are unlikely to contain buried archaeological resources.	
Martinsville series soils formed in loess and in the underlying loamy outwash on stream terraces, outwash plains, and till plains. Since they were formed in glacial till, they are unlikely to contain buried archaeological resources.	
Treaty series soils formed in loess and in the underlying loamy till of depressions on till plains. Since they were formed in glacial till and their drainage is very poor, they are unlikely to contain buried archaeological resources.	
Sloan series soils formed in loamy alluvium on flood plains. However, the very poor drainage of this mapped portion within the survey area indicates it is unlikely to contain buried archaeological resources.	

RECORDS CHECK	
<input type="checkbox"/> Records check only; no field investigation conducted.	Date of records check (month, day, year) May 24, 2024
Records consulted (Check all that apply)	
<input checked="" type="checkbox"/> Archaeological site forms, reports in SHAARD, and SHAARD Archaeology and Structures Map Web Application <input type="checkbox"/> Cultural Resource Management reports, other research reports, etc., on file in locations other than SHAARD <input checked="" type="checkbox"/> Historical documents and maps from other institutions / resources <input checked="" type="checkbox"/> IHSSI / NRHP structures records in SHAARD <input checked="" type="checkbox"/> Cemetery records in SHAARD	

Within the Project Area	
Previously recorded archaeological sites (<i>Include citations</i>)	
None	
Previous archaeological studies within the project area (<i>Include citations</i>)	
None	
Name(s) of previously recorded cemetery(ies)	
None	
Cemetery registry number(s)	
N/A	
Outside the Project Area	
Distance from boundary (<i>Check one</i>)	
<input type="checkbox"/> Area researched was a half (½) mile radius from the boundary of the project area. <input checked="" type="checkbox"/> Area researched was a one (1) mile radius from the boundary of the project area. <input type="checkbox"/> Area researched was a two (2) mile radius from the boundary of the project area.	
Previously recorded archaeological sites (<i>Include citations</i>)	
Site 12CN218 has an Early Archaic period lithic scatter component and a historic mid-to-late 19 th century farmstead component, both of which were recommended not eligible to the NRHP (Miller et al. 2018)	
Previous archaeological studies (<i>Include citations</i>)	
Miller and colleagues (2018) conducted a Phase Ia survey for a rehabilitation project on SR 26 in Ross and Owen Townships in Clinton County. This survey resulted in the resurvey of Site 12CN138 and the discovery of twelve new sites: 12CN218–12CN229. None of these sites were recommended eligible to the NRHP, and none of them were recommended for additional work. Only Site 12CN218 is located within one mile of the proposed project area.	
Snell (2020) conducted a Phase Ia survey for a bridge project on US 421 over Campbells Run located approximately 0.3 mile north/northwest of the proposed project area. No archaeological sites were located during the survey, and no further archaeological work was recommended.	
Name(s) of previously recorded cemetery(ies)	
None	
Cemetery registry number(s)	
N/A	

FIELD INVESTIGATION			
Date(s) of field investigation (<i>month, day, year</i>)		Name of field supervisor	
May 28, 2024		David P. Walton	
Names of field crew			
KayLee Blum and Amy Swenson			
Field Conditions			
Surface visibility 0-80%	Factors affecting visibility Tall and short grasses, recently planted crops, and crop litter from previous season(s)		
Slope Near 0%	Environmental (weather) conditions during the survey Partly sunny and 70 degrees		
Methods			
Surface survey (<i>Check all that apply</i>)			
<input checked="" type="checkbox"/> Visual walkover <input checked="" type="checkbox"/> Pedestrian survey	Interval:	<input type="checkbox"/> Thirty (30) meters <input checked="" type="checkbox"/> Five (5) meters	<input checked="" type="checkbox"/> Other (<i>Describe below</i>) <input checked="" type="checkbox"/> Ten (10) meters <input type="checkbox"/> Other (<i>Describe below</i>)
<i>Describe methods.</i> <p>With construction plans that demonstrate existing utility lines as a reference (Appendix A), the entire survey area was inspected through visual walkover to delineate areas with disturbed soils apart from areas with undisturbed soils that could be subjected to Phase Ia archaeological survey per the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology (IDNR-DHPA) guidelines (2022) and the INDOT Cultural Resources Manual (2019).</p>			
Shovel probes (<i>Check all that apply</i>)			
<input checked="" type="checkbox"/> Shovel probes	Interval:	<input type="checkbox"/> Five (5) meters <input type="checkbox"/> Ten (10) meters	<input checked="" type="checkbox"/> Fifteen (15) meters <input type="checkbox"/> Other (<i>Describe below</i>)
<i>The standard is screened shovel probes using ¼" size mesh. If shovel probes were not screened, or a different size mesh was utilized, an explanation must be provided in the methods below.</i>			
<i>Describe methods.</i> <p>Shovel probes (30 cm wide and 50 cm deep) were placed at 15-meter intervals. Munsell colors, textures, and depths of horizons were recorded for excavated soils, which were screened through 1/4" wire mesh.</p>			
Cores / auger probes (<i>Check all that apply</i>)			
<input type="checkbox"/> Cores / auger probes	Interval:	<input type="checkbox"/> Five (5) meters <input type="checkbox"/> Ten (10) meters	<input type="checkbox"/> Fifteen (15) meters <input type="checkbox"/> Other (<i>Describe below</i>)
<i>The standard is screened cores / auger probes using ¼" size mesh. If cores / auger probes were not screened, or a different size mesh was utilized, an explanation must be provided in the methods below.</i>			

Describe methods.

Additional field investigation comments

A combination of landowner information and two disturbed shovel probes in the southern end of the survey area's west field indicated a septic leach field had been installed within the southwestern corner of the survey area within the past year along with the house itself; thus, shovel probing advancing towards the southwest corner of the survey area was discontinued to prevent potential damage to the landowner's septic leach field.

RESULTS

Summary of relevant regional culture background

The Indiana State Historic Architectural and Archaeological Research Database (SHAARD) documents 15 archaeological sites within Ross Township of Clinton County. These are comprised of five camps, four isolated finds, three lithic scatters, two historic scatters, and one farmstead (IDNR-DHPA 2024). In addition to seven unidentified precontact period temporal components, these sites collectively exhibit four Early Archaic, one Late Archaic, one Middle to Late Woodland, and four historic period components. Beyond diagnostic projectile points leading to temporal assignments, this collection of precontact period sites does not present evidence of a known archaeological cultural group/tradition from the Archaic or Woodland periods.

In addition to the file search in SHAARD, historic maps (Frankfort Morning Times 1919; Middle West Publishing Company 1903; United States Post Office Department 1911; Warner and Higgins 1865) and historic aerial photos for this portion of Clinton County (Historic Aerials 2024) were reviewed to evaluate the potential for historic archaeological sites and the development of the survey area.

Prior to Euro-American settlement, the area now known as Clinton County was inhabited by the Potawatomi and the Miami Nation comprised of Miami, Wea, and Piankeshaw groups (Historic Landmarks Foundation of Indiana [HLFI] 1997). The land that now comprises Clinton County was transferred from the Miami and other native tribes including the Delawares to the United States under the provisions of the Treaty of St. Mary's (1818). Subsequent reorganization of legally bounded native settlements and forcible removals of native populations following the Indian Removal Act of 1830 led to increased Euro-American settlement in central Indiana. Most native tribes had left the region by 1838 (Wheeler-Voegelin et al. 1974).

Clinton County, named for Governor DeWitt Clinton of New York State, was organized in 1830 from a section of Tippecanoe County (HLFI 1997). The first permanent settlers migrated to the county in the 1820s and established two communities, Jefferson and Kirklin. The town of Frankfort was platted as the county seat in 1830. Throughout the mid-19th century, the county's prime agricultural lands attracted an increasing number of settlers including many German immigrants who purchased land in the northwest corner of the county (HLFI 1997). Frankfort emerged as a regional shipping center at the intersection of five railroad lines connecting the local area to more distant markets in Chicago, Indianapolis, Columbus, and St. Louis (HLFI 1997).

Historic maps from the 19th and early 20th centuries do not depict structures within the proposed project area. Aerial photos from 1956-2020 consistently depict the project area as containing a paved two-lane road flanked by agricultural fields and/or residential lawns (Historic Aerials 2024).

Records check (Check all that apply)

- The project area does not have the potential to contain archaeological resources. *Provide explanation / justification.*
- There are previously recorded archaeological resources within the project area, but those resources do not warrant additional archaeological investigation. *Provide explanation / justification.*
- The project area contains previously recorded archaeological resources that warrant additional investigation and/or the project area has the potential to contain archaeological resources. *Provide explanation / justification.*
 - Based upon the records check results, a reconnaissance has been conducted.
 - A cemetery is located within or adjacent to the project area.

Explanation / justification

The potential of undisturbed soils within the survey area suggested the project may impact unrecorded archaeological resources. As a result, a Phase 1a survey of the proposed project area was warranted.

Phase 1a archaeological reconnaissance (Check all that apply)

- No Phase 1a reconnaissance was conducted.
- Phase 1a reconnaissance located no archaeological resources.
- Previously recorded sites were in the project area.
 - Artifacts and/or features at a previously recorded site(s) within the project area were not discovered. *List the site(s) below.*
- Phase 1a reconnaissance has identified landforms conducive to buried archaeological deposits. *Describe below.*

List sites.

Describe landforms.

Number of shovel probes excavated 14	Number of cores / auger probes 0
---	-------------------------------------

Describe disturbances. Attach photographs documenting disturbances.

The small structure beneath US 421 and its embankments; above and below ground utilities including a septic leach field in the southwest portion of the survey area.

Actual area surveyed (hectares) 0.91	Actual area surveyed (acres) 2.25
---	--------------------------------------

Explain results of fieldwork.

A visual walkover was conducted along both sides of US 421 to verify underground and above ground utility disturbances documented on Stage 1 construction plans (Appendix A) and the extent of the disturbance created by the existing small structure.

US 421 runs approximately north to south through the survey area creating two fields located east and west of the road, respectively (Figure 2). The west field contained an area with tall grasses (Figure 3), a drainage area created by the small structure, and an area with short grasses (Figure 4) including a recently constructed house and septic leach field (Figure 5). Shovel probes were placed along one transect matching the proposed project area's western perimeter. A representative profile for these shovel probes contained very dark grayish brown (10 YR 3/2) silty clay loam up to 38 cm bgs underlaid by dark yellowish brown (10 YR 4/4) hydric subsoil (Figure 6), matching expectations for the Treaty and Sloan soil series.

The east field included a recently tilled, planted, and rain-washed agricultural field with 80% visibility (Figures 7 and 8). It was subjected to pedestrian survey at 10-meter intervals, and one shovel probe was placed in the northeast portion of the field to obtain a representative profile, which matched the profile of the west field. Only modern trash along the field's western perimeter was observed during pedestrian survey.

Archaeological resources were not located during this survey, and no further investigation is recommended.

RECOMMENDATIONS

Records check (Check all that apply)

- No archaeological investigation is recommended before the project is allowed to proceed because the records check has determined that the project area does not have the potential to contain archaeological resources.
- A Phase 1a archaeological reconnaissance is recommended.
- Based upon the records check results, a Phase 1a archaeological reconnaissance was recommended and has been conducted.
- A cemetery development plan may be required under Indiana Code 14-21-1-26.5 because project ground disturbance will be within 100 feet of a cemetery.

Phase 1a archaeological reconnaissance (Check all that apply)

- It is recommended that the project be allowed to proceed as planned because the Phase 1a archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.
- It is recommended that Phase 1c archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase 1a archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits.

Other recommendations / commitments

Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

REQUIRED ATTACHMENTS

- Figure showing project location within Indiana
- USGS topographic map showing the project area (1:24,000 scale)
- Aerial photograph showing the project area, land use and survey methods
- Photographs of the project area, including, if applicable, photographs documenting disturbances
- Project plans (if available)

Other attachments
N/A

References cited (See short report instructions for required references to be consulted)

Frankfort Morning Times
1919 *Atlas and Plat Book of Clinton County, Indiana*. The Frankfort Morning Times, Frankfort, IN.

Historic Aerials
2024 *Historic Aerials*. <https://historicaerials.com/viewer.>, accessed May 24, 2024.

Historic Landmarks Foundation of Indiana (HLFI)
1997 *Clinton County Interim Report*. Pierson Press, Indianapolis.

Indiana Department of Natural Resources Division of Historic Preservation and Archaeology (IDNR-DHPA)
2022 *Guidebook for Indiana Historic Sites and Structures Inventory-Archaeological Sites*. DHPA, Indianapolis.

2024 *State Historic Architectural and Archaeological Research Database (SHAARD)*. Electronic document,
<https://secure.in.gov/apps/dnr/shaard/welcome.html>, accessed May 24, 2024.

Indiana Department of Transportation and Federal Highway Administration
2019 *Indiana Department of Transportation-Cultural Resources Manual*. Electronic document,
<https://www.in.gov/indot/crm/files/P2-Chapter-7-Identification-of-Historic-Properties-Archaeology.pdf>, accessed May 24, 2023.

Middle West Publishing Company
1903 *20th Century Atlas of Clinton County, Indiana*. Middle West Publishing Company, Chicago, IL.

Miller, Damian Shaun, Chuck Mustain, and Sean P. Coughlin
2018 *Phase Ia Archaeological Records Check and Reconnaissance Survey for the State Road 26 Rehabilitation Project (Des. No. 1400263), Ross and Owen Townships, Clinton County, Indiana*. ASC Group, Inc., Indianapolis. Prepared for S.E.H. of Indiana.

Snell, Samuel P.
2020 *Phase Ia Archaeological Records Check and Phase Ia Field Reconnaissance Report: US 421 over Campbells Run (#421-12-00479 C, NBI #32230) Bridge Project 0.28 Miles South of SR 26, Rossville, Ross Township, Clinton County, Indiana (Des No. 1800101)*. Metric Environmental, Indianapolis. Prepared for AECOM.

United States Department of Agriculture
2023 Web Soil Survey, United States Department of Agriculture website.
<http://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx>.

United States Geological Survey (USGS)
2022 *Rossville Quadrangle, Indiana – Clinton County [map] 1:24,000. 7.5-Minute Series*. U.S. Department of the Interior, Reston, VA.

United States Post Office Department
1911 *Map of Clinton County, Indiana Showing Rural Delivery Service*. United States Post Office Department, Washington, D.C.

Warner, A., and J.S. Higgins
1865 *Map of Boone and Clinton Counties, Indiana*. Cowles & Titus, Philadelphia, PA.

Wheeler-Voegelin, Erminie, Emily J. Blasingham, and Dorothy R. Libby
1974 *Miami, Wea, and Eel-River Indians of Southern Indiana*. Garland Publishing, Inc., New York.

Comments

CURATION

Location of project documentation
INDOT: Cultural Resources Office

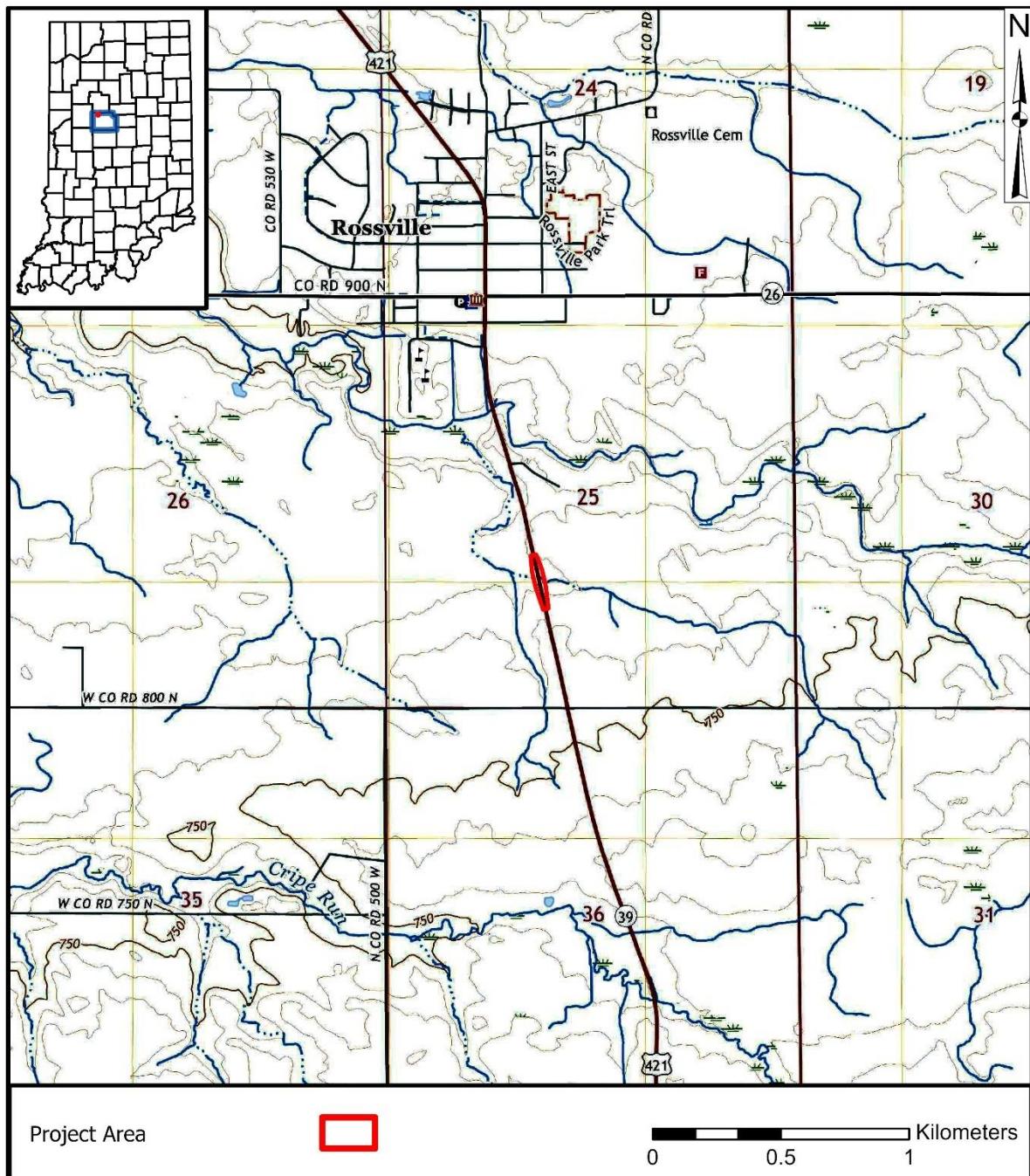


Figure 1. A section of the Rossville, IN 7.5' series topographic quadrangle map (USGS 2022) showing the location of the project area outlined in red within Clinton County, which is outlined in blue on an inset map of Indiana and its counties.

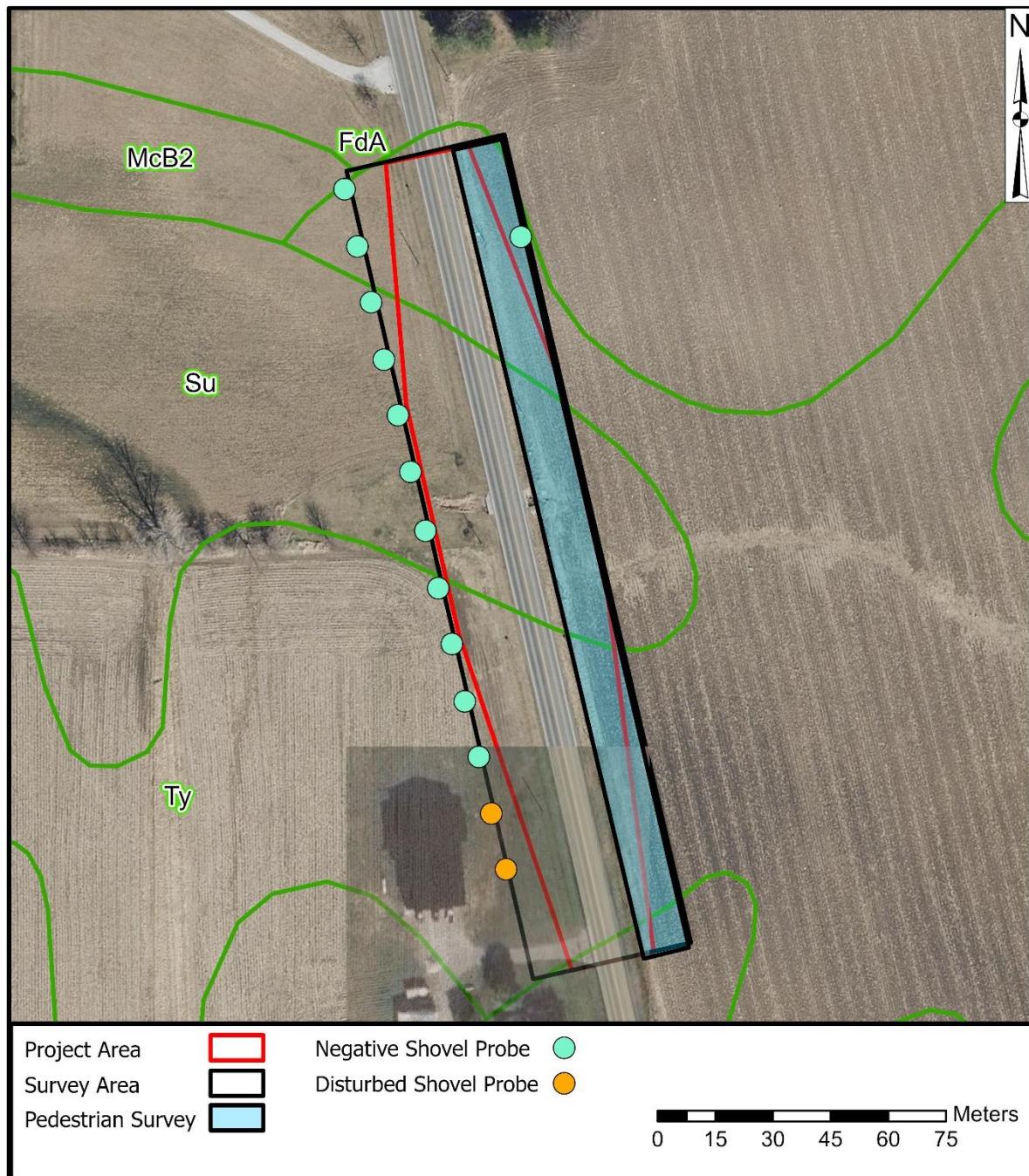


Figure 2. Illustration of Phase Ia survey coverage, project area, and mapped soil series (Martinsville silt loam, 2 to 6 percent slopes, eroded [McB2]; Sloan silt loam [Su]; Treaty silt loam, 0 to 2 percent slopes [Ty]; and Fincastle-Crosby silt loams, 0 to 2 percent slopes [FdA], which is also mapped for the southeastern corner of the survey area that is shown as unlabeled) on an aerial photo (2021) at 1:1,600 scale with an additional aerial photo (2024) showing the location of a newly constructed home.



Figure 3. Example of tall grasses observed in the west field facing southeast.



Figure 4. Example of short grass observed in the west field facing north.



Figure 5. Newly constructed home and its septic leach field located within the southern portion of the west field facing west.



Figure 6. Excavated shovel probe from the short grass portion of the west field.



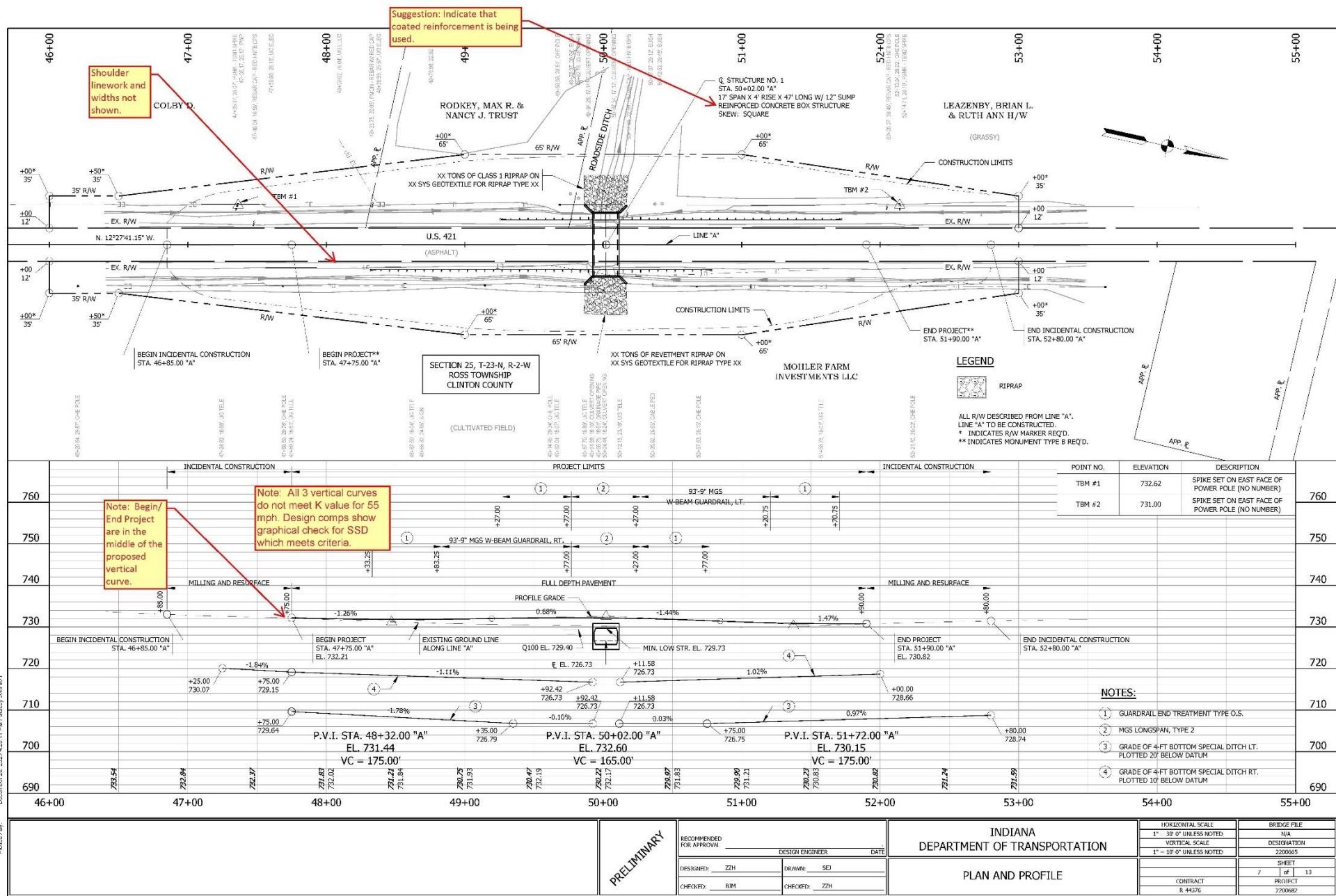
Figure 7. Photograph of the east field taken from its northern perimeter facing south with an orange flag demonstrating the positioning of the first pedestrian survey transect.



Figure 8. Example of ground visibility within the east field.

Appendix A

Stage 1 Construction Plans



Appendix E

Red Flag and Hazardous Materials

Des. No. 2200682



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
(855) INDOT4U

Eric Holcomb, Governor
Michael Smith,
Commissioner

Date: May 23, 2023

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation (INDOT)
100 N Senate Avenue, Room N758-ES
Indianapolis, IN 46204

From: Rachel Pluckebaum
Corradino, LLC
200 S. Meridian St. Suite 330
Indianapolis, IN 46225
rpluckebaum@corradino.com

Re: RED FLAG INVESTIGATION
DES #2200665, State Project
Small Structure Replacement
US 421, 0.67 Mile South of SR 26
Clinton County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: This project is located on US 421, 0.67 mile south of SR 26 in Clinton County, Indiana. The small structure carries US 421 over a potential unnamed tributary to Campbells Run. The current structure is a 8-foot span with 4-foot rise reinforced concrete box structure. There is heavy spalling with exposed rebar and cracking with efflorescence throughout the structure. The head walls have spalling with exposed rebar. The channel beams have cracking with efflorescence and spalling with rebar exposed. There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure. Excavation will occur at approximately 10 feet deep. Excavation will be required to remove and replace the existing structure and place scour protection measures. Riprap will be placed at inlet and outlet of the new structure as scour protection. The structural evaluation rating from the culvert inspection is a 4 (poor condition) out of 9 (excellent condition). Due to the severity of the deterioration of the small structure, the proposed scope for this project is a small structure replacement.

Bridge Work Included in Project: Yes No Structure #(s) _____

If this is a bridge project, is the bridge Historical? Yes No , Select Non-Select

(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).

Culvert Work Included in Project: Yes No Structure #(s) CV 421-012-133.62

Proposed right of way: Temporary # Acres 0.20 Permanent # Acres 0.40, Not Applicable

Type and proposed depth of excavation: Excavation will occur at approximately 10 feet. Excavation will be required at the project site to excavate, remove, and replace the existing structure and to place scour protection measures.

Maintenance of traffic (MOT): US 421 will be maintained during construction with a single lane closure and a temporary signal.

Work in waterway: Yes No Below ordinary high water mark: Yes No

State Project: LPA:

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	N/A	Recreational Facilities	1
Airports ¹	N/A	Pipelines	N/A
Cemeteries	N/A	Railroads	1
Hospitals	N/A	Trails	N/A
Schools	3	Managed Lands	N/A

¹In order to complete the required airport review, a review of public-use airports within 3.8 miles (20,000 feet) is required.

Explanation:

Schools: Three (3) schools are located within the 0.5 mile search radius. The nearest facilities, Rossville Middle School/Rossville Senior High School, are 0.48 mile northwest of the project area. No impact is expected.

Recreational Facilities: One (1) recreational facility is located within the 0.5 mile search radius. Although the icon is located outside of the 0.5 mile search radius, Rossville Jr-Sr High School is 0.48 mile northwest of the project area. No impact is expected.

Railroads: One (1) railroad segment is located within the 0.5 mile search radius. The unknown railroad segment is 0.32 mile east of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	7
Canal Structures – Historic	N/A	Lakes	1
NPS NRI Listed	N/A	Floodplain - DFIRM	1
NWI-Lines	4	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	4	Sinkhole Areas	N/A
Rivers and Streams	4	Sinking-Stream Basins	N/A

If unmapped water features are identified that might impact the project area, direct coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Explanation:

NWI-Lines: Four (4) NWI-Line segments are located within the 0.5 mile search radius. The nearest NWI-Line segment is located 0.27 mile north of the project area. No impact is expected.

IDEML 303d Listed Streams and Lakes (Impaired): Four (4) impaired streams are located within the 0.5 mile search radius. The nearest impaired stream, unnamed tributary (UNT) to Campbells Run, is located within the project area. UNT to Campbells Run is listed as impaired for E. coli.

- Workers who are working in or near water with E. coli should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

Rivers and Streams: Four (4) river and stream segments are located within the 0.5 mile search radius. The nearest stream segment, UNT to Campbells Run, is located within the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI-Wetlands: Seven (7) wetland polygons are located within the 0.5 mile search radius. The nearest wetland polygon is 0.24 mile northeast of the project area. No impact is expected.

Lakes: One (1) lake polygon is located within the 0.5 mile search radius. The lake polygon is 0.17 mile northwest of the project area. No impact is expected.

Floodplain-DFIRM: One (1) floodplain polygon is located within the 0.5 mile search radius. The floodplain polygon is located 0.18 mile north of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration

Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

Petroleum Wells	N/A	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation: No Mining and Mineral Exploration resources are located within the 0.5 mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns

Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	N/A	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A

Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	1
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	N/A	Notice of Contamination Sites	N/A

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

Explanation:

NPDES Facilities: Although the icon is located outside the half mile buffer, one (1) NPDES Facility is located within the 0.5 mile search radius. One (1) NPDES Facility is located within the 0.5 mile search radius. Rossville Consolidated Schools Site Improvements, 1 Robert Egly Drive Rossville, IN 46065, AI # 120109 is located 0.41 mile northwest of the project area. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Clinton County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/nature-preserves/files/np_clinton.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did not indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by farmland. The July 13, 2022, inspection report for Culvert CV 421-012-133.62 states that no evidence of bats was seen or heard in the culvert. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

RECOMMENDATIONS SECTION

Include recommendations from each section. If there are no recommendations, please indicate N/A:

INFRASTRUCTURE: N/A

WATER RESOURCES: A Waters of the US Report is recommended based on the presence of mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur for the following features:

- One (1) stream segment, UNT to Campbells Run, is located within the project area.

Workers who are working in or near water with E. coli should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

INDOT ESD concurrence: Shelby O'Neal (Signature)

Prepared by:
Rachel Pluckebaum
Environmental Specialist
Corradino, LLC

Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: YES

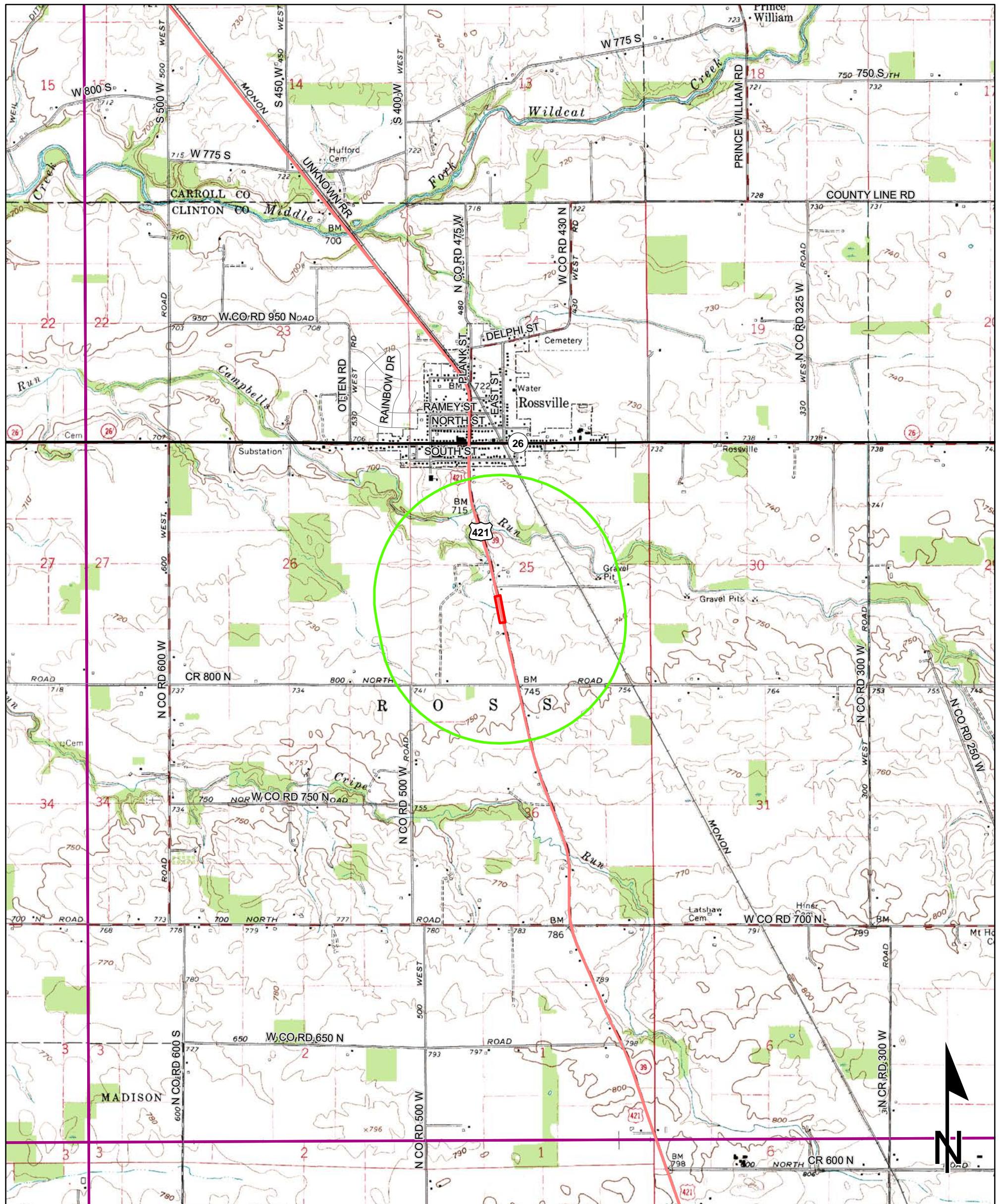
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana



Sources: 0.6 0.3 0 0.6 Miles
Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

ROSS QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Infrastructure
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana



Sources:
Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

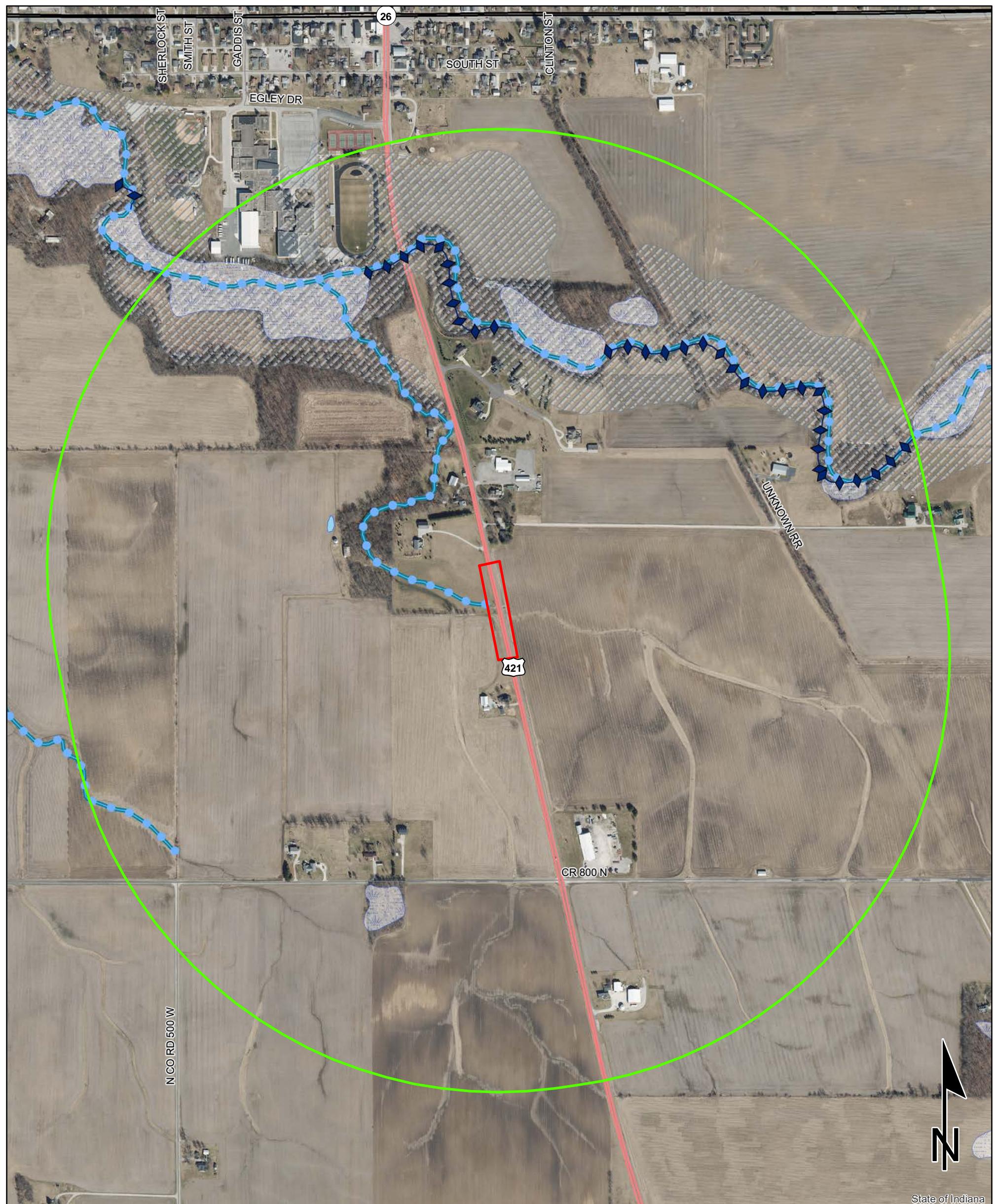
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

0.1 0.05 0 0.1 Miles

	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana



Sources:
Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

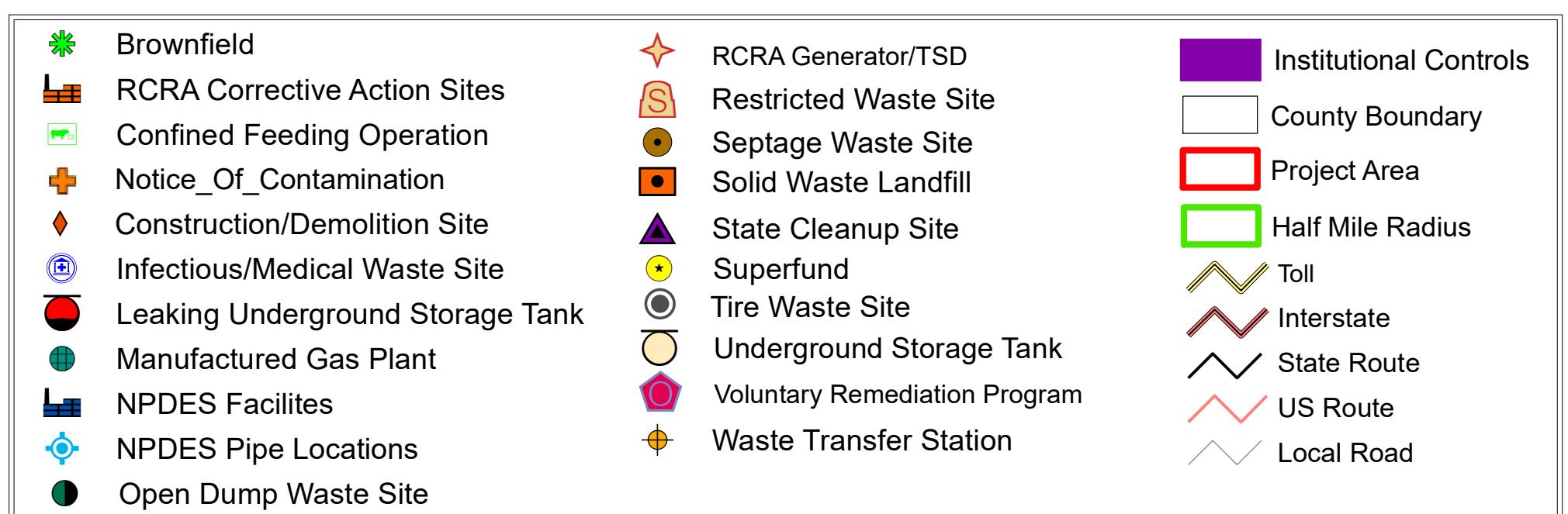
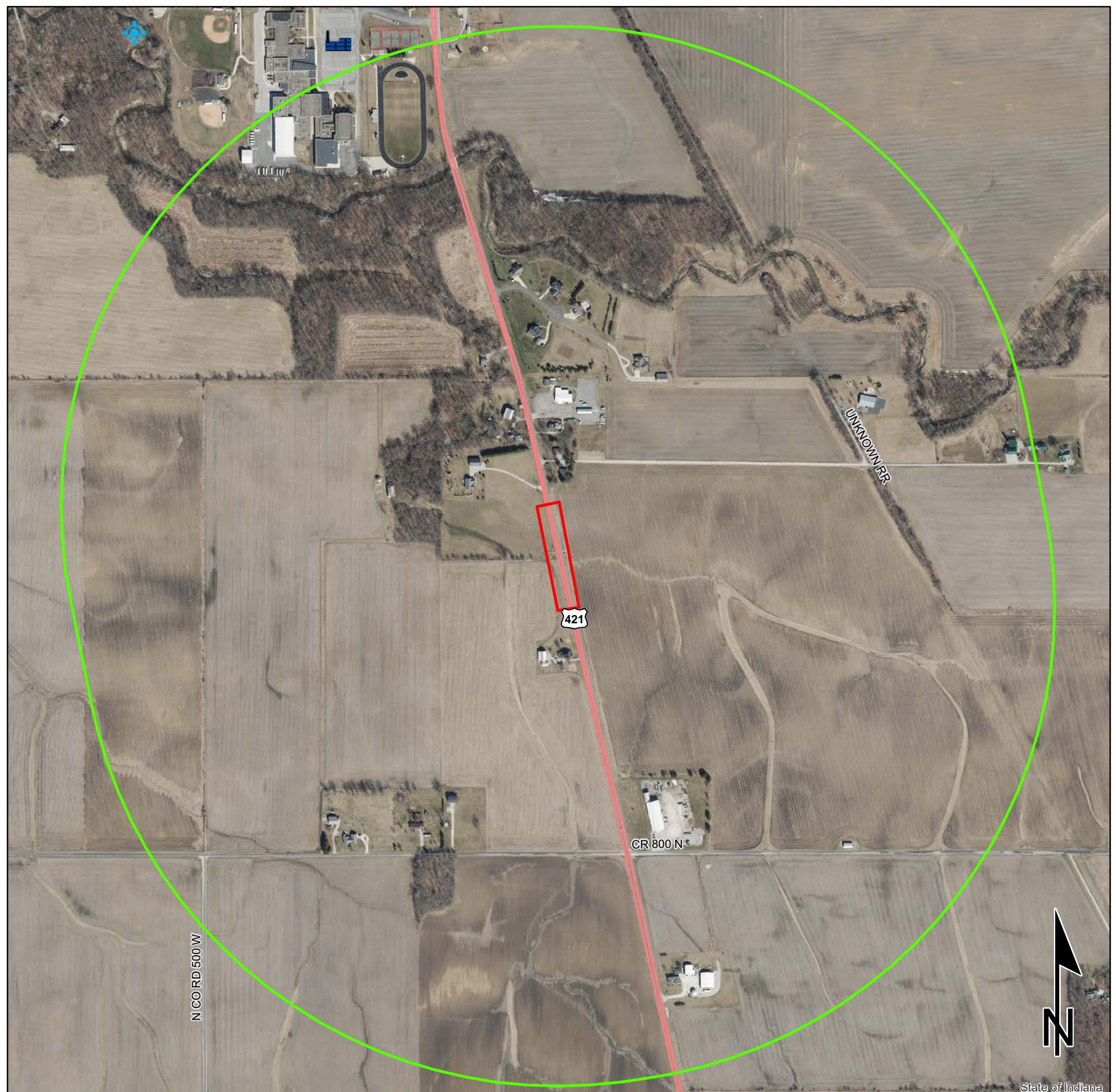
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

0.1 0.05 0 0.1
 Miles

 NWI - Point	 Wetlands	 Project Area
 Karst Spring	 Lake	 Half Mile Radius
 NWI - Line	 Floodplain - DFIRM	 Toll
 Impaired_Stream_Lake	 Cave Entrance Density	 Interstate
 NPS NRI listed	 Sinkhole Area	 State Route
 River	 Sinking-Stream Basin	 US Route
Canal Structure - Historic	County Boundary	Local Road
Canal Route - Historic		Appendix E-9

Red Flag Investigation - Hazardous Material Concerns
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana



0.1 0.05 0 0.1
 Miles

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Sources:

Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N **Map Datum:** NAD83

APPENDIX F

Water Resources

Des. No. 2200682

Lily Alexander

8/1/2024

Waters of the U.S. Determination

US 421 in Clinton County, Indiana
Small Structure Project, 0.67 Mile South of SR 26
Designation Number 2200665
Asset Name: CV 421-012-133.62

Prepared by:

Kirk Roth
kroth@corradino.com
317-488-2363
Corradino, LLC

July 26, 2024

1. Project Information

Dates of Field Reconnaissance:

Field work for this report was conducted on June 8, 2023 by Corradino, LLC.

Project Location:

Rossville Quadrangle

Section 25, Township 23 North, Range 2 West

Ross Township, Clinton County, Indiana

Coordinates: 40.40707, -86.59243

12-digit Hydrologic Unit –051201070203 Campbells Run

Project Description:

This project is located on US 421, 0.67 mile south of SR 26 at structure CV 421-012-133.62. US 421 crosses a ditch-like drainage in the project area. The project area is surrounded by agricultural and residential terrain. The project the proposed scope for this project is a small structure replacement. The replacement structure will be a 17-foot span, 4-foot rise, 47-foot long reinforced concrete box culvert structure. The pavement will be widened to 12-foot lanes and 6-foot usable shoulders at the approach and vertical alignment of US 421 will be raised to accommodate cover to the replacement structure. Guardrail will be placed for roadside protection.

The investigative area for this Waters of the U.S. report is that which is necessary to effectively illustrate potential water resources which may be impacted by the project, and it may exceed the anticipated project area limits.

2. Desktop Reconnaissance

Soils

According to the Soil Survey Geographic (SSURGO) Database for Clinton County, Indiana, the investigated area does contain soil areas with nationally listed hydric soils. The soil surrounding the project culvert is Sloan Silt Loam (Su), with Treaty Silt Loam (Ty) with 0 to 2 percent slopes is in the north and south quarters of the investigated area.

Soil Unit Name	Symbol	NRCS Hydric Soil Category	SSURGO Hydric Rating
Sloan Silt Loam	Su	Hydric	100% Hydric
Treaty Silt Loam	Ty	Predominantly Hydric	85% Hydric

National Wetland Inventory Information

The nearest wetland, intermittent seasonally flooded riverine streambed (R4SBC) is approximately 70 feet west of the investigated area according to the National Wetland Inventory.

National Hydrography Dataset Information

Reach Code	Flowline Type	Location
05120107000625	Stream/River	Project structure, extending west and east

Attached Documents:

- Project Location Map
- Topographic Map
- Aerial Map
- Water Resources Map
- FEMA/FIRM/NHD Map
- StreamStats Analysis
- Soils Map
- Photo Key and Photo Log

3. Field Reconnaissance

Site reconnaissance was conducted on June 8, 2023 by Corradino, LLC.

Stream Analysis

The project structure is associated with a weakly defined bed and bank structure which held upland vegetation species. According to NHD and topographic mapping, this ditch-like depression encounters Campbells Run, which encounters Middle Fork Wildcat Creek, Wildcat Creek, and eventually the navigable Wabash River. The upland vegetation continued from the bed past the bank and did not comprise a discreet Ordinary High Water Mark (OHWM). A valid OHWM must demonstrate a discreet horizontal change in character related to water retention and the presence of the same upland vegetation existing from bed through the upland shelf throughout the area indicates that no OHWM is present. See photos 11 and 12. During the site inspection, no water was present in the channel. Within the investigated area, this depression drains the surrounding agricultural and residential area.

There is bank erosion at the east end of the structure and there is sediment build up at the west end of the structure.

The StreamStats website (<https://streamstats.usgs.gov/ss/>) shows the area of the watershed to be 0.487 square mile. The NHD characterizes this drainage as a stream/river. No Ordinary High Water Mark

(OHWM) was present; therefore, the drainage is not classified as a tributary. No jurisdictional tributaries are located within the investigated area. See Roadside Ditch Analysis for more information.

Wetland Analysis

The investigative area was inspected for potential wetland characteristics. No areas within the investigated area exhibited dominant hydrophytic vegetation. The ditch-like depression associated with the project structure had a bed and bank structure, thereby meeting the secondary indicator Geomorphic Position (G2). The primary indicator Drift Deposits (B3), comprised of corn stalks limited to the area under the structure and an eroded area west of the structure, was observed. See Roadside Ditch Analysis for more detail on this water feature.

Outside of this depression, the roadside was dominated by the facultative *Ambrosia trifida* and facultative upland *Schedonorus arundinaceus*, *Phleum pratense*, *Bromus inermis*, *Dactylis glomerata*, *Asclepias syriaca*, and *Digitaria ischaemum*.

Because no areas within the investigative area exhibited both hydrophytic vegetation and wetland hydrology indicators, no wetlands were found within the investigated area.

Roadside Ditch Analysis

RSD1 (photos 1-12; 31)

The project structure is associated with a drainage which exhibited a weak bed and bank structure west of the structure but no OHWM and was dominated with upland-type vegetation. East of the structure is a swale through an agricultural field which drains into the structure. This drainage is considered a roadside ditch and is named RSD1 in this report. RSD1 was dominated by the facultative upland *Schedonorus arundinaceus* and *Digitaria ischaemum*.

RSD1 encounters the project structure. RSD1 extends west of the project structure through a mowed residential area. RSD1 ends immediately east of the project structure where it encounters a swale through an agricultural field and an area with severe erosion. The swale was dominated by the non-indicator *Glycine max* and the eroded area dominated by *Schedonorus arundinaceus*, *Bromus inermis*, *Asclepias syriaca*, and *Ambrosia trifida*. This bed and bank extends west where NHD and topographic mapping indicate it encounters Campbell Run outside the investigative area.

All four quadrants did not exhibit bed and bank structure parallel to the road. Drainage from the surrounding roadway and agricultural areas is apparent sheet flow. No roadside ditches were found parallel to US 421.

4. Summary and Conclusions

RSD1 is a non-jurisdictional feature within the investigated area. There were no areas with wetland characteristics within the study area. There are no areas meeting the definition of a tributary within the investigated area. Therefore, no likely Waters of the U.S. are expected to be affected by this project.

No bat or bird use of the culvert was detected during the June 8, 2023 survey. No other signs of wildlife usage were observed.

Every effort should be taken to avoid and minimize impacts to waterways 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 U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the Corps.

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.

Kirk Roth



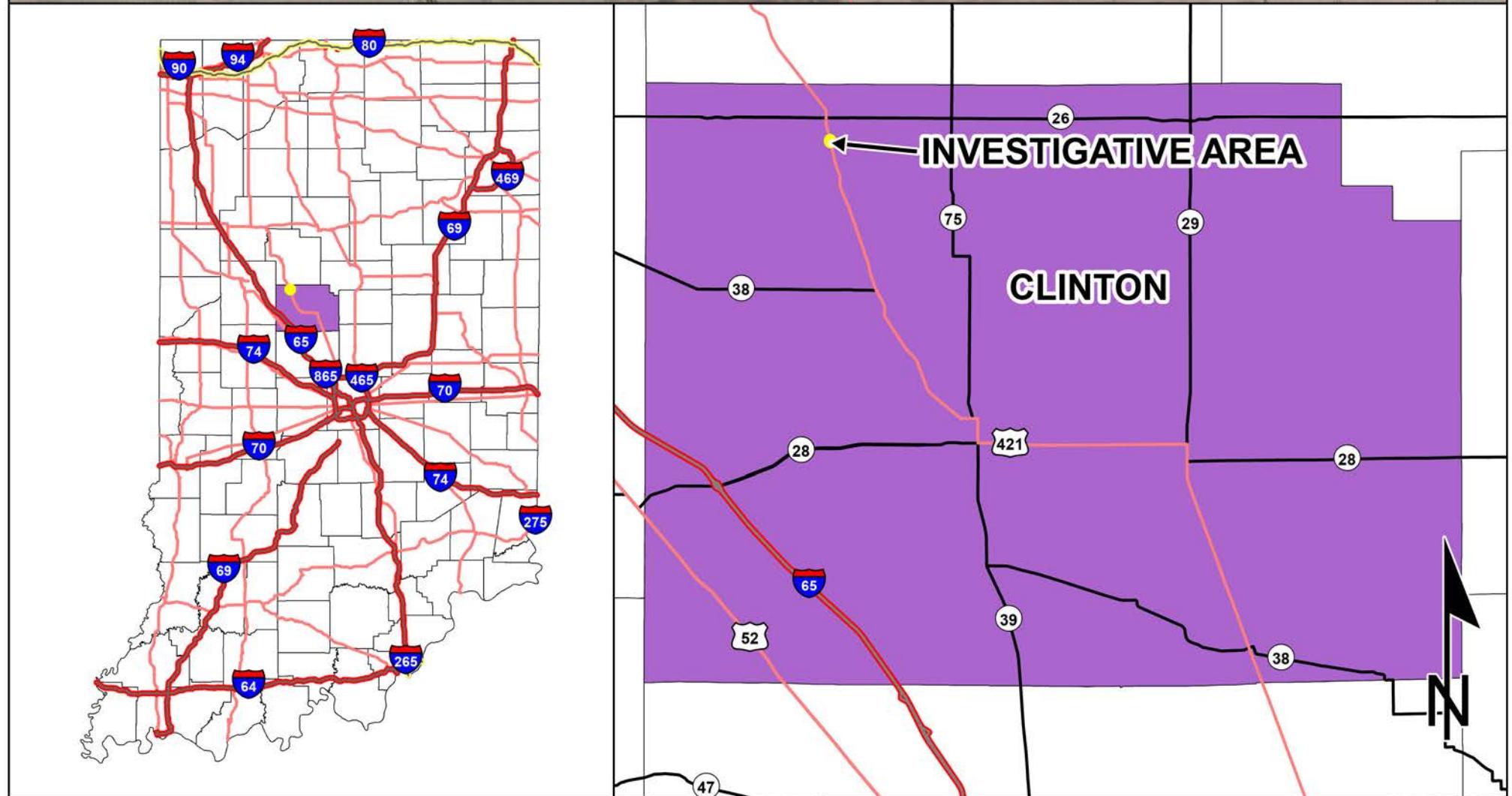
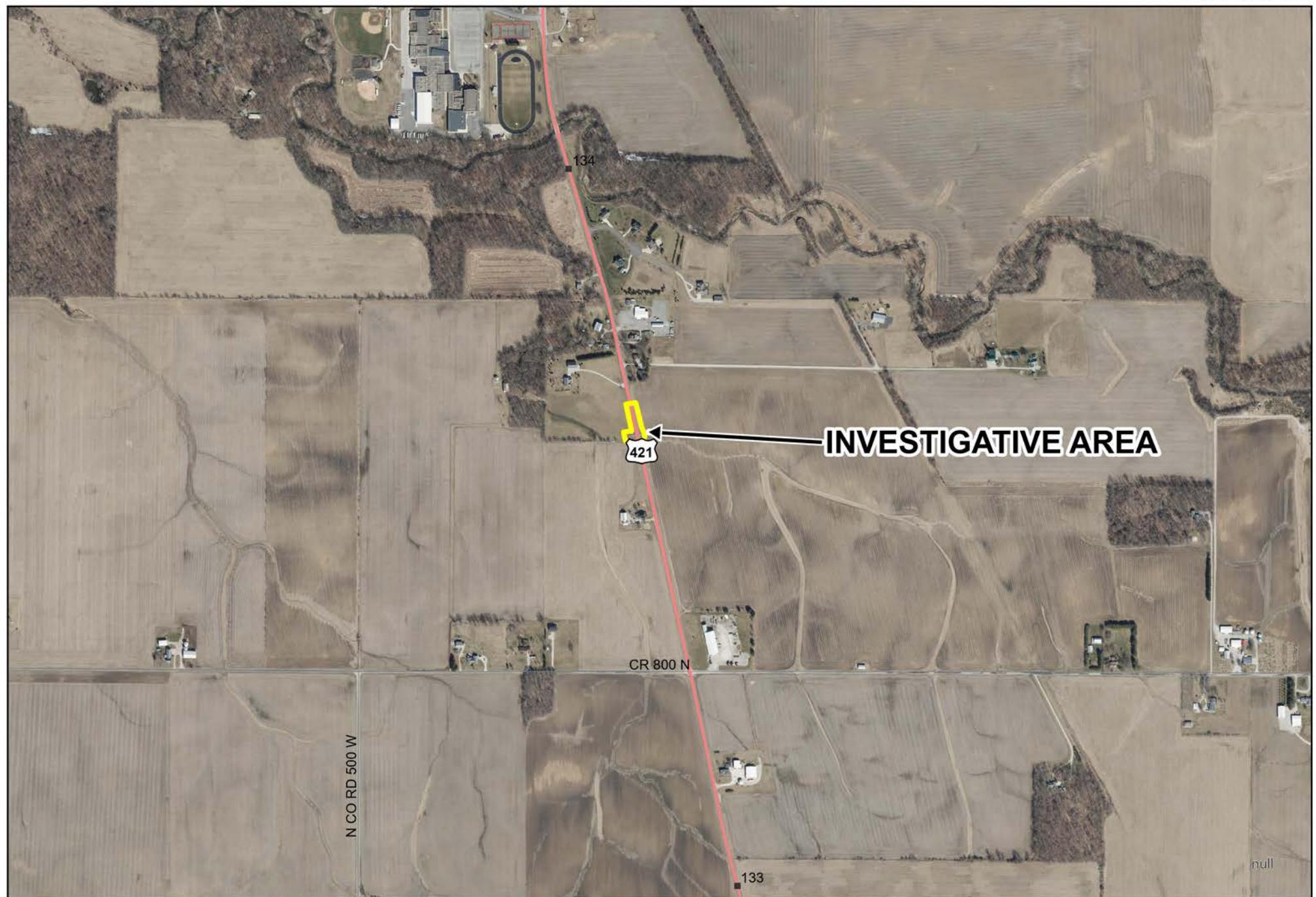
Environmental Scientist

Corradino, LLC

July 26, 2024

Project Location Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources: 0.25 0.13 0 0.25 Miles

Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

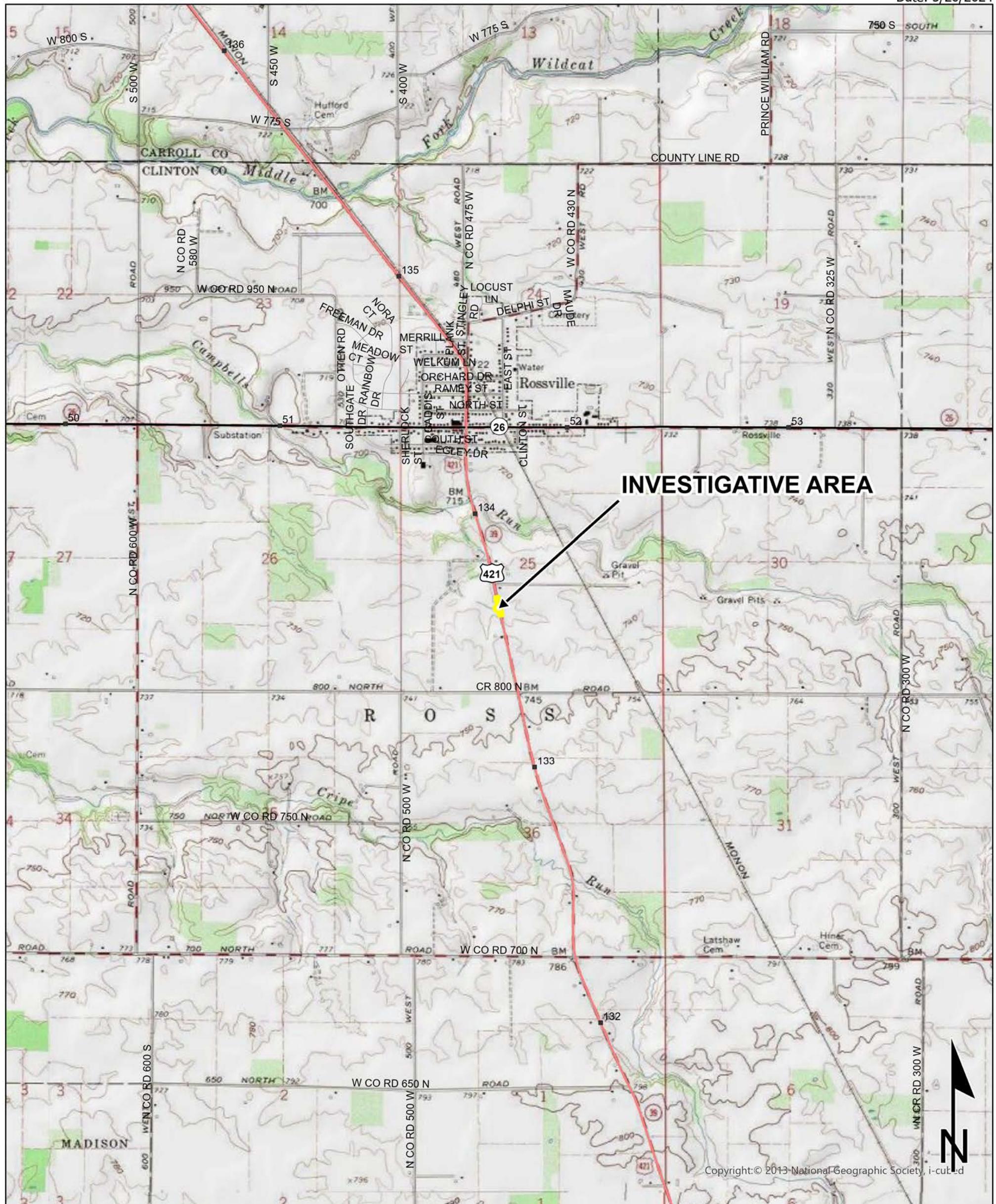
Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

INDIANA
STATEWIDE
GIS DATA

Topographic Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources: 0.6 0.3 0 0.6 Miles
Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

ROSSVILLE QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Topographic Map - Zoomed In
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024

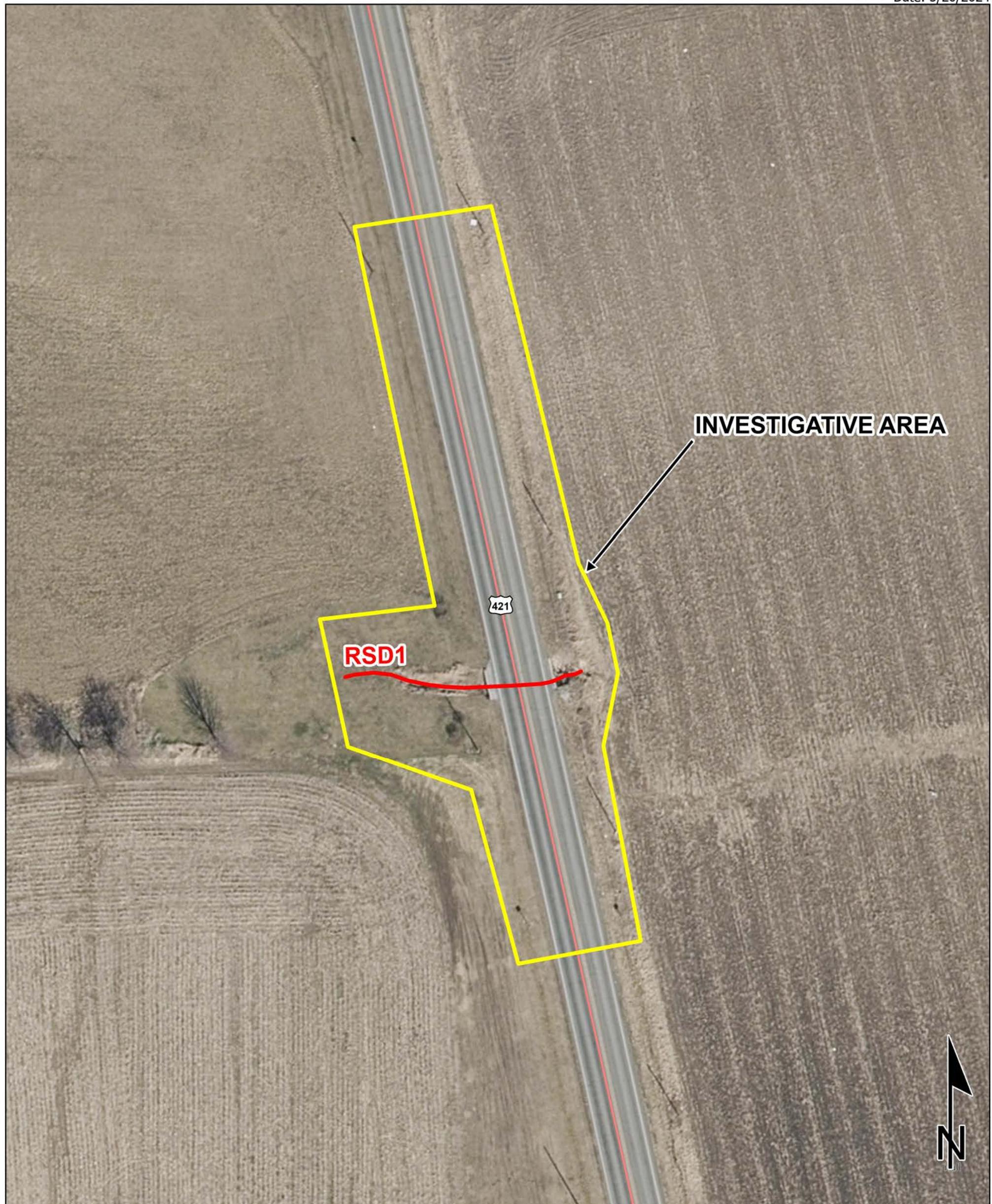


Sources: 0.07 0.04 0 0.07 Miles
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N Map Datum: NAD83
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

ROSSVILLE QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Aerial Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources: 0.01 0.01 0 0.01
Non Orthophotography  Miles
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N Map Datum: NAD83
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

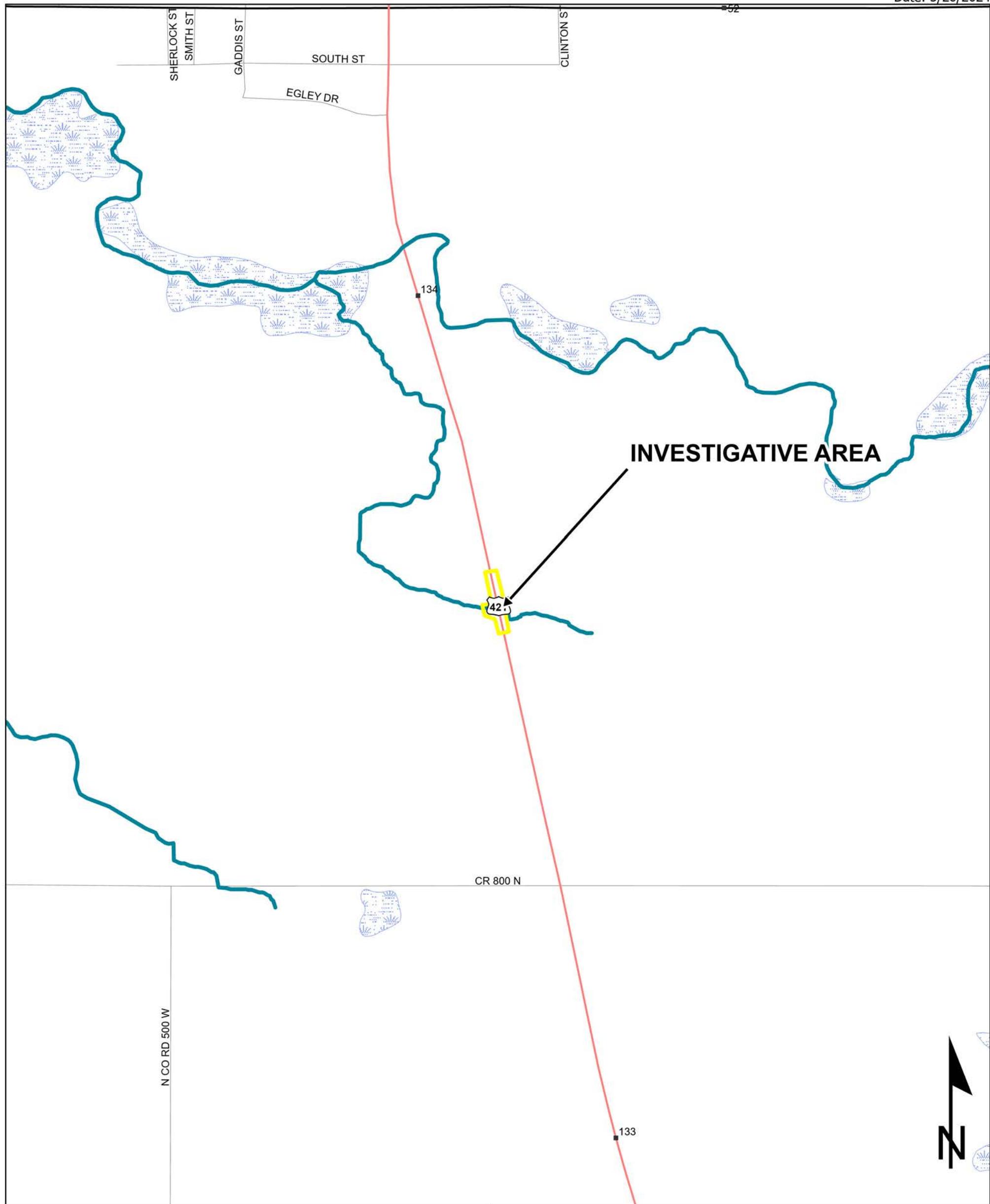
**INDIANA STATEWIDE
IMAGERY
(FLOWN 2022)**

Legend

 Project Area
 RSD

NWI Features
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources:

Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

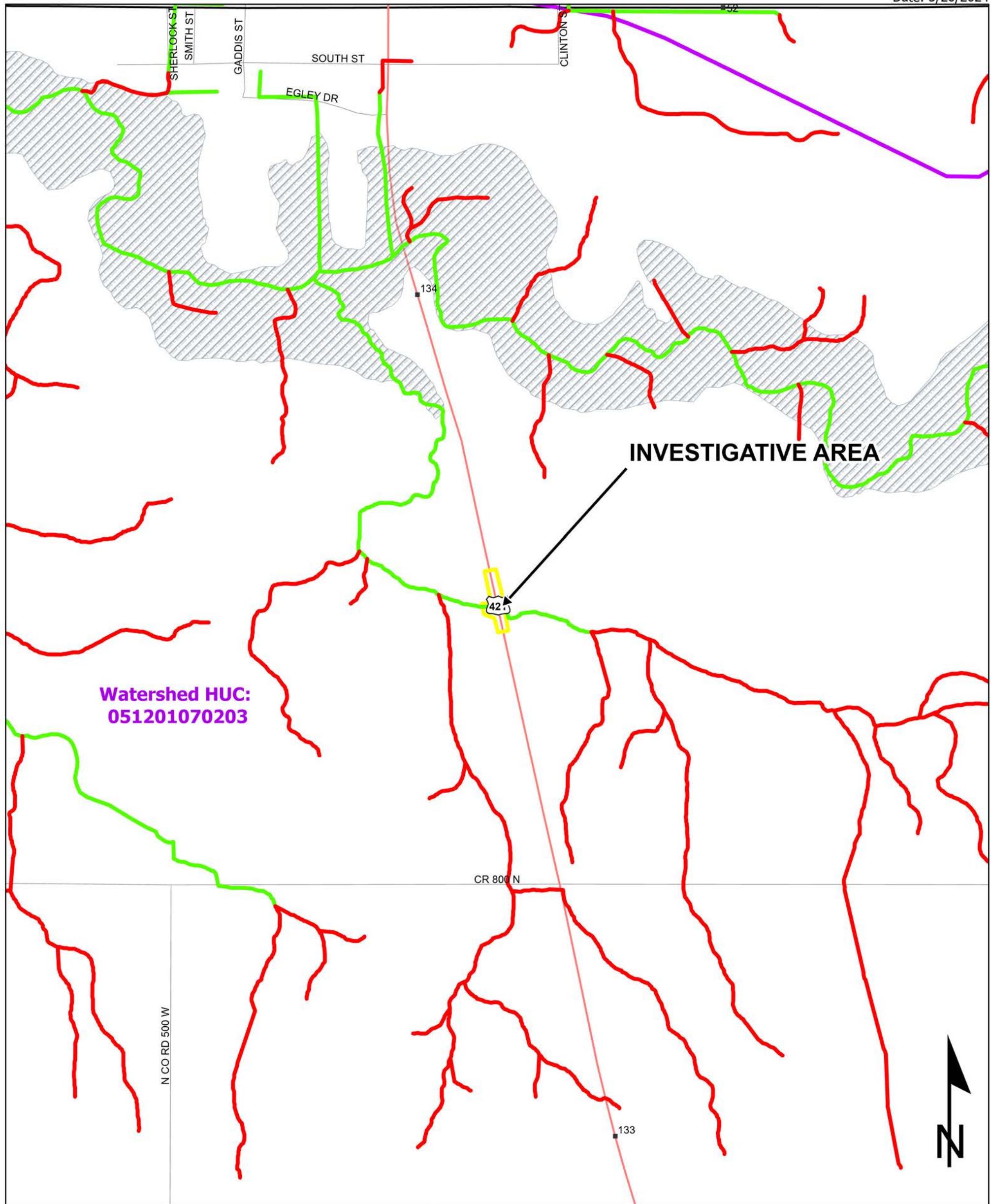
0.15 0.07 0 0.15 Miles

Legend

- Project Area
- NWI Point
- Stream
- Wetlands
- Toll
- Interstate
- State Route
- US Route
- Local Road

FEMA/FIRM/NHD Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources: Miles

Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

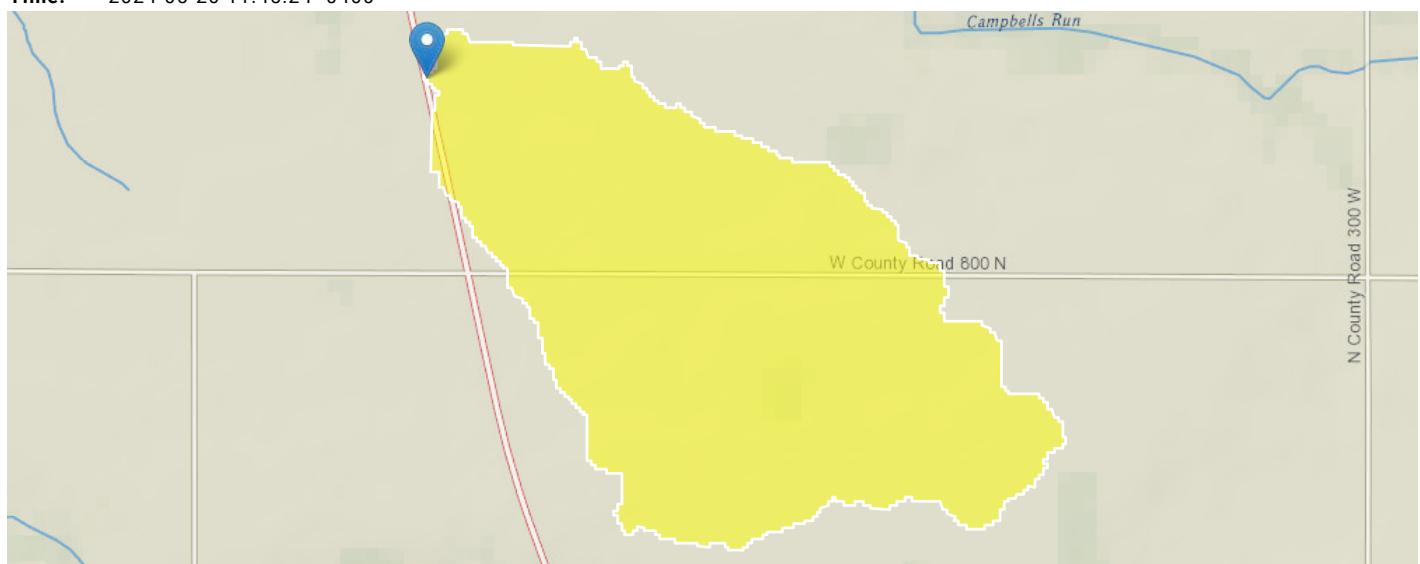
StreamStats Report

Region ID: IN

Workspace ID: IN20240520154502996000

Clicked Point (Latitude, Longitude): 40.40704, -86.59237

Time: 2024-05-20 11:45:24 -0400



 Collapse All

► Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.487	square miles
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	19	ft per day
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	1.7	percent
LOWREG	Low Flow Region Number	1729	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	233.8	dimensionless
T2INDNR	Average transmissivity (ft ² /d) for the full depth of unconsolidated deposits from InDNR well database.	1706	square feet per day

► General Flow Statistics

General Flow Statistics Parameters [Harmonic Mean Central Region 2016 5102]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.487	square miles	2.99	828
K2INDNR	Avg_Hydraulic_Conductivity_Full_Depth	19	ft per day	6.36	45.9
QSSPERMTHK	Permeability_Index	233.8	dimensionless	43.8	5400
LOWREG	Low Flow Region Number	1729	dimensionless		

General Flow Statistics Disclaimers [Harmonic Mean Central Region 2016 5102]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

General Flow Statistics Flow Report [Harmonic Mean Central Region 2016 5102]

Statistic	Value	Unit
Harmonic Mean Streamflow	0.0494	ft^3/s

General Flow Statistics Citations

Martin, G.R., Fowler, K.K., and Arihood, L.D., 2016, Estimating selected low-flow frequency statistics and harmonic-mean flows for ungaged, unregulated streams in Indiana (ver 1.1, October 2016): U.S. Geological Survey Scientific Investigations Report 2016-5102, 45 p. (<http://dx.doi.org/10.3133/sir20165102>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

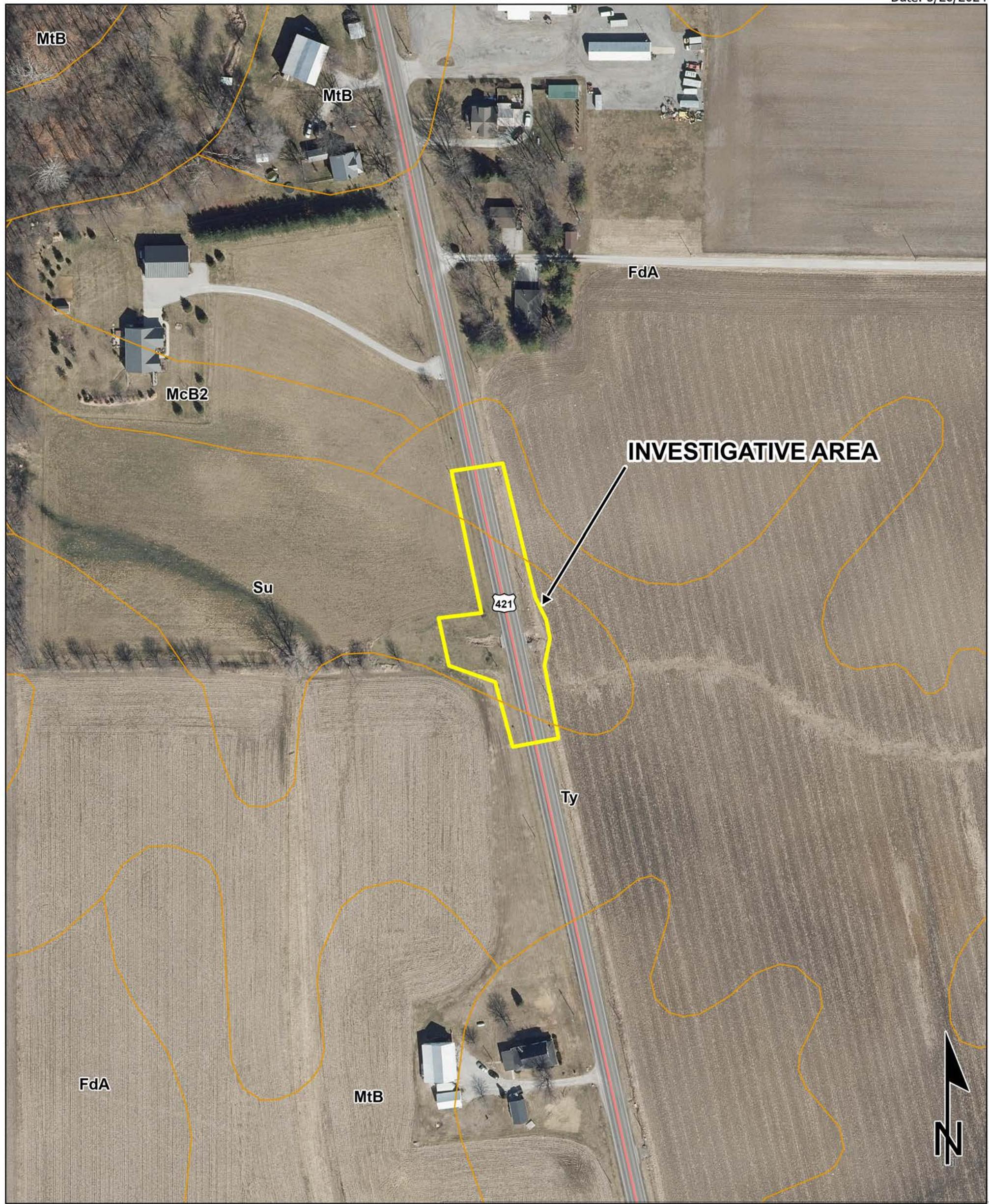
Application Version: 4.20.1

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

Soils Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources:  Miles

Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

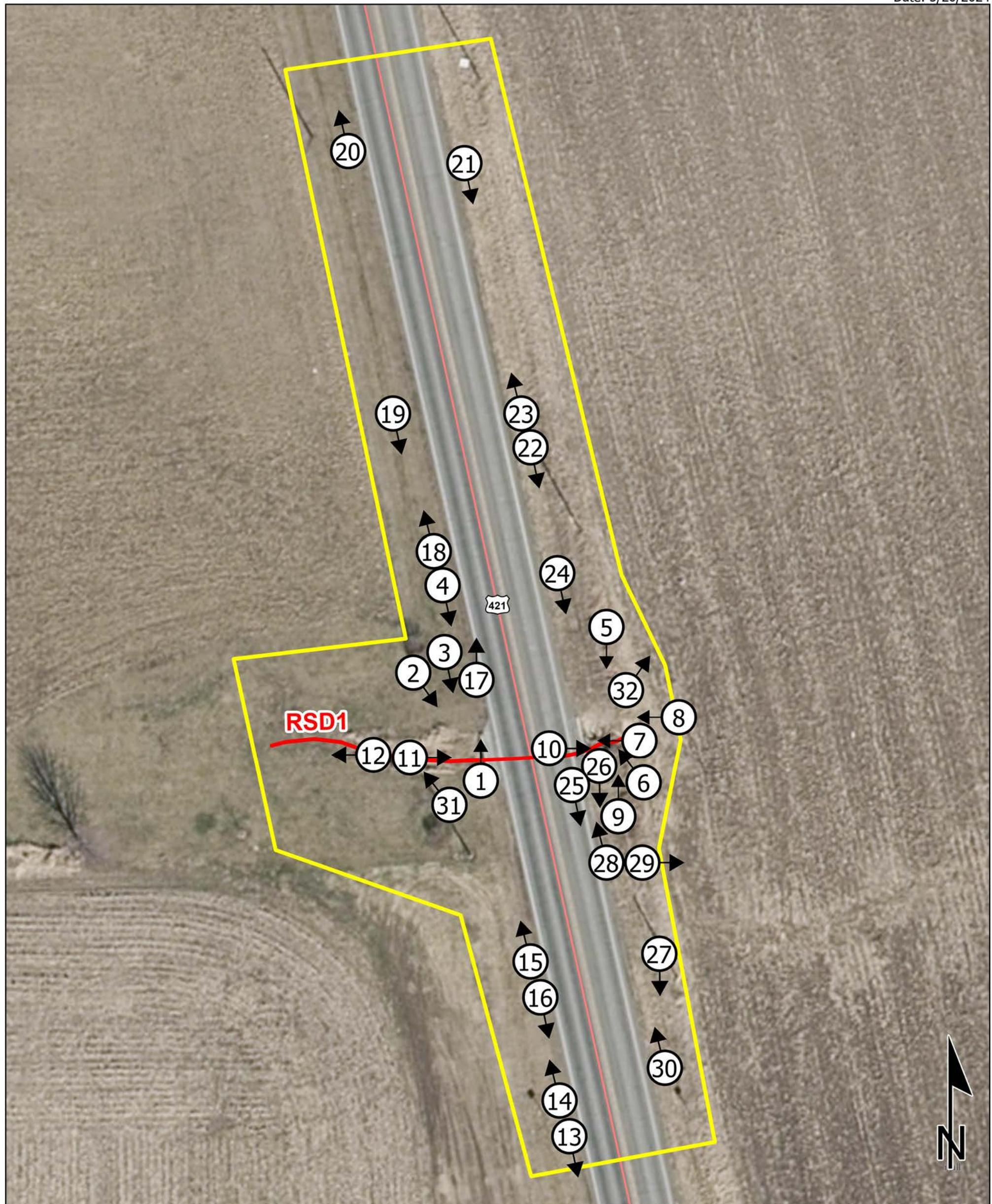
NRCS SOILS DATA

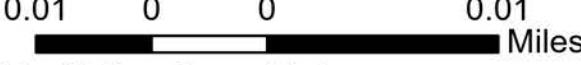
Legend

Su - Sloan Silt Loam (100% Hydric)
Ty - Treaty Silt Loam (85% Hydric)

Photo Key Map
US 421, 0.67 Mile South of SR 26
Des. No. 2200665, Small Structure Replacement
Clinton County, Indiana

Author: Zachary Ehlers
Date: 5/20/2024



Sources: 0.01 0 0.01 Miles
Non Orthophotography 
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N Map Datum: NAD83
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

INDIANA STATEWIDE IMAGERY (FLOWN 2022)

Legend

-  Investigative Area
-  RSD

DES 2200665 Waters of the U.S. Determination Report—Photo Log



Picture 1—RSD1 project structure outlet, north view; 8 JUN 2023.



Picture 2—RSD1 project structure outlet, southeast view; 8 JUN 2023.

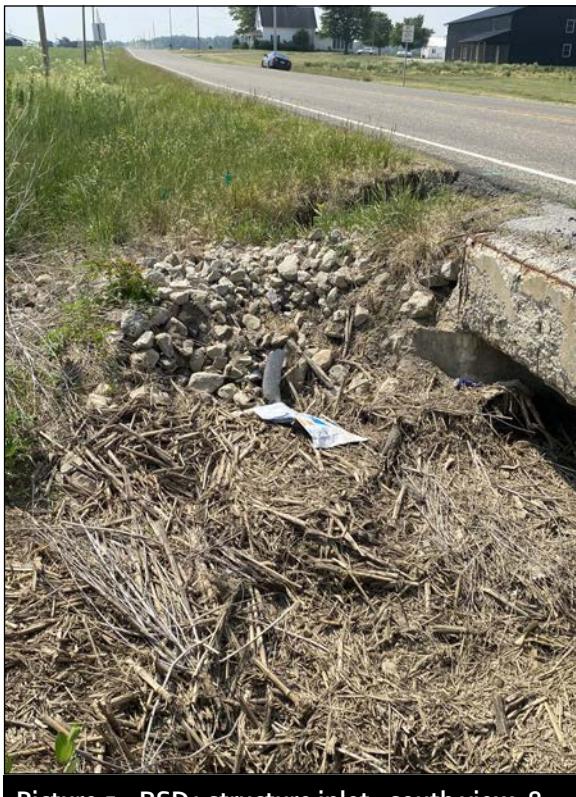


Picture 3—RSD1 project structure outlet, southeast view; 8 JUN 2023.



Picture 4—RSD1 project structure outlet, southeast view; 8 JUN 2023.

DES 2200665 Waters of the U.S. Determination Report—Photo Log



Picture 5—RSD1 structure inlet; south view; 8 JUN 2023.



Picture 6—RSD1 structure inlet; northwest view; 8 JUN 2023.



Picture 7—RSD1 inlet; west view; 8 JUN 2023.



Picture 8—RSD1 inlet and vegetation; west view; 8 JUN 2023.

DES 2200665 Waters of the U.S. Determination Report—Photo Log



Picture 9—RSD1 east end; north view; 8 JUN 2023.



Picture 10—RSD1 east end—note eroded feature; east view; 8 JUN 2023



Picture 11—RSD1; east view; 8 JUN 2023



Picture 12—RSD1—note weakly defined bed and bank structure; west view; 8 JUN 2023

DES 2200665 Waters of the U.S. Determination Report—Photo Log



Picture 13—US 421 roadside—southwest quadrant; southeast view; 8 JUN 2023.



Picture 14—US 421 roadside—southwest quadrant; northwest view; 8 JUN 2023.



Picture 15—US 421 roadside—southwest quadrant—note slope on the right but sheet flow area on the left; northwest view; 8 JUN 2023.



Picture 16—US 421 roadside—southwest quadrant—note slope on the left but sheet flow area on the right; southeast view; 8 JUN 2023.

DES 2200665 Waters of the U.S. Determination Report—Photo Log



Picture 17—US 421 roadside—northwest quadrant; north view; 8 JUN 2023.



Picture 18—US 421 roadside—northwest quadrant; northwest view; 8 JUN 2023.



Picture 19—US 421 roadside—northwest quadrant; southeast view; 8 JUN 2023.

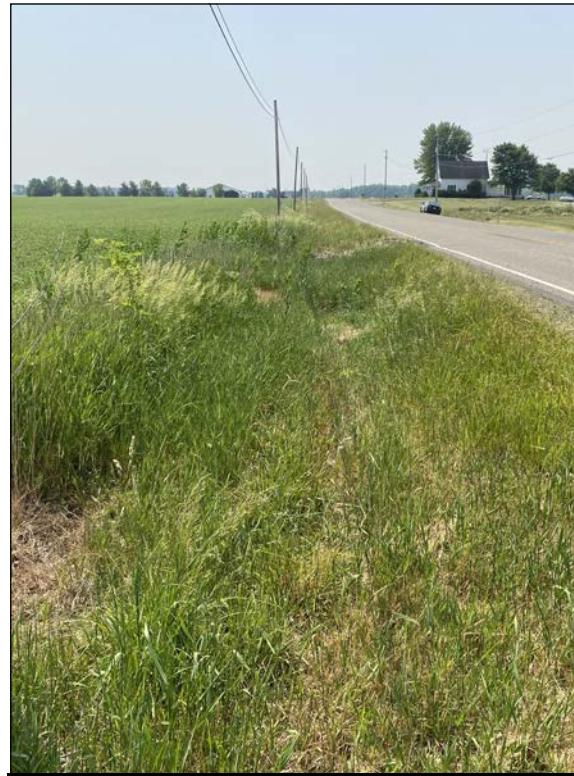


Picture 20—US 421 roadside—northwest quadrant; northwest view; 8 JUN 2023.

DES 2200665 Waters of the U.S. Determination Report—Photo Log



Picture 21—US 421 roadside—northeast quadrant; southeast view; 8 JUN 2023.



Picture 22—US 421 roadside—northeast quadrant; southeast view; 8 JUN 2023.



Picture 23—US 421 roadside—northeast quadrant; northwest view; 8 JUN 2023.



Picture 24—US 421 roadside—northeast quadrant; south view; 8 JUN 2023.

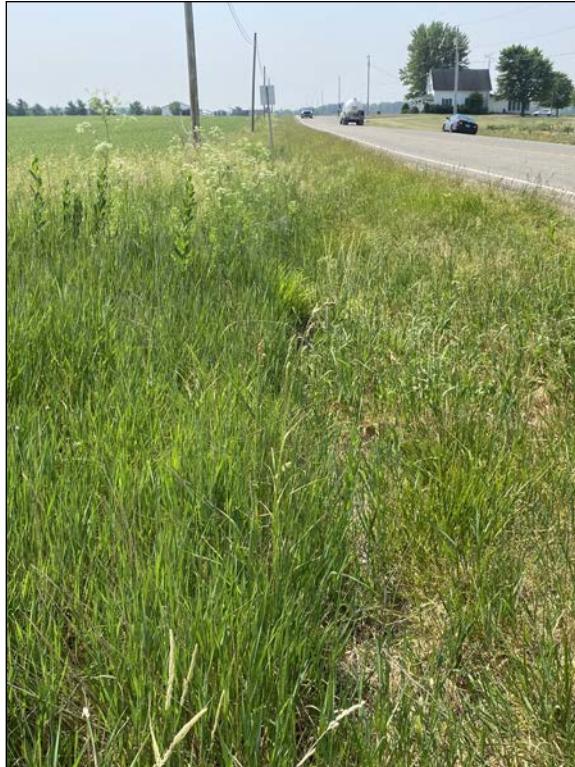
DES 2200665 Waters of the U.S. Determination Report—Photo Log



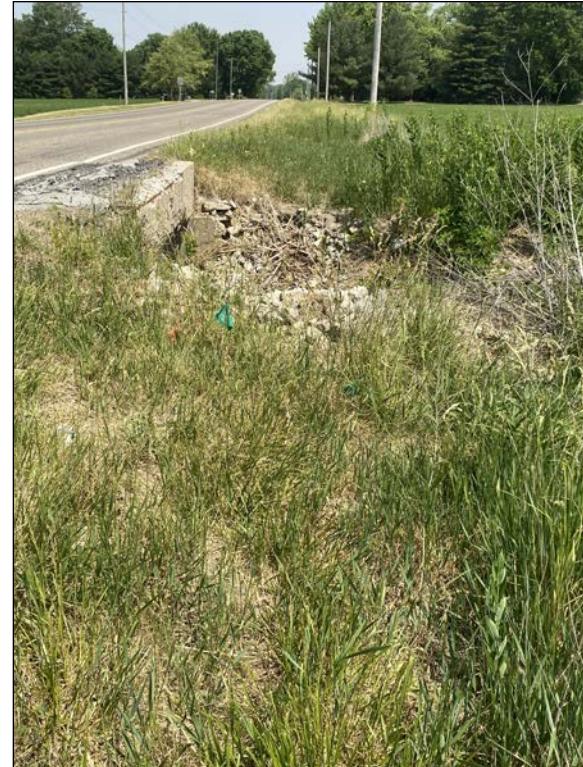
Picture 25—Southeast quadrant erosional feature ; southeast view; 8 JUN 2023.



Picture 26—Southeast quadrant erosional feature; southeast view; 8 JUN 2023.



Picture 27—US 421 roadside—southeast quadrant; south view; 8 JUN 2023.



Picture 28—US 421 roadside—southeast quadrant; northwest view; 8 JUN 2023.

DES 2200665 Waters of the U.S. Determination Report—Photo Log



Picture 29—Agricultural field and erosional swale; east view; 8 JUN 2023.



Picture 30—US 421 roadside—southeast quadrant; northwest view; 8 JUN 2023.



Picture 31—RSD1 and north bank; northwest view; 8 JUN 2023.



Picture 32—Agricultural field; northeast view; 8 JUN 2023

Appendix G

Public Involvement

Des. No. 2200682

April 11, 2023



Re: Clinton County Tax Parcel – [REDACTED]

NOTICE OF SURVEY

Dear Property Owner:

HNTB, on behalf of The Indiana Department of Transportation (INDOT), will perform a survey to address a small structure on US 421, 0.67 miles south of SR 26, located in Clinton County, Crawfordsville District, Indiana, Des No. 2200665. A portion of this survey work may be performed on your property in order to provide design engineers information for project design. The survey work will include mapping the location of features such as trees, buildings, fences, drives, ground elevations, etc. The survey is needed for the proper planning and design of this highway project.

At this stage we generally do not know what effect, if any, our project may eventually have on your property. If we determine later that your property is involved, we will contact you with additional information.

Indiana Code 8-23-7-26 allows HNTB, as the authorized employees of INDOT, *Right of Entry* to the project site (including private property) upon proper notification. A copy of a Notice of Survey discussion sheet, as found on INDOT's website (<http://www.in.gov/indot/2888.htm>), is attached to this letter. Pursuant to Indiana Code 8-23-7-27, this letter serves as written notification that we will be performing the above noted survey in the vicinity of your property on or after April 17, 2023.

HNTB employees will show you their identification, if you are available, before coming onto your property.

If you own but are not the tenant of this property (i.e. rental, sharecrop), please inform us so that we may also contact the actual tenant of the property prior to commencement of our work. If you have any questions or concerns regarding our proposed survey work or schedule, please contact the HNTB Project Manager. This contact information is as follows:

Michael Conley
111 Monument Circle, Suite 1200
Indianapolis, IN 46204
(463) 206-1577

Under Indiana Code 8-23-7-28, you have a right to compensation for any damage that occurs to your land or water as a result of the entry or work performed during the entry. To obtain such compensation, you should contact the INDOT Central Office; contact information is below. The INDOT Central Office can provide you with a form to request compensation for damages. Once you fill out this form, you can return it to the INDOT Central Office for consideration. If you are not satisfied with the compensation that INDOT determines is owed to you, Indiana Code 8-23-7-28 provides the following:

The amount of damages shall be assessed by the county agricultural extension educator of the county in which the land or water is located and two (2) disinterested residents of the county, one (1) appointed by the aggrieved party and one (1) appointed by the department. A written report of the assessment of damages shall be mailed to the aggrieved party and the department by first class United States mail. If either the department or the aggrieved party is not satisfied with the assessment of damages, either or both may file a petition, not later than fifteen (15) days after receiving the report, in the circuit or superior court of the county in which the land or water is located.

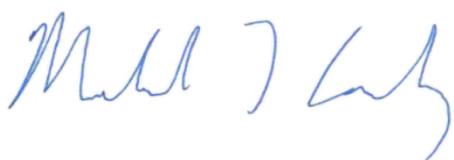
If you have questions regarding the rights and procedures outlined in this letter, please contact the Indiana Department of Transportation Central Office. This contact information is as follows:

1-855-INDOT4U (463-6848)
www.INDOT4U.com

Thank you in advance for your cooperation in this matter.

Sincerely,

HNTB Corporation

A handwritten signature in blue ink, appearing to read "Mike Conley".

Mike Conley
Land Surveying Section Manager

Appendix H

Air Quality

Des. No. 2200665

Indiana Department of Transportation (INDOT)

State Preservation and Local Initiated Projects FY 2024 - 2028

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Clinton County	43600 / 2002999	Init.	IR 1414	Bridge Replacement	Crawfordsville	.15	STBG	\$2,199,000.00	Local Funds	CN	\$0.00	\$387,000.00			\$387,000.00		
									Local Funds	RW	\$0.00	\$6,000.00	\$6,000.00				
									Local Bridge Program	RW	\$24,000.00	\$0.00	\$24,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: CR 750 North over Cripe Run																	
Comments:Include DES 2002999																	
Indiana Department of Transportation	43698 / 2100765	Init.	SR 26	Small Structure Pipe Lining	Crawfordsville	0	NHPP	\$470,000.00	Bridge Consulting	PE	\$64,000.00	\$16,000.00	\$80,000.00				
									Bridge Construction	CN	\$304,000.00	\$76,000.00		\$50,000.00	\$330,000.00		
									Bridge ROW	RW	\$8,000.00	\$2,000.00		\$10,000.00			
Performance Measure Impacted: Safety																	
Location: 1.20 mi W of US 421																	
Comments:Include DES 2100765																	
Indiana Department of Transportation	43698 / 2100765	M 45	SR 26	Small Structure Pipe Lining	Crawfordsville	0	NHPP	\$470,000.00	Bridge ROW	RW	\$0.00	\$0.00	\$0.00	(\$10,000.00)	\$10,000.00		
Performance Measure Impacted: Safety																	
Location: 1.20 mi W of US 421																	
Comments:Move RW from FY 25 to FY 26																	
Indiana Department of Transportation	44376 / 2200682	Init.	SR 28	Small Structure Pipe Lining	Crawfordsville	0	STBG	\$2,999,397.00	Bridge Construction	CN	\$1,541,600.00	\$385,400.00			\$60,000.00	\$1,867,000.00	
									Bridge ROW	RW	\$44,000.00	\$11,000.00			\$55,000.00		
Performance Measure Impacted: Safety																	
Location: 2.36 mi W of US 421 N JUNCTION, US 421 0.67 mi S of SR 26 and US 231 1.44 mi S of SR 18																	
Comments:Include DES 2200665, 2200667, 2200682																	
Indiana Department of Transportation	44394 / 2200505	Init.	SR 38	Small Structures & Drains Construction	Crawfordsville	.889	STBG	\$535,000.00	Bridge Construction	CN	\$336,000.00	\$84,000.00			\$15,000.00	\$405,000.00	
									Bridge Consulting	PE	\$80,000.00	\$20,000.00	\$100,000.00				
									Bridge ROW	RW	\$12,000.00	\$3,000.00			\$15,000.00		
Performance Measure Impacted: Safety																	
Location: From 5.64 mi W of US 421 W Jct to 4.75 mi W of US 421 W Jct																	

**Federal Transit
Administration**
Region V
200 West Adams St., Suite 320
Chicago, IL 60606-5253



**U.S. Department
of Transportation**

Federal Highway Administration
Indiana Division
575 N. Pennsylvania St., Rm 254
Indianapolis, IN 46204-1576

September 1, 2023

Mr. Michael Smith
Commissioner
Indiana Department of Transportation
100 N Senate Ave. N955
Indianapolis, IN 46204

SUBJECT: Indiana FY2024-2028 STIP Approval and Associated Federal Planning Finding

Dear Mr. Smith:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the FY2024-2028 Indiana Statewide Transportation Improvement Program (INSTIP), which was submitted by the Indiana Department of Transportation (INDOT) request letter dated August 23, 2023.

Based on our review of the information provided, certifications of the Statewide and Metropolitan transportation planning processes for and within the state of Indiana, and our participation in those transportation planning processes (including planning certification reviews conducted in Transportation Management Areas), FHWA and FTA are jointly approving the FY2024-2028 STIP, including the Metropolitan Planning Organization (MPO) Transportation Improvement Programs (TIPs) incorporated into the STIP by reference, subject to the corrective actions identified in the attached Federal Planning Finding (FPF) report. FHWA and FTA consider the projects in the 5th year for informational purposes only, and our approval does not exceed four years per 23 CFR 450.220(c).

FHWA and FTA are required under 23 CFR 450.220(b) to document and issue an FPF in conjunction with the approval of the FY2024-2028 STIP. At a minimum, the FPF verifies that the development of the STIP is consistent with the provisions of both the Statewide and Metropolitan transportation planning requirements. FHWA and FTA find that the Indiana FY2024-2028 STIP substantially meets the transportation planning requirements and are approving the STIP subject to the corrective actions outlined in the FPF. This approval is effective September 1, 2023 and is given with the understanding that an eligibility determination of individual projects for funding must be met, and INDOT must ensure the satisfaction of all administrative and statutory requirements, as well as address the corrective actions outlined in the attached report.

If you have questions or need additional information concerning our approval and the FPF, please contact Ms. Erica Tait of the FHWA Indiana Division at (317) 226-7481, or by email at erica.tait@dot.gov, or Mr. Tony Greep of the FTA Region 5 Office at (312) 353-1646, or by email at anthony.greep@dot.gov.

Sincerely,

KELLEY
BROOKINS
Digitally signed by
KELLEY BROOKINS
Date: 2023.08.31
17:33:15 -05'00'

Kelley Brookins
Regional Administrator
FTA Region V

Sincerely,

JERMAINE
R HANNON
Digitally signed by
JERMAINE R HANNON
Date: 2023.09.01
11:46:31 -04'00'

Jermaine R. Hannon
Division Administrator
FHWA Indiana Division

Appendix I

Additional Studies

Des. No. 2200665

Culvert Inspection Report

CV 421-012-133.62
US 421
over



Inspection Date: 07/13/2022

Inspected By: Jacob Gould

Inspection Type(s): Culvert

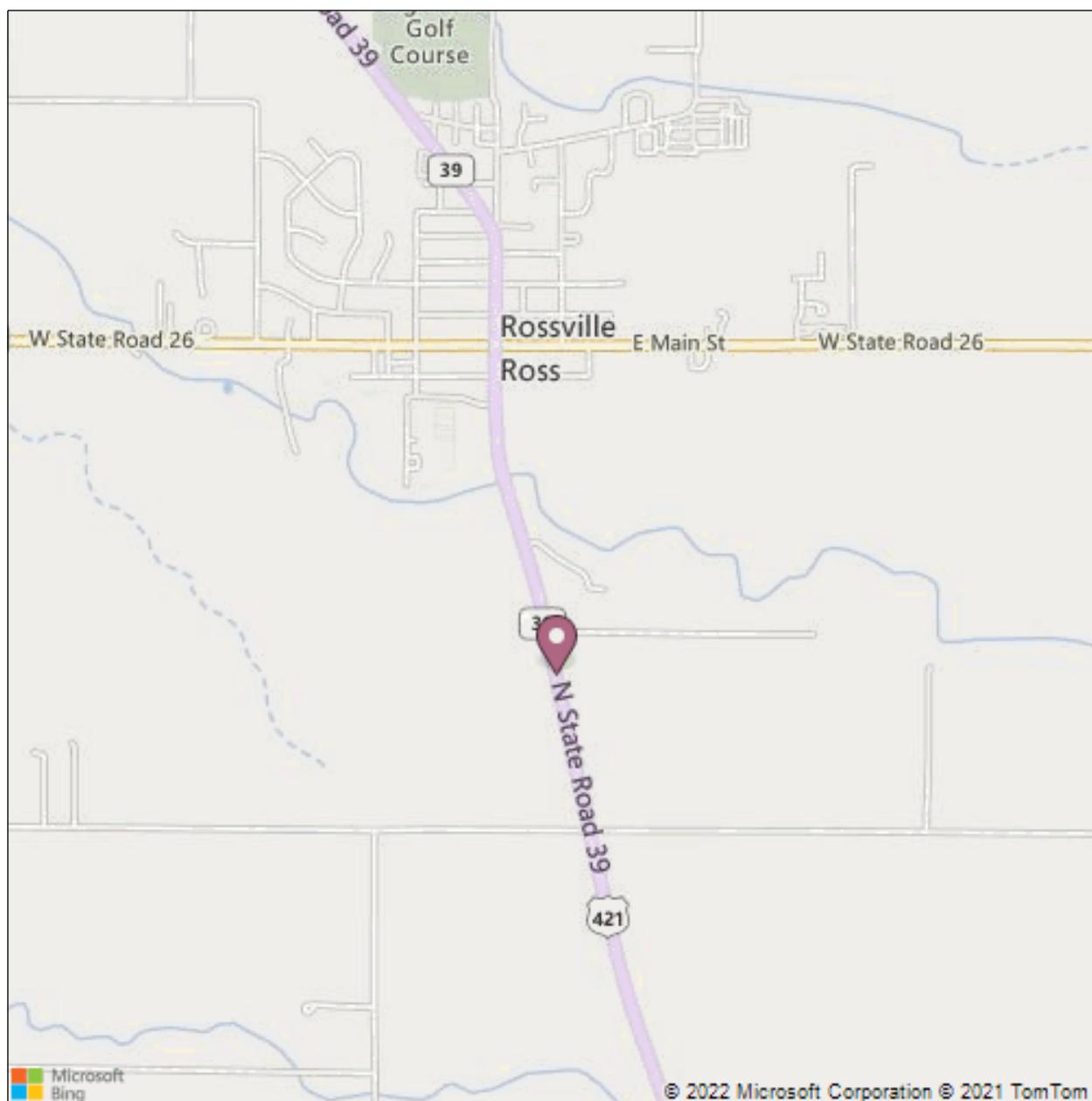
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Inspector: Jacob Gould
Inspection Date: 07/13/2022

Asset Name: CV 421-012-133.62
Facility Carried: US 421

Culvert Inspection Report



Latitude: 40.40707
Longitude: -86.59243

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Executive Summary

Overall the structure is in poor condition. The original slab has been widened by reinforced concrete channel beams on both sides. The east channel beam has severe concrete failure with the interior web being ineffective as well as heavy spalling with exposed steel along the east coping. However due to being off the roadway, this is not a critical finding. The original slab has heavy spalling with exposed steel. The western portion of the channel has been repaired while the eastern portion has heavy field debris.

It is recommended to replace this structure. SPMS shows that the structure is to be replaced in 2026.

Until replacement, no work is recommended at this time.

History

- Unknown construction date.
- 10/07/2026: Small structure replacement under SPMS under DES #2200665 & Contract #R-44376

Inspector: Gould, Jacob
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report
t

Structure Number: CV 421-012-133.62

Inspector: Gould, Jacob

Large Culvert Inspection Report

(8) Asset Code:	93001701	(27) Year Built:	0000
Asset Name:	CV 421-012-133.62	(90) Inspection Date:	07/13/2022
OLD Culvert ID:	421-12-133.62	(91) Inspection Frequency:	12
Team Assignment:	01	<input type="checkbox"/> Additional Treatment Exists	

Identification

(2) Highway Agency District:	01	(3) County Code:	012
Sub District:	1400	Ramp ID:	
(42B) Type of Service (Under):	5	<input type="checkbox"/> Adjacent to Roadway	
(7) Facility Carried:	US 421	(6) Features Intersected:	
(9) Location:	0.67 S SR 26	(9.01) Location Additional Description:	
(11) Milepoint:	0	(16) Latitude:	40.40707
Classification:		(17) Longitude:	-86.59243
(104) Highway System of the Inventory Route:	0	(26) Functional Classification of Inventory Route:	02

Geometric Data

Culvert: Kind of Material:	1. Concrete	Culvert: Type of Structure:	7. 3 Sided Culvert (flat or arch type)	Min Est Fill Cover (ft):	0.00
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Culvert: Max. Horizontal Opening (ft.): 8.00 Culvert: Max. Vertical Opening (ft.): 4.00 (34) Skew: 0

Barrel Length (ft.): 32.00 Original Culvert Shape: Box

Measurement Remarks: *From Culvert Chart*

Structure Additional Description: *Reinforced Concrete Box 8' x 4' RC Box*

Openings:

Direction	Opening Latitude	Opening Longitude	Direction	Opening Latitude	Opening Longitude
1.			3.		
2.			4.		

Openings Comments:

Follow Up Required:

**If checked, please
describe for follow up:

Endangered Species

Bats: seen or heard under structure? * N

Birds/swallows/nests seen? Empty nests present? N

* If yes, add one photo to the dropdown field

Inspector: Gould, Jacob
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culver Inspection Report
t

General Condition Ratings

(36A) Bridge Railings:	N	(36C) Approach Guardrail:	N
(36B) Transitions:	N	(36D) Approach Guardrail Ends:	N

Culvert:

(62) Culvert - Rating: 4

(62) Culvert Rating
Comments: *The original slab has been widened by reinforced concrete channel beams on both sides. The east channel beam has severe concrete failure with the interior web being ineffective as well as heavy spalling with exposed steel along the east coping. However due to being off the roadway, this is not a critical finding. The original slab has heavy spalling with exposed steel.*

Deck:

(58) Deck: N

(58a) Deck Comments:

Superstructure:

(59) Superstructure: N

(59.01) Superstructure
Comments:

Substructure:

(60) Substructure: N

(60.01) Substructure
Comments:

CV-Headwall/Anchor Rating N

CV-Wingwalls Rating N

Channel:

(61) Channel and Channel
Protection: 6

(61.01) Channel and Channel
Protection Comments: *There is minor bank erosion at the east end of the structure as well as heavy field debris. The west end of the structure has been repaired. There is little to no water flowing through the structure at this time.*

Bank Erosion Rating: 6

Drift/Sediment Rating: 5

Channel Alignment Rating: 8

Check this box if culvert has OBSTRUCTED flow

Describe Obstruction: *Field debris that will disappear with the next rain event.*

Overtopping Frequency: 2

Inspector: Gould, Jacob
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culver Inspection Report
t

Overtopping Frequency
Comments:

Inspector: Gould, Jacob
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culver Inspection Report

Large Culvert Inspection Report - Culvert # 93001701

Additional Treatment Condition Rating: 4

Treatment Type: Extension

Material: 2. Concrete Precast

Structure Type: 7. 3 Sided Culvert (flat or arch type)

Shape: Square

Vertical Opening: 4

Indicator Side: East

Year Constructed:

Length Beyond Original Structure: 6'

Treatment Description

Precast channel beams

Comments

1 channel beam on each side of the 3 sided box. spalling with rebar exposed and cracking with efflorescence.

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 1

Description Alignment Looking North

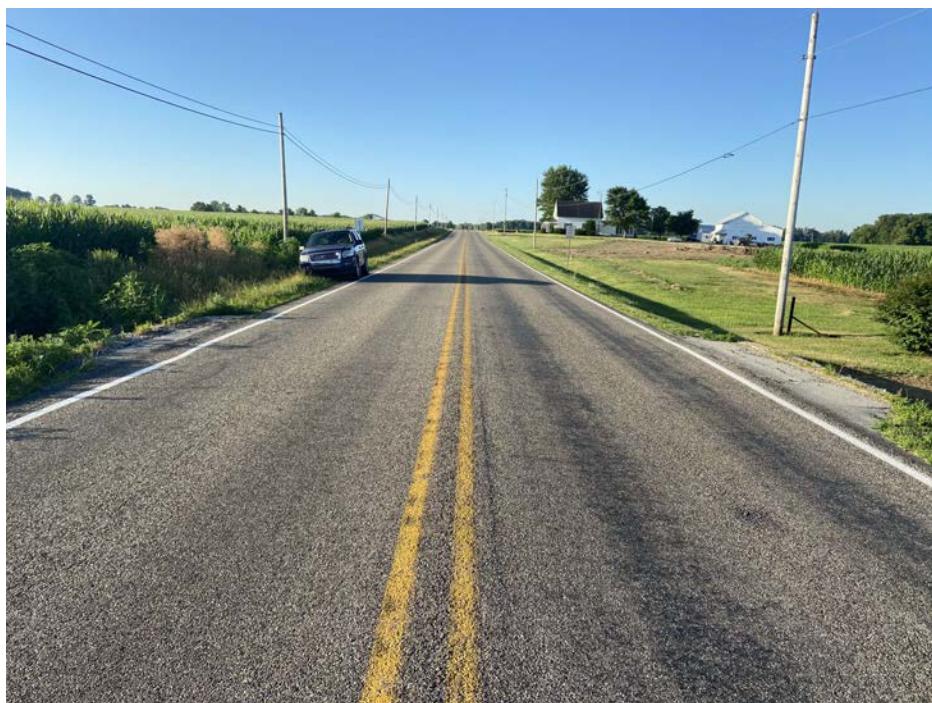


PHOTO 2

Description Alignment Looking South

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 3

Description Wearing Surface



PHOTO 4

Description East Elevation

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 5

Description West Elevation



PHOTO 6

Description Interior Looking West

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 7

Description Heavy Spalling on the East Widening Channel Beam



PHOTO 8

Description Heavy Spalling on the East Widening Channel Beam

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 9

Description Heavy Spalling on the East Widening Channel Beam



PHOTO 10

Description Heavy Spalling with Exposed Steel on the Original Slab

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 11

Description Heavy Spalling with Exposed Steel on the Original Slab



PHOTO 12

Description Heavy Spalling with Exposed Steel on the Original Slab

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 13

Description West Widening Beam



PHOTO 14

Description West Channel

Inspector: Jacob Gould
Inspection Date: 07/13/2022

Structure Number: 93001701
Facility Carried: US 421

Culvert Inspection Report

Pictures



PHOTO 15

Description East Channel

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	6/8/23; 11:00 am	DOT Project Number	2200665	Route/Facility Carried	US 421	County	Clinton
Federal Structure ID	CV 421-012-133.62	Structure Coordinates (latitude and longitude)	40.40707; -86.59243	Structure Height (approximate)	4 feet	Structure Length	32 feet
Structure Type (check one)			Structure Material (check all that apply)				
Bridge Construction Style			Deck Material	Beam Material	End/Back Wall Material		
<input type="radio"/> Cast-in-place		<input type="radio"/> Pre-stressed Girder		Metal	None	Concrete	
<input type="radio"/> Flat Slab/Box		<input type="radio"/> Steel I-beam		Concrete	Concrete	Timber	
<input type="radio"/> Truss		<input type="radio"/> Covered		Timber	Steel	Stone/Masonry	
<input type="radio"/> Parallel Box Beam		<input type="radio"/> Other:		Open grid	Timber	Other:	
				Other:	Other:	Creosote Evidence	
Culvert Type			Culvert Material		<input type="radio"/> Yes	<input checked="" type="radio"/> No	
<input checked="" type="radio"/> Box			Metal		<input type="radio"/> Unknown		
<input type="radio"/> Pipe/Round			Concrete				
<input type="radio"/> Other:			Plastic				
Crossings Traversed (check all that apply)			Surrounding Habitat (check all that apply)				
<input checked="" type="checkbox"/> Bare ground		Open vegetation	<input checked="" type="checkbox"/> Agricultural		Grassland		
<input type="checkbox"/> Rip-rap		Closed vegetation	<input checked="" type="checkbox"/> Commercial		Ranching		
<input type="checkbox"/> Flowing water		Railroad	<input type="checkbox"/> Residential-urban		Riparian/wetland		
<input type="checkbox"/> Standing water		Road/trail - Type:	<input type="checkbox"/> Residential-rural		Mixed use		
<input type="checkbox"/> Seasonal water		Other:	<input type="checkbox"/> Woodland/forested		Other:		
Areas Assessed (check all that apply)							
Check all areas that apply. If an area is not present in the structure, check the "not present" box.							
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.							
Area (check if assessed)	Assessment Notes		Evidence of Bats (include photos if present)				
<input type="checkbox"/> All crevices and cracks:	<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #	Audible	<input type="checkbox"/> Species	
<input checked="" type="checkbox"/> Bridges/culverts: rough surfaces or imperfections in concrete			<input type="checkbox"/> Guano		Odor		
<input checked="" type="checkbox"/> Other structures: soffits, rafters, attic areas			<input type="checkbox"/> Staining		Photos		
<input checked="" type="checkbox"/> Concrete surfaces (open roosting on concrete)	<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #	Audible	<input type="checkbox"/> Species	
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck			<input type="checkbox"/> Guano		Odor		
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck		<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Staining		Photos		
<input type="checkbox"/> Vertical surfaces on concrete I-beams			<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #	Audible	<input type="checkbox"/> Species	
<input type="checkbox"/> Spaces between walls, ceiling joists			<input type="checkbox"/> Guano		Odor		
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes			<input type="checkbox"/> Staining		Photos		
<input type="checkbox"/> All guiderails	<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #	Audible	<input type="checkbox"/> Species	
<input type="checkbox"/> All expansion joints			<input type="checkbox"/> Guano		Odor		
			<input type="checkbox"/> Staining		Photos		
			<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #	Audible	<input type="checkbox"/> Species	
			<input type="checkbox"/> Guano		Odor		
			<input type="checkbox"/> Staining		Photos		
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2022 Community of Comparison (COC) and Affected Community (AC) Data for DES 2200665

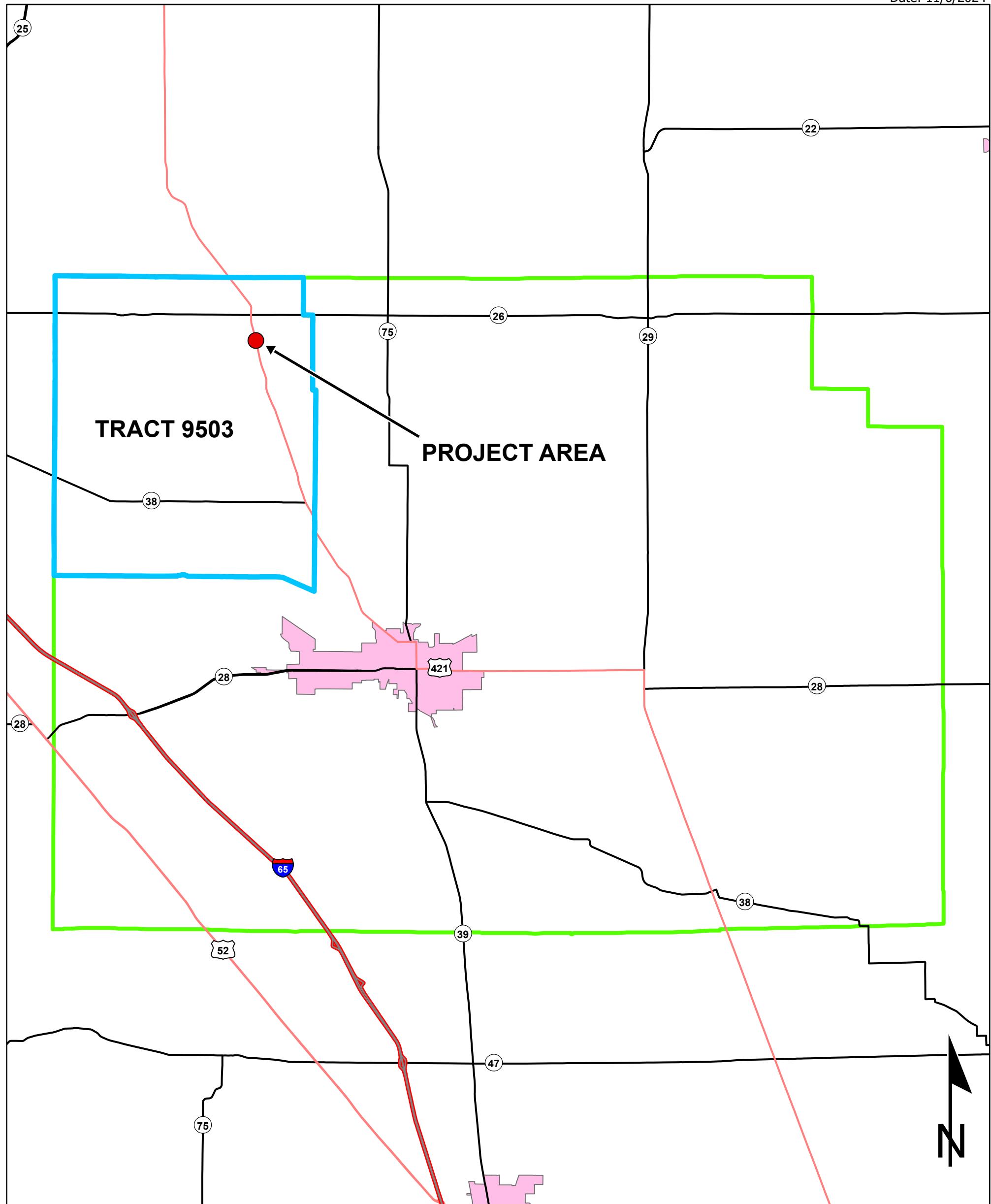
	Clinton County, Indiana (COC)	Census Tract 9503, Clinton County, Indiana (AC)
Label	Estimate	Estimate
Total Race Population Sample:	33,020	5,305
Non-Hispanic White alone %	26,600	5,015
Minority	19.44	2.77
125% COC	24.30	<125% COC
<hr/>		
Total Poverty Population Sample:	32,131	5,018
Income Below Poverty Status	2,877	437
% Below Poverty Status	8.95	8.71
125% COC	11.19	<125% COC

Source

<https://data.census.gov/cedsci/>

Census Tract Map
US 421, 0.67 Miles South of SR 26
DES #2200665, Small Structure Replacement
Clinton County, Indiana

Author: Mark Rinehart
Date: 11/6/2024



Sources:

Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Census Tract 9503 in Clinton County

● Project Area

■ Urbanized Area Boundary (UAB)

■ Affected Community (AC)

■ Community of Comparison (COC)

GEO_ID	Geography	0500000US18023	1400000US18023950300
NAME	Geographic Area Name	Clinton County, Indiana	County; Indiana
B17001_001E	Estimate Total:	32131	5018
B17001_001M	Margin of Error Total:	157	378
B17001_002E	Estimate Total: Income in the past 12 months below poverty level:	2877	437
B17001_002M	Margin of Error Total: Income in the past 12 months below poverty level:	500	166
B17001_003E	Estimate Total: Income in the past 12 months below poverty level: Male:	1241	166
B17001_003M	Margin of Error Total: Income in the past 12 months below poverty level: Male:	281	67
B17001_004E	Estimate Total: Income in the past 12 months below poverty level: Male: Under 5 years	135	15
B17001_004M	Margin of Error Total: Income in the past 12 months below poverty level: Male: Under 5 years	76	20
B17001_005E	Estimate Total: Income in the past 12 months below poverty level: Male: 5 years	0	0
B17001_005M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 5 years	27	18
B17001_006E	Estimate Total: Income in the past 12 months below poverty level: Male: 6 to 11 years	186	4
B17001_006M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 6 to 11 years	125	9
B17001_007E	Estimate Total: Income in the past 12 months below poverty level: Male: 12 to 14 years	34	23
B17001_007M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 12 to 14 years	39	37
B17001_008E	Estimate Total: Income in the past 12 months below poverty level: Male: 15 years	27	0
B17001_008M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 15 years	31	18
B17001_009E	Estimate Total: Income in the past 12 months below poverty level: Male: 16 and 17 years	45	19
B17001_009M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 16 and 17 years	43	21
B17001_010E	Estimate Total: Income in the past 12 months below poverty level: Male: 18 to 24 years	110	12
B17001_010M	Margin of Error Total:!!Income in the past 12 months below poverty level: Male: 18 to 24 years	72	14
B17001_011E	Estimate Total: Income in the past 12 months below poverty level: Male: 25 to 34 years	92	5
B17001_011M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 25 to 34 years	57	6
B17001_012E	Estimate Total: Income in the past 12 months below poverty level: Male: 35 to 44 years	152	20
B17001_012M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 35 to 44 years	84	20
B17001_013E	Estimate Total: Income in the past 12 months below poverty level: Male: 45 to 54 years	165	10
B17001_013M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 45 to 54 years	88	10
B17001_014E	Estimate Total: Income in the past 12 months below poverty level: Male: 55 to 64 years	198	32
B17001_014M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 55 to 64 years	89	25
B17001_015E	Estimate Total: Income in the past 12 months below poverty level: Male: 65 to 74 years	51	10
B17001_015M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 65 to 74 years	28	10
B17001_016E	Estimate Total: Income in the past 12 months below poverty level: Male: 75 years and over	46	16
B17001_016M	Margin of Error Total: Income in the past 12 months below poverty level: Male: 75 years and over	27	13
B17001_017E	Estimate Total: Income in the past 12 months below poverty level: Female:	1636	271
B17001_017M	Margin of Error Total: Income in the past 12 months below poverty level: Female:	308	122
B17001_018E	Estimate Total: Income in the past 12 months below poverty level: Female Under 5 years	95	30
B17001_018M	Margin of Error Total: Income in the past 12 months below poverty level: Female: Under 5 years	54	26
B17001_019E	Estimate Total: Income in the past 12 months below poverty level: Female: 5 years	26	9
B17001_019M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 5 years	25	16
B17001_020E	Estimate Total: Income in the past 12 months below poverty level: Female: 6 to 11 years	115	1
B17001_020M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 6 to 11 years	78	4
B17001_021E	Estimate Total: Income in the past 12 months below poverty level: Female: 12 to 14 years	70	4
B17001_021M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 12 to 14 years	61	7
B17001_022E	Estimate Total: Income in the past 12 months below poverty level: Female: 15 years	118	8
B17001_022M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 15 years	78	10
B17001_023E	Estimate Total: Income in the past 12 months below poverty level: Female: 16 and 17 years	120	0
B17001_023M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 16 and 17 years	91	18
B17001_024E	Estimate Total: Income in the past 12 months below poverty level: Female: 18 to 24 years	112	70
B17001_024M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 18 to 24 years	63	52
B17001_025E	Estimate Total: Income in the past 12 months below poverty level: Female: 25 to 34 years	251	11
B17001_025M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 25 to 34 years	101	16
B17001_026E	Estimate Total: Income in the past 12 months below poverty level: Female: 35 to 44 years	241	51
B17001_026M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 35 to 44 years	118	57
B17001_027E	Estimate Total: Income in the past 12 months below poverty level: Female: 45 to 54 years	133	19
B17001_027M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 45 to 54 years	80	20
B17001_028E	Estimate Total: Income in the past 12 months below poverty level: Female: 55 to 64 years	152	28
B17001_028M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 55 to 64 years	68	22
B17001_029E	Estimate Total: Income in the past 12 months below poverty level: Female: 65 to 74 years	78	14
B17001_029M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 65 to 74 years	37	13
B17001_030E	Estimate Total: Income in the past 12 months below poverty level: Female: 75 years and over	125	26
B17001_030M	Margin of Error Total: Income in the past 12 months below poverty level: Female: 75 years and over	61	21
B17001_031E	Estimate Total: Income in the past 12 months at or above poverty level:	29254	4581
B17001_031M	Margin of Error Total: Income in the past 12 months at or above poverty level:	536	360
B17001_032E	Estimate Total: Income in the past 12 months at or above poverty level: Male:	14940	2226
B17001_032M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male:	333	213
B17001_033E	Estimate Total: Income in the past 12 months at or above poverty level: Male: Under 5 years	1005	129
B17001_033M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: Under 5 years	73	50
B17001_034E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 5 years	93	46
B17001_034M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 5 years	47	34
B17001_035E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 6 to 11 years	1457	228
B17001_035M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 6 to 11 years	193	79
B17001_036E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 12 to 14 years	701	93
B17001_036M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 12 to 14 years	182	36
B17001_037E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 15 years	364	63
B17001_037M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 15 years	117	56
B17001_038E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 16 and 17 years	433	35
B17001_038M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 16 and 17 years	123	30
B17001_039E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 18 to 24 years	1337	151
B17001_039M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 18 to 24 years	121	87
B17001_040E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 25 to 34 years	1841	317
B17001_040M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 25 to 34 years	105	98

B17001_041E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 35 to 44 years	1797	220
B17001_041M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 35 to 44 years	89	65
B17001_042E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 45 to 54 years	1870	259
B17001_042M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 45 to 54 years	90	71
B17001_043E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 55 to 64 years	1911	382
B17001_043M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 55 to 64 years	111	113
B17001_044E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 65 to 74 years	1377	219
B17001_044M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 65 to 74 years	72	59
B17001_045E	Estimate Total: Income in the past 12 months at or above poverty level: Male: 75 years and over	754	84
B17001_045M	Margin of Error Total: Income in the past 12 months at or above poverty level: Male: 75 years and over	87	44
B17001_046E	Estimate Total: Income in the past 12 months at or above poverty level: Female:	14314	2355
B17001_046M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female:	336	246
B17001_047E	Estimate Total: Income in the past 12 months at or above poverty level: Female: Under 5 years	982	244
B17001_047M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: Under 5 years	52	74
B17001_048E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 5 years	261	8
B17001_048M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 5 years	117	14
B17001_049E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 6 to 11 years	1311	256
B17001_049M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 6 to 11 years	182	116
B17001_050E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 12 to 14 years	496	80
B17001_050M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 12 to 14 years	147	37
B17001_051E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 15 years	68	10
B17001_051M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 15 years	40	12
B17001_052E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 16 and 17 years	370	73
B17001_052M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 16 and 17 years	111	46
B17001_053E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 18 to 24 years	1203	141
B17001_053M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 18 to 24 years	61	66
B17001_054E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 25 to 34 years	1683	379
B17001_054M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 25 to 34 years	113	84
B17001_055E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 35 to 44 years	1624	191
B17001_055M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 35 to 44 years	166	52
B17001_056E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 45 to 54 years	1740	254
B17001_056M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 45 to 54 years	134	62
B17001_057E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 55 to 64 years	1953	294
B17001_057M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 55 to 64 years	97	75
B17001_058E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 65 to 74 years	1483	257
B17001_058M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female 65 to 74 years	66	58
B17001_059E	Estimate Total: Income in the past 12 months at or above poverty level: Female: 75 years and over	1140	168
B17001_059M	Margin of Error Total: Income in the past 12 months at or above poverty level: Female: 75 years and over	114	74

GEO_ID	Geography	0500000US18023	1400000US18023950300
NAME	Geographic Area Name	Clinton County, Indiana	County; Indiana
B03002_001E	Estimate Total:	33020	5305
B03002_001M	Margin of Error Total:	*****	381
B03002_002E	Estimate Total: Not Hispanic or Latino:	27409	5158
B03002_002M	Margin of Error Total: Not Hispanic or Latino:	*****	413
B03002_003E	Estimate Total: Not Hispanic or Latino: White alone	26600	5015
B03002_003M	Margin of Error Total: Not Hispanic or Latino: White alone	74	420
B03002_004E	Estimate Total: Not Hispanic or Latino: Black or African American alone	221	36
B03002_004M	Margin of Error Total: Not Hispanic or Latino: Black or African American alone	115	43
B03002_005E	Estimate Total: Not Hispanic or Latino: American Indian and Alaska Native alone	1	0
B03002_005M	Margin of Error Total: Not Hispanic or Latino: American Indian and Alaska Native alone	3	18
B03002_006E	Estimate Total: Not Hispanic or Latino: Asian alone	145	48
B03002_006M	Margin of Error Total: Not Hispanic or Latino: Asian alone	20	51
B03002_007E	Estimate Total: Not Hispanic or Latino: Native Hawaiian and Other Pacific Islander alone	0	0
B03002_007M	Margin of Error Total: Not Hispanic or Latino: Native Hawaiian and Other Pacific Islander alone	27	18
B03002_008E	Estimate Total: Not Hispanic or Latino: Some other race alone	20	0
B03002_008M	Margin of Error Total: Not Hispanic or Latino: Some other race alone	23	18
B03002_009E	Estimate Total: Not Hispanic or Latino: Two or more races:	422	59
B03002_009M	Margin of Error Total: Not Hispanic or Latino: Two or more races:	140	30
B03002_010E	Estimate Total: Not Hispanic or Latino: Two or more races: Two races including Some other race	88	0
B03002_010M	Margin of Error Total: Not Hispanic or Latino: Two or more races: Two races including Some other race	71	18
B03002_011E	Estimate Total: Not Hispanic or Latino: Two or more races: Two races excluding Some other race, and three or more races	334	59
B03002_011M	Margin of Error Total: Not Hispanic or Latino: Two or more races: Two races excluding Some other race, and three or more races	120	30
B03002_012E	Estimate Total: Hispanic or Latino:	5611	147
B03002_012M	Margin of Error Total: Hispanic or Latino:	*****	112
B03002_013E	Estimate Total: Hispanic or Latino: White alone	1514	42
B03002_013M	Margin of Error Total: Hispanic or Latino: White alone	442	38
B03002_014E	Estimate Total: Hispanic or Latino: Black or African American alone	31	0
B03002_014M	Margin of Error Total: Hispanic or Latino: Black or African American alone	34	18
B03002_015E	Estimate Total: Hispanic or Latino: American Indian and Alaska Native alone	0	0
B03002_015M	Margin of Error Total: Hispanic or Latino: American Indian and Alaska Native alone	27	18
B03002_016E	Estimate Total: Hispanic or Latino: Asian alone	10	0
B03002_016M	Margin of Error Total: Hispanic or Latino: Asian alone	16	18
B03002_017E	Estimate Total: Hispanic or Latino: Native Hawaiian and Other Pacific Islander alone	0	0
B03002_017M	Margin of Error Total: Hispanic or Latino: Native Hawaiian and Other Pacific Islander alone	27	18
B03002_018E	Estimate Total: Hispanic or Latino: Some other race alone	2235	25
B03002_018M	Margin of Error Total: Hispanic or Latino: Some other race alone	541	35
B03002_019E	Estimate Total: Hispanic or Latino: Two or more races:	1821	80
B03002_019M	Margin of Error Total: Hispanic or Latino: Two or more races:	556	101
B03002_020E	Estimate Total: Hispanic or Latino: Two or more races: Two races including Some other race	1557	80
B03002_020M	Margin of Error Total: Hispanic or Latino: Two or more races: Two races including Some other race	512	101
B03002_021E	Estimate Total: Hispanic or Latino: Two or more races: Two races excluding Some other race, and three or more races	264	0
B03002_021M	Margin of Error Total: Hispanic or Latino: Two or more races: Two races excluding Some other race, and three or more races	189	18