

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

Road No./County:

State Route (SR) 13 and SR 128, Hamilton, Madison, and Tipton

Designation Number(s):

2003081

**Project
Description/Termini:**

Intersection improvement project at SR 13 and SR 128, in Hamilton, Madison, and Tipton Counties, Indiana. The project will extend from approximately 690 feet south to 800 feet north of the intersection and 83 feet west to 770 feet east of the intersection.

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

 01/10/2025

INDOT DE Initials and Date

N/A

INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Name and Organization of CE/EA Preparer:

Virginia Flynn, Kaskaskia Engineering Group, LLC

Indiana Department of Transportation

County Hamilton, Madison, and Tipton Route SR 13 at SR 128 Des. No. 2003081

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.**

	Yes	No
Does the project have a historic bridge processed under the Historic Bridges PA*?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If No, then: Opportunity for a Public Hearing Required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**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 Survey letters were mailed to potentially affected property owners near the project area on May 1, 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 Survey letter is included in Appendix G, page 1.

Pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4), the public was provided an opportunity to comment of FHWA's finding of "No Historic Properties Affected". A legal advertisement was placed in the Indianapolis Star, a local publication, on August 1, 2024, soliciting public input on FHWA's Section 106 effect finding. Comments from the public were accepted for 30 days following the publication of the notice. No comments are received during this period. A copy of the public notice, affidavit of publication area included in Appendix G.

A Public Information Meeting for the project was held on August 17, 2023, at Lapel High School located in Lapel, Indiana, approximately 11.5 miles from the project site. Public notices for the meeting were advertised in the Greenfield Daily Reporter, the Anderson Herald, and the Current (Fishers and Noblesville editions). Eleven people attended. No comments were received (Appendix G, pages 2 to 11).

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. INDOT has decided to hold a public hearing for this project. 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.

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

Indiana Department of Transportation

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

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

Local Name of the Facility: SR 13 and SR 128

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

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

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.

Per the September 25, 2020, Engineering Assessment Report, (Appendix I, pages 1 to 13), the need for this project is due to the very high frequency of crash severity, particularly right-angle crashes, at the existing intersection. Per RoadHAT 3.0 analysis (INDOT traffic engineering safety modeling software) of 2017-2019 crash data, the most recent data available at the time of this analysis, the index of crash frequency (ICF) is 1.90 (above average) and the index of crash cost (ICC) is 2.31. These values are considered high for this type of intersection. These indices compare the crash cost and crash frequency for this intersection to intersections with similar volumes, roadway classifications, and control type throughout Indiana. The ICF and ICC exceed the threshold of 1.00 set by INDOT's Office of Traffic Safety, flagging the intersection as a safety concern. Additionally, increased motorist delays at the subject intersection depicts a level of service (LOS) rating of (stable flow), ranging from 17.9 second delay during the AM peak hour for eastbound travel, and 23 second delay during the PM peak hour for westbound travel. The LOS, which measures the quality of motor vehicle traffic service, is measured on a scale of A through F, with F being the worst. LOS A indicates less than or equal to ten seconds of vehicular delay for both unsignalized and signalized intersections. LOS F indicates greater than 50 seconds of vehicular delay at unsignalized intersections, and greater than 80 seconds of vehicular delay at signalized intersections. The intersection's current LOS rating of C was measured in 2017-2019 and the overall LOS was predicted to have a rating of E in 2046 if the safety concern is not addressed.

The purpose of the project is to reduce crash potential, improve the ICF and ICC to below 1.00, and provide safe operation of the intersection.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Hamilton, Madison, and Tipton Municipality: Greenfield

Limits of Proposed Work: The project will occur at the intersection of SR 13 and SR 128, extending approximately 690 feet south to 800 feet north of the intersection and 83 feet west to 770 feet east of the intersection.

Total Work Length: 0.34 Mile(s) Total Work Area: 4.42 Acre(s)

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.

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

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.

This is page 3 of 27 Project name: SR 13, Intersection Improvement Date: December 20, 2024

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The INDOT and the Federal Highway Administration (FHWA) intend to proceed with this intersection improvement project.

The project is located at the intersection of SR 13 and SR 128 in Section 32, Township 21 North, Range 6 East in Madison Township in Tipton County, Indiana; Section 5, Township 20 North, Range 6 East in White River Township in Hamilton County, Indiana; and Section 4, Township 20 North, Range 6 East, and Section 33, Township 21 North, Range 6 East of Pipe Creek Township in Madison County, Indiana (Appendix B, page 1).

SR 13 is a two-lane rural Minor Arterial and SR 128 is a two-lane rural Major Collector. The existing SR 13 and SR 128 cross sections consist of one 12-foot lane in each direction with two-foot paved shoulders. The project is located in a rural area consisting of predominantly forested acreage and agricultural land. The northwest and southwest quadrants of the intersection consist of forested acreage. The southeast quadrant of the intersection includes agricultural land. The northeast quadrant on the intersection includes forested acreage with a further-adjacent residential dwelling. Per the September 25, 2020, Engineering Assessment Report, the intersection experiences elevated crash rates with a pattern of severe right-angle crashes. Crash data from 2017 to 2019 was analyzed at this intersection. During this time period, there were 18 crashes, of which, seven were right angle crashes, five rear end crashes, four ran-off-road crashes, and two sideswipe crashes. Seven of these crashes resulted in injury, and of those six were incapacitating, and one as non-incapacitating (Appendix I, page 7). The remaining 11 crashes resulted in property damage only. This resulted in the RoadHAT analysis and the aforementioned ICF value of 1.90 and ICC value of 2.31, as discussed in the purpose and need section.

The preferred alternative for this project will convert the existing intersection with two-way stop control into a single lane roundabout. Proposed roadway elements include 12-foot travel lanes with a mix of open and curbed shoulders. A central concrete island and truck apron will be provided, as well as exterior truck aprons in the northwest and southwest to facilitate turning movements. Additionally, drainage improvements will include installation of curb and gutter turnouts, a stormwater system, including an approximately 0.45 acre stormwater detention pond, and new roadside ditches. An existing culvert, CLV-013-048-20.9 (CLV-43727), will be replaced as part of this project. CLV-43727 is comprised of 54 feet of single barrel, 36-inch Corrugated Metal Pipe (CMP), tied into 54 feet of 63-inch by 36-inch Reinforced Concrete Culvert Pipe (RCP). This existing structure will be replaced with 121 feet of single barrel, 48-inch RCP. The center of the intersection will shift approximately 100-feet to the east to avoid impacts to the historical bridge over Duck Creek located approximately 100-feet west of the center of the existing intersection. Utility relocations will be required at the existing intersection, as well as new lighting. The project will require approximately 3.26 acres of permanent right-of-way (ROW), and approximately 0.55 acre of temporary ROW. Anticipated impacts include tree removal affecting terrestrial habitat and impacts to streams and non-jurisdictional wetlands. Since the project will disturb at least one acre of soil, a Construction Stormwater General Permit (CSGP) will be required. Every effort to avoid, minimize, and/or mitigate project impacts will be made. Preliminary project plans are included in Appendix B (pages 22 to 47).

The proposed maintenance of traffic (MOT) is anticipated to include lane shifts, lane closures, and detours (Appendix B, pages 26 to 29). The MOT for the project is discussed in further detail in the MOT During Construction section of this document.

The project will reduce crash potential, improve the ICF and ICC to below 1.00, and provide safe operation of the intersection.. This improves overall safety in the area and meets the purpose and need.

The construction limits extend from approximately 690 feet south to 800 feet north of the intersection and 83 feet west to 770 feet east of the intersection, which are the logical termini for the project since these are the rational end points of the transportation improvement and subsequent review of its environmental impacts. This project demonstrates independent utility because it will improve the intersection as an independent project and does not depend on any other planned projects.

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.

Realignment and Left Turn Lanes: An intersection realignment and 100-foot left turn lanes were considered. This alternative would allow turning traffic to be bypassed by through movement traffic through the intersection. This alternative improves safety by alleviating rear end crashes but does not improve safety for the right angle crashes. This alternative will not address the purpose and need. Therefore, this alternative was discarded from further consideration.

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Realignment and Traffic Signal: Installation of a traffic signal was considered. This alternative will require dedicated left turn lanes at all approaches; however, the volumes at this intersection do not meet any of the traffic signal warrants from the Manual on Uniform Traffic Control Devices (MUTCD). This alternative is anticipated to reduce total crashes, but results in an increase in rear end crashes, and the predominant pattern of right angle crashes remains. This alternative will not address the purpose and need. Therefore, this alternative was discarded from further consideration.

Realignment and 4-Way Stop: The addition of stop signs on SR 13 was considered. This alternative would add additional stop signs, making the intersection an all-way stop. This would not improve safety for the rear end crashes and right angle crashes due to the design speeds along SR 13. This alternative will not address the purpose and need. Therefore, this alternative was discarded from further consideration.

No Build: The no build alternative does not address the safety concerns of the intersection. If no action is taken, the intersection safety issues will persist. The severe right angle and left turn crashes will not be addressed with the no build alternative. This would not address the purpose and need. Therefore, this alternative was discarded from further consideration.

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

It would not correct existing capacity deficiencies;

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):

X

ROADWAY CHARACTER:

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

Name of Roadway	<u>SR 13</u>		
Functional Classification:	<u>Minor Arterial</u>		
Current ADT:	<u>8,636</u>	<u>(2026)</u>	Design Year ADT: <u>10,266</u> <u>(2046)</u>
Design Hour Volume (DHV):	<u>1,011</u>	Truck Percentage (%)	<u>3.9</u>
Designed Speed (mph):	<u>55</u>	Legal Speed (mph):	<u>55</u>

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	2 through lanes		2 through lanes	
Pavement Width:	12	ft.	12	ft.
Shoulder Width:	2	ft.	Variable up to 3	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Name of Roadway	<u>SR 128</u>		
Functional Classification:	<u>Major Collector</u>		
Current ADT:	<u>1,452</u>	<u>(2026)</u>	Design Year ADT: <u>1,725</u> <u>(2046)</u>
Design Hour Volume (DHV):	<u>192</u>	Truck Percentage (%)	<u>4.6</u>
Designed Speed (mph):	<u>55</u>	Legal Speed (mph):	<u>55</u>

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Existing			Proposed		
Number of Lanes:	2		2		
Type of Lanes:	2 through lanes		2 through lanes		
Pavement Width:	12	ft.	12	ft.	
Shoulder Width:	2	ft.	Variable up to 3	ft.	
Median Width:	N/A	ft.	N/A	ft.	
Sidewalk Width:	N/A	ft.	N/A	ft.	

Setting: ☐ Urban ☐ Suburban ☒ Rural
 Topography: ☒ Level ☐ Rolling ☐ Hilly

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): #80-00093 B / 8000092 Sufficiency Rating: 91.3, BIAS Inspection 11/10/22
 (Rating, Source of Information)

Existing			Proposed		
Bridge/Structure Type:	Continuous slab concrete		N/A		
Number of Spans:	3		N/A		
Weight Restrictions:	N/A	ton	N/A	ton	
Height Restrictions:	N/A	ft.	N/A	ft.	
Curb to Curb Width:	28	ft.	N/A	ft.	
Outside to Outside Width:	28.6	ft.	N/A	ft.	
Shoulder Width:	0	ft.	N/A	ft.	

Structure/NBI Number(s): CLV-013-048-20.9 (CLV-43727), Sufficiency Rating: N/A
 (Rating, Source of Information)

Existing			Proposed		
Bridge/Structure Type:	Corrugated pipe into reinforced concrete culvert pipe		Reinforced concrete culvert pipe		
Number of Spans:	N/A		N/A		
Weight Restrictions:	N/A	ton	N/A	ton	
Height Restrictions:	N/A	ft.	N/A	ft.	
Curb to Curb Width:	N/A	ft.	N/A	ft.	
Outside to Outside Width:	N/A	ft.	N/A	ft.	
Shoulder Width:	N/A	ft.	N/A	ft.	

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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.

Adjacent to the west of the project area on SR 13 is a three-span concrete bridge (Str. 80-00093 B / NBI 8000092 that is 105.5 feet in length, with an out-to-out width of 28.6 feet, built in 2011. Per a review of the INDOT Historic Bridges Inventory, this structure is not listed as a select or non-select historic structure.

No work associated with the bridge is anticipated as part of this project.

One small pipe structure, CLV-013-048-20.9 (CLV-43727), is located approximately 400 feet south of the intersection of SR 13 and SR 128. The existing structure is a 54-foot CMP tied into a 54-foot RCP. This RCP structure will be replaced with a single barrel RCP that will be 121 feet in length and a barrel width of 48 inches.

No other structures are involved in this project.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

Discuss closures 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. Any local concerns about access and traffic flow should be detailed as well.

The MOT for the project will require phased closures of SR 13 and SR 128. Phase one of the MOT will maintain through traffic on SR 13, and closure of SR 128 during construction of the east and a majority of the north and south legs of the proposed roundabout. Phase one detour includes the use of SR 13, SR 28, and SR 9, adding nearly 27 miles of travel. Phase two of the MOT will include a closure of the intersection of SR 13 and SR 128 for construction of the north and south tie-ins. Phase two detours will include: closure of SR 13 utilizing SR 28, SR 213, and SR 37, adding nearly 33 miles of travel; closure of SR 128 (north) utilizing SR 9 SR 28, and SR 213, adding nearly 22 miles of travel; closure of SR 128 (south) utilizing SR 9, SR 28, and SR 213, adding nearly 40 miles to travel; and lastly, closure of 296th Street, utilizing SR 213 and 281st Street, adding nearly 11 miles to travel. Phase three MOT will be used for the west approach of the roundabout and the construction of detention pond. Phase three of the of the MOT will include closure of the west leg of 296th Street, utilizing SR 213 and 281st Street as a detour, adding nearly 11 miles of travel. The detours will remain for the duration of each phase of construction for the project, which is anticipated to be approximately one construction season combined for all phases. Total length of time the detour will be in place will be determined by the contractor but it is anticipated to be less than 6 months total. MOT plans are included in Appendix B, pages 26 to 29.

The closures/lane restrictions 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.

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ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 1,143,486 (FY 2022-2025) Right-of-Way: \$ 350,000 (FY 2025) Construction: \$ 4,293,000 (FY 2026 under DES 2003082)

Anticipated Start Date of Construction: Spring 2026

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0.601	0
Commercial	0	0
Agricultural	1.019	0
Forest	1.102	0
Wetlands	0	0
Other:	0	0
Other:	0	0
Other:	0	0
Other:	0	0
TOTAL	2.72	0

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 is approximately 12 feet on each side of centerline on SR 13 and varies from 12 feet to 40 feet on SR 128 on each side of centerline and consists of mowed grasses and scrub shrub typical of being adjacent to a rural roadway. Areas of proposed ROW include maintained vegetation associated with residential acreage at the northeast quadrant of the intersection, forested acreage at the northwest and southwest quadrant of the intersection, and agricultural acreage at the southeast quadrant of the intersection.

The project requires approximately 2.72 acres of permanent ROW consisting of roadside vegetation and residential maintained vegetated land in the northeast quadrant of SR 13 and SR 128, roadside vegetation and forested land in the northwest and southwest quadrant of SR 13 and SR 128, and roadside vegetation and agricultural land in the southeast quadrant of SR 13 and SR 128. The project will not require the acquisition of temporary ROW. Proposed ROW widths along SR 13 are 60 feet from centerline and 45 feet from centerline along SR 128. ROW locations are denoted in the project plans in Appendix B (pages 34 to 38).

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

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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.

Early coordination letters were sent on July 10 and November 10, 2023 (Appendix C, pages 1 to 2).

Agency	Date Sent	Response Date	Appendix
Federal Highway Administration (FHWA)	July 10, 2023	No response received	N/A
Indiana Geological and Water Survey (IGWS) – Online Form.	July 10, 2023	July 10, 2023 (automated response)	Appendix C, pages 3 to 4
U.S. Department of Housing and Urban Development (HUD)	July 10, 2023	No response received	N/A
Natural Resources Conservation Service (NRCS)	July 10, 2023	July 20, 2023	Appendix C, page 5
Indiana Department of Environmental Management (IDEM) – Wetlands and Stormwater Programs	July 10, 2023	No response received	N/A
IDEM - Groundwater Section	July 10, 2023	July 25, 2023	Appendix C, pages 9 to 10
Indiana Department of Natural Resources, Division of Fish and Wildlife (IDNR-DFW)	July 10, 2023	August 9, 2023	Appendix C, pages 11 to 15
National Park Service (NPS)	July 10, 2023	No response received	N/A
Indiana Department of Transportation (INDOT) – Office of Aviation	July 10, 2023	July 11, 2023	Appendix C, page 16
INDOT Greenfield Environmental Section Manager (Supervisor)	July 10, 2023	No response received	N/A
INDOT Project Manager	July 10, 2023	No response received	N/A
U.S. Army Corps of Engineers (USACE)	July 10, 2023	No response received	N/A
U.S. Coast Guard – Eight District Commander	July 10, 2023	July 20, 2023	Appendix C, page 26
Henry County Planning Commission - Floodplain and Zoning Administrator	July 10, 2023	No response received	N/A
Hamilton County Sheriff's Department	July 10, 2023	No response received	N/A
Hamilton County Council – District 3 Council Member	July 10, 2023	No response received	N/A
Hamilton County Commissioners - President	July 10, 2023	No response received	N/A
Hamilton County Highway Department	July 10, 2023	No response received	N/A
Hamilton County Surveyor	July 10, 2023	July 13, 2023	Appendix C, pages 17 to 25
Hamilton County Plan Commission Director – Floodplain Administrator	July 10, 2023	No response received	N/A
Madison County Sheriff's Department	July 10, 2023	No response received	N/A
Madison County Council – District 3 Council Member	July 10, 2023	No response received	N/A
Madison County Commissioners – North District	July 10, 2023	No response received	N/A
Madison County Highway Department – Highway Superintendent	July 10, 2023	No response received	N/A
Madison County Surveyor	July 10, 2023	No response received	N/A
Tipton County Surveyor	July 10, 2023	No response received	N/A
Tipton County Plan Commission - President	July 10, 2023	No response received	N/A
Tipton County Highway Department – Highway Superintendent	July 10, 2023	No response received	N/A
Tipton County Council - Councilman	July 10, 2023	No response received	N/A
Tipton County Sheriff's Department	July 10, 2023	No response received	N/A
City of Elwood - Mayor	July 10, 2023	No response received	N/A
City of Elwood City Council - President	July 10, 2023	No response received	N/A
City of Elwood Police Department - Chief	July 10, 2023	No response received	N/A
City of Elwood Fire Department - Chief	July 10, 2023	No response received	N/A
City of Elwood Street Department – Street Commissioner	July 10, 2023	No response received	N/A
Indianapolis Metropolitan Planning Organization –	July 10, 2023	No response received	N/A

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Executive Director			
Indianapolis Metropolitan Planning Organization – Director of Transportation Planning	July 10, 2023	No response received	N/A
Hamilton Heights School Corporation – Superintendent	July 10, 2023	No response received	N/A
Franklin-Lapel Community Schools – Superintendent	July 10, 2023	No response received	N/A
Elwood Community Schools Corporation - Superintendent	November 10, 2023	No response received	N/A

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

SECTION B – ECOLOGICAL RESOURCES:

	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
Streams, Rivers, Watercourses & Other Jurisdictional Features	X	X	
Federal Wild and Scenic Rivers			
State Natural, Scenic or Recreational Rivers			
Nationwide Rivers Inventory (NRI) listed			
Outstanding Rivers List for Indiana			
Navigable Waterways			

Total stream(s) in project area: 714.66 Linear feet Total impacted stream(s): 6 Linear feet

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 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 of the project area, and the Red Flag Investigation (RFI) report (Appendix E), there are five streams, rivers, watercourses, or other jurisdictional features within the 0.5-mile search radius. There are four streams, rivers, watercourses, or other jurisdictional features within or adjacent to the project area, which was confirmed by the site visit on May 10, and August 9, 2023, by Kaskaskia Engineering Group, LLC (KEG).

No Federal, Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana; navigable waterways or National Rivers Inventory waterway are present within or adjacent to the project area.

A *Waters of the U.S. Determination/Wetland Delineation Report* was approved by INDOT Ecology, Waterway Permitting, and Stormwater Office (EWPSO) on November 29, 2023. Please refer to Appendix F, page 1 for the *Waters of the U.S. Determination/Wetlands Delineation Report*. It was determined that one likely perennial jurisdictional stream, two intermittent jurisdictional stream, and one ephemeral jurisdictional stream is located within the investigated area. An approved jurisdictional determination was completed by the USACE on March 6, 2024. The USACE determined that one stream, UNT 3 to Duck Creek, is non-jurisdictional (Appendix F, page 43).

Duck Creek is a perennial stream that flows from north to south beneath SR 218. Duck Creek flows into the West Fork White River, which then flows into the Wabash River, and eventually to the Ohio River. The West Fork of the White River is a section 10 navigable river, making Duck Creek a likely Waters of the US. A defined ordinary high water mark (OHWM) was observed that was approximately 30 feet wide and approximately 5 feet deep. Upstream drainage consists of agricultural fields, forested tracts, and rural residential structures. Approximately 298.88 linear feet (LF) of the stream is within the investigated area. Duck Creek is of poor quality within this reach due to channeling and an *E. coli* impairment, according to Indiana's 303(d) list. 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.

UNT 1 to Duck Creek is an ephemeral stream because it was observed to have a defined bed and bank but seems to originate upstream from flow-off from a business parking area slope. No water or flow was present during normal hydrological conditions. UNT

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1 to Duck Creek flows 30 feet southwest into UNT 2 to Duck Creek, then follows the previously described flow pattern of Duck Creek, making UNT 1 to Duck Creek a likely Waters of the US. An observed OHWM was measured at approximately 2.16 feet wide and approximately 0.25 feet deep. Upstream drainage consists of forested tracts and a row crop agricultural field. Approximately 42.54 LF of the stream is within the investigated area. UNT 1 to Duck creek is of poor quality due to disturbance and channeling.

UNT 2 to Duck Creek is likely to be considered an intermittent stream because it was observed to have a bed and bank but no water or flow present during hydrological conditions. UNT 2 to Duck Creek flows 351 feet northwest into Duck Creek, then follows the previously described flow pattern of Duck Creek, making UNT 2 to Duck Creek a likely Waters of the US. An observed OHWM was measured at approximately three feet wide and 0.42 feet deep. Upstream drainage consists of a forested tract and a row crop agricultural field. Approximately 126 LF of the stream is within the investigated area. UNT 2 to Duck creek is of poor quality due to disturbance and channeling.

UNT 3 to Duck Creek is likely to be considered an intermittent stream because it was observed to be holding water but had no flow during normal hydrological conditions. UNT 3 to Duck Creek was determined by the USACE to be non-jurisdictional (Appendix F, page 43). Approximately 247.24 LF of the stream is within the investigated area. UNT 3 to Duck Creek is of poor quality due to disturbance and channeling.

Approximately 4 LF (0.0003 acre) of permanent impacts to UNT 2 to Duck Creek will occur due installation of riprap at the detention pond outfall pipe. Approximately 5 LF (0.0003 acre) of temporary impacts will occur due to construction access. Avoidance was not practicable, as project limits have been constrained to the smallest possible to complete the project. There will be no impacts to UNT 1 to Duck Creek or UNT 3 to Duck Creek or Duck Creek. UNT 1 to Duck Creek, UNT 3 to Duck Creek, and the portion of UNT 2 to Duck Creek outside of construction limits will be marked "Do Not Disturb" on project plans.

Per coordination with INDOT EWPO on May 20, 2024, due to impacts to likely Waters of the U.S., a USACE Section 404 Nationwide Permit (NWP) and an IDEM Section 401 Water Quality Certification (WQC) will likely be required. No mitigation will likely be required for this permit.

IDNR-DFW responded on August 9, 2023, with recommendations regarding bank vegetation disturbance, stream crossings, excavation, and erosion control standards (Appendix C, pages 11 to 15). 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	No

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 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 of the project area, and the RFI report (Appendix E), there are no open water features 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 May 10, and August 9, 2023, by KEG.

The open water features are not within or adjacent to the project area. No direct or indirect impacts to the open water features are anticipated. Therefore, no impacts are expected.

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Wetlands

Presence

☒

Impacts

Yes

No

☒

☐

0.15 permanent/

Total wetland area: 0.17 Acre(s) Total wetland area impacted: 0 temporary Acre(s)

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

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments (i.e. location, Water of the US, appendix reference)
1	PEM	0.02	0	North side of SR 128, east of SR 13, non-jurisdictional (Appendix F)
2	PEM	0.12	0.12 permanent / 0 temporary	Northeast quadrant of SR 13 and SR 128, non-jurisdictional (Appendix F)
3	PEM	0.03	0.03 permanent / 0 temporary	Southeast quadrant of SR 13 and SR 128, non-jurisdictional (Appendix F)

Documentation

ESD Approval Dates

Wetlands (Mark all that apply)

Wetland Determination

Wetland Delineation

USACE Isolated Waters Determination

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

November 29, 2023

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.

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

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 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 of the project area, and the RFI report (Appendix E), there are eight wetlands within the 0.5-mile search radius. There are three wetlands within or adjacent to the project area, which was confirmed by the site visit on May 10, and August 9, 2023, by KEG.

A *Waters of the U.S. Determination/Wetland Delineation Report* was approved by INDOT EWPSO on November 29, 2023. Please refer to Appendix F, page 1 for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that three likely jurisdictional wetlands are located within the investigated area and will be impacted by the project. An approved jurisdictional determination was completed by the USACE on March 6, 2024. The USACE determined that Wetlands 1, 2, and 3 are non-jurisdictional (Appendix F, page 43).

Wetland 1 is an approximately 0.02-acre palustrine emergent wetland (PEM) of poor quality that is located on the north side of SR 128 and the east side of SR 13. Hydrology within Wetland 1 is due to roadside drainage retention.

Wetland 2 is an approximately 0.12-acre PEM of poor quality that is located at the northeast quadrant of the intersection of SR 13 and SR 128. Hydrology within Wetland 2 is due to roadside drainage retention.

Wetland 3 is an approximately 0.03-acre PEM of poor quality that is located at the southeast quadrant of the intersection of SR 13 and SR 128. Hydrology within Wetland 3 is due to roadside drainage retention.

Permanent impacts to Wetland 2 (0.12 acre) and Wetland 3 (0.03 acre) are anticipated due to roadway installation, stormwater pipes, and detention pond grading. There will be no impacts to Wetland 1. There will be no temporary impacts to wetlands. Avoidance was

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not practicable, as project limits have been constrained to the smallest possible to complete the project. Wetland 1 will be marked as "Do Not Disturb" on the project plans.

Per coordination with INDOT EWPO on May 20, 2024, a USACE Section 404 Nationwide Permit (NWP) and an IDEM Section 401 Water Quality Certification (WQC) NWP 33 will likely be required.

IDNR-DFW responded on August 9, 2023, with standard recommendations regarding wetland impacts (Appendix C, pages 11 to 15). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Terrestrial Habitat

Presence

☒ X

Impacts

Yes

☒ X

No

☐

Total terrestrial habitat in project area: 1.76 Acre(s) Total tree clearing: 0.96 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 May 10, and August 9, 2023, by KEG, and the aerial map of the project area (Appendix B, page 1), there are forested tracts, agricultural fields, shrubs, and trees, typical of a rural setting, surrounding the project area. The dominant species include false Japanese Honeysuckle (*Lonicera japonica*), Canada Goldenrod (*Solidago canadensis*), and Reed Canary Grass (*Phalaris arundinacea*). Approximately 1.76 acre of terrestrial habitat will be disturbed due to construction of the single lane roundabout. Disturbed areas will be re-seeded post-construction to return the site as close as possible to pre-construction conditions. An estimated 0.96 acre of trees will be removed from the northeast quadrant of the intersection. The dominate species of trees to be removed include black walnut (*Juglans nigra*), sugar maple (*Acer saccharum*), and Eastern redbud (*Cercis canadensis*). Avoidance alternatives would not be practical as the project limits have been constrained to the smallest area possible to complete the project. Mitigation is not anticipated.

The IDNR-DFW responded on August 9, 2023, regarding tree removal dates, tree removal within a regulated floodway, revegetation, and erosion control (Appendix C, pages 11 to 15). 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

☒ X

No

☐

Determination Received for Listed Bats from USFWS:

NE ☐

NLAA ☒ X

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

☐

☒ X

No

☒ X

Migratory Birds

Known usage or presence of birds (i.e. nests)

State bird species based upon coordination with IDNR

Yes

☐

☐

No

☒ X

☒ X

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

This is page 13 of 27 Project name: SR 13, Intersection Improvement Date: December 20, 2024

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Based on a desktop review and the RFI report (Appendix E), completed by KEG on May 1, 2023, the IDNR Hamilton, Madison, and Tipton County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated August 9, 2023 (Appendix C, pages 11 to 15), the Natural Heritage Program's Database has been checked and the Little Spectaclecase (*Villosa lienesa*), a Species of Special Concern in Indiana, has been documented within 0.5 miles of the project site. Because work is not proposed in or near Duck Creek, significant or detrimental impacts to the Little Spectaclecase is not anticipated as a result of this project so long as appropriate erosion and sediment control measures are in place to minimize movement of sediment into nearby waterways (Appendix C, page 11). No further coordination is required for this species. An INDOT 0.5-mile bat review occurred on March 27, 2023, and did not indicate the presence of endangered bat species in or within the project area.

The project qualifies for the *Rangewide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between the FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on October 31, 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, pages 39 to 53). INDOT reviewed and verified the effect finding on October 31, 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. General construction, tree removal, and lighting Avoidance and Minimization Measures (AMMs) are applicable to this project. AMMs and/or commitments are included as firm commitments in the Environmental Commitments section of this document.

Structure CLV-013-048-20.9 (CLV-43727) and the project's surrounding habitat is conducive for use (i.e., nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the 107-C-273 Migratory Bird Protection Recurring Special Provision (RSP).

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study/report was completed and results. (Karst investigation must comply with the current Karst MOU and coordinated and reviewed by INDOT EWPO)

Based on a desktop review and the Indiana Karst Region Map, the project is not located in the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topo map of the project area (Appendix B, page 1) and the RFI report (Appendix E), there are no karst features identified within or adjacent to the project area. In the early coordination response on July 10, 2023, the IGWS did not indicate that karst features exist in the project area (Appendix C, pages 3 to 4). IGWS did indicate moderate liquefaction potential, one percent annual chance flood hazard, high potential bedrock resource, low potential sand and gravel resource, and active or abandoned petroleum exploration wells. The RFI report identified four petroleum wells located within 0.5 mile of the project area (Appendix E, page 3). The features will not be affected because the project is not within the vicinity of these wells. Response from IGWS has been communicated with the designer on October 8, 2024. 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

X

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.

This project is located in Hamilton, Madison, and Tipton Counties, which are 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.

In an early coordination letter dated July 25, 2023, IDEM stated the project is not located within a wellhead area; however, the project is located within a Source Water Assessment area for a Public Water Supply System (PWSS) surface water intake (Appendix C, pages 9 to 10). A subsequent early coordination letter was sent to the PWSS, Citizens Water – Indianapolis on November 10, 2023. A response from Citizens Water – Indianapolis was not received within the 30 day timeframe. No impacts are expected.

The IDNR Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on November 10, 2023, by KEG. No wells are located near this project. Therefore, no impacts are expected.

Based on a desktop review of the INDOT Roadway Inventory and Functional Class Viewer by KEG on November 10, 2023, (<https://indot.maps.arcgis.com/apps/webappviewer/index.html?id=df731deea704512923b7732ed3ddad2>) this project is not located in an Urban Area Boundary. No impacts are expected.

Based on a desktop review, a site visit on May 10, and August 9, 2023, by KEG, and the aerial map of the project area (Appendix B, page 1), no public water systems were identified. Therefore, no impacts are expected.

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Floodplains

Project located within a regulated floodplain

Longitudinal encroachment

Transverse encroachment

Homes located in floodplain within 1000' up/downstream from project

Presence

X
X
X

Impacts

Yes	No
X	
X	
	X

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.

Based on a desktop review of The IDNR's Indiana Floodway Information Portal website (<http://dnrmmaps.dnr.in.gov/appsphp/fdms/>) by KEG on November 20, 2023, and the RFI report, this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, page 18). An early coordination letter was sent on July 10, 2023, to the local Floodplain Administrator. The Floodplain Administrator did not respond within the 30-day time frame. This project qualifies as Category 4 per the current INDOT CE Manual, which states, one homestead is located within the base floodplain within 1,000 feet downstream. The proposed structure will have an effective capacity such that backwater surface elevations are not expected to substantially increase. As a result, there will be no substantial adverse impacts on natural and beneficial floodplain values; there will be no substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not substantial.

Farmland

Agricultural Lands

Prime Farmland (per NRCS)

Presence

X
X

Impacts

Yes	No
X	
X	

Total Points (from Section VII of CPA-106/AD-1006*)

Hamilton
County
(114)/Tipton
County
(111)/Madison
County (129)

*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 May 10, 2023, by KEG, and the aerial map of the project area (Appendix B, page 1) the project will convert 0.72 acres of farmland in Madison County as defined by the Farmland Protection Policy Act. An early coordination letter was sent on July 10, 2023, to the Natural Resources Conservation Service (NRCS). Coordination with the NRCS resulted in scores of 114 (Hamilton County), 111 (Tipton County), and 129 (Madison County) on the AD 1006 Forms (Appendix C, pages 6 to 8). 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.

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SECTION D – CULTURAL RESOURCES

Minor Projects PA Category(ies) and Type(s) INDOT Approval Date(s) N/A ☒

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:

☒
☒
☒
☐
☒
☐
☐

ESD Approval Date(s)

April 28, 2023
July 23, 2024
January 3, 2024

June 3, 2024

SHPO Approval Date(s)

May 30, 2023 (ECL/APE)
August 19, 2024
February 1, 2024

July 8, 2024

MOA Signature Dates (List all signatories)

Memorandum of Agreement (MOA) ☐

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.

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires that federal agencies identify and assess the effects of federal projects, programs, and actions on historic resources. This includes projects that are supported by federal funds. The Section 106 process was managed by Michael Baker International, who is listed on the IDNR Department of Historic Preservation and Archaeology's Roster of Qualified Professionals.

Area of Potential Effects (APE): Pursuant to 36 CFR 800.16(d), the APE for aboveground resources included properties adjacent to and/or within view of the project (Appendix D, page 3). The APE for archaeology included all existing and proposed ROW (Appendix D, page 11).

Coordination with Consulting Parties: Early coordination was initiated on April 27 and 28, 2023, with a letter inviting organizations and individuals to become consulting parties (Appendix D, pages 18 to 20). The Indiana State Historic Preservation Officer (SHPO) from IDNR Division of Historic Preservation (DHPA) is a designated consulting party. The following is a list of the organizations formally invited to become a consulting party (those who agreed to be consulting parties are shown in bold),

- **Beth McCord, State Historic Preservation Officer (automatic consulting party)**
- Darlene Likens, Commissioner, Madison County
- John Richwine, Commissioner, Madison County
- Olivia Pratt, Commissioner, Madison County
- Tracey Powell, Commissioner, Tipton County
- Dennis Henderson, Commissioner, Tipton County
- Nancy Cline, Commissioner, Tipton County
- Mark Heirbrandt, Commissioner, Hamilton County
- Christine Altman, Commissioner, Hamilton County
- Steve Dillinger, Commissioner, Hamilton County

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- Jerrold Bridges, Regional Director, Madison County Council of Governments (MCCOG)
- Dave Benefiel, ACIP, Principal Transportation Planner, Anderson MPO
- **Brittany Miller, Eastern Regional Office, Director, Indiana Landmarks**
- **Alex Brooks, Community Preservation Specialist, Indiana Landmarks**
- Stephen T. Jackson, Madison County Historian
- David Heighway, Hamilton County Historian
- Richard E. Kreeger, President, Madison County Historical Society
- Tipton County Historical Society
- Hamilton County Historical Society
- Scott Harless, Highway Superintendent, Madison County
- Bret Morris, Highway Superintendent, Tipton County
- Bradley Davis, Highway Director, Hamilton County
- Absentee Shawnee Tribe of Oklahoma
- **Delaware Nation of Oklahoma**
- Delaware Tribe of Indians
- **Eastern Shawnee Tribe of Oklahoma**
- **Miami Tribe of Oklahoma**
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- **Shawnee Tribe**

The following is a summary of the comments of the consulting parties following the distribution of the early coordination materials:

- May 1, 2023: An email from Brittany Miller, Indiana Landmarks Eastern Regional Office Director, accepting the invite for consultation, and included individuals who represent Hamilton and Tipton Counties (Appendix D, page 21).
- May 1, 2023: An email from Alex Brooks, Indiana Landmarks Community Preservation Specialist, accepting the invite for consultation (Appendix D, page 22).
- May 5, 2023: An email from the Tribal Historic Preservation Officer (THPO) of the Miami Tribe of Oklahoma stating no objection to the project, as the tribe is not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Indiana, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of the project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of the discovery (Appendix D, page 23).
- May 30, 2023: An email from the Historic Preservation Director of the Delaware Nation of Oklahoma was received accepting the invitation for consultation regarding the project. The Preservation Director indicated the location of the project does not endanger any known cultural or religious sites of interest to the Delaware Nation; however, there is always the potential for discovery of archaeological resources. The Preservation Director also requested that ground disturbing activities and construction be halted if human remains or any Native American archaeological resources inadvertently be uncovered and notify appropriate state agencies and Delaware nation within 24 hours (Appendix D page 24).
- May 30, 2023: A letter from SHPO stated that they were unaware of any additional consulting parties that should be invited to participate in the Section 106 process beyond those who already invited. If ROW is to be taken from a potentially historic property, owners of the property should be invited as soon as possible (Appendix D, pages 25 to 26).
- June 7, 2023: An email from the THPO of the Shawnee Tribe accepting the invitation for consultation and stated there are no issues or concerns at this time. The THPO added that in the event archaeological materials are encountered during construction, use, or maintenance of this location, that the THPO be notified (Appendix D, page 27).
- June 16, 2023: An email from the THPO of the Eastern Shawnee Tribe of Oklahoma stating the project proposes no adverse effect or endangerment to known sites of interest to the Eastern Shawnee Tribe. THPO added, though should this project inadvertently discover an archaeological site or object(s), that the Eastern Shawnee Tribe and appropriate state agencies be contacted within 24 hours (Appendix D, page 28).

Historic Properties: Micheal Baker International (MBI) prepared a *Historic Property Short Report (HPSR)* (January 3, 2024), that determined there are no properties listed in the NRHP, and no resources were recommended eligible for listing in the NRHP for the purpose of this project (Appendix D, pages 54 to 55).

On January 5, 2024, the Historic Property Short Report (HPSR) was made available to the consulting parties via INDOT's online document portal INSCOPE. The following is a summary of the comments following the distribution of the HPSR:

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- February 1, 2024: The SHPO responded to the letter stating that the APE appears to be of adequate size to encompass the geographic area in which direct and indirect effects of a project of this nature should occur. Additionally, the SHPO agreed with the conclusions of the HPSR that there are no previously recorded National Register of Historic Places (NRHP) listed or eligible resources located within the APE, and the ineligibility of the remaining properties surveyed within the APE for inclusion in the NRHP (Appendix D, pages 32 to 33).
- February 28, 2024: An email from the THPO of the Eastern Shawnee Tribe of Oklahoma, in response to the HPSR, stating again that the project proposes no adverse effect or endangerment to known sites of interest to the Eastern Shawnee Tribe. THPO added, though should this project inadvertently discover an archaeological site or object(s), that the Eastern Shawnee Tribe and appropriate state agencies be contacted within 24 hours (Appendix D, page 34).

Archaeology: Staff for MBI conducted a Phase Ia records check, dated May 24, 2024, and a field reconnaissance on June 1 through June 4, 2024. An *Archaeology Phase Ia Reconnaissance Report (AR)* was prepared, which identified one new archaeological site – 12M0880, through subsurface sampling, consisting of a single, isolated, pre-Contact lithic flake (Appendix D, pages 56 to 58). The site was found to lack information potential and, therefore, is unlikely to yield information important to the interpretation of Indiana prehistory and was recommended ineligible for the NRHP. MBI recommended project clearance and no further archaeological investigations necessary for the site.

The Phase 1a Archaeology Report was distributed to consulting parties on June 4, 2024. On July 8, 2024, the SHPO responded to the AR with concurrence of the finding that further archaeological investigation of site 12M0880 surveyed for the project are unlikely to produce additional important information and no further work in these areas is warranted (Appendix D, pages 36 to 37). Additionally, the SHPO noted that in the event any prehistoric or archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, must be reported under state law within two (2) business days to IDNR-DHPA.

Documentation Finding: INDOT, acting on behalf of FHWA, issued a “No Historic Properties Affected” finding on July 18, 2024 (Appendix D, pages 1 to 2). SHPO concurred with this finding on August 19, 2024 (Appendix D, page 59). No other consulting party comments were received.

Public Involvement: Pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4), the public was provided an opportunity to comment of FHWA’s finding of “No Historic Properties Affected”. A legal advertisement was placed in the *Indianapolis Star*, a local publication, soliciting public input on FHWA’s Section 106 effect finding on August 1, 2024. Comments from the public were accepted for 30 days following the publication of the notice. No comments are received during this period. A copy of the public notice, affidavit of publication area included in Appendix G.

This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

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

	<u>Presence</u>	<u>Use</u>	
		Yes	No
Parks and Other Recreational Land			
Publicly owned park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Publicly owned recreation area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (school, state/national forest, bikeway, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wildlife and Waterfowl Refuges			
National Wildlife Refuge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Natural Landmark	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Wildlife Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Nature Preserve	<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) ☐

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"De minimis" Impact
Individual Section 4(f)
Any exception included in 23 CFR 774.13

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, page 1), and the RFI report (Appendix E), 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 May 10, and August 9, 2023, by KEG, there is one Section 4(f) resource located within or adjacent to the project area. One trail segment is located within the project area. Publicly owned recreational trails are subject to Section 4(f) applicability. On July 10, 2023, an early coordination letter was sent to the Hamilton County Planning Commission. A response was not received within the 30-day timeframe. The project will not use this resource by taking permanent right of way and will not indirectly use the resource in such a way that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Therefore, no 4(f) use is expected.

Section 6(f) Involvement

Presence

Use

Yes

No

Section 6(f) Property

☐☐☐

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 the conversion of lands purchased with LWCF monies to a non-recreation use.

A review of 6(f) properties on the INDOT ESD website revealed a total of 7 properties in Hamilton County, 19 properties in Madison County, and two properties in Tipton County (Appendix I, pages 14 to 16). None of these properties are located within or adjacent to the project area. Therefore, there will be no impact to 6(f) resources.

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

No

X
X
X

X
X

Location in STIP:

Name of MPO (if applicable):

FY 2024-2028,

Initial, September 1, 2023

Madison County Council of Governments
(MCCOG)

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Location in TIP (if applicable):

MCCOG TIP FY 2022-2026

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.

This project is being added to the Fiscal Year (FY) 2022-2026 Madison County Council of Governments (MCCOG) Transportation Improvement Program (TIP) through Resolution 17 (Appendix H, page 5), which will be directly incorporated into the FY 2024-2028 Statewide Transportation Improvement Program (STIP) by Amendment 24-MPO32. This will be updated in the final environmental document. The rural portion of the Fiscal Year (FY) 2024-2028 Statewide Transportation Improvement Program (STIP) is listed based on the lead DES number in the contract. The lead DES number for this contract is 2003082. The FY 2024-2028 STIP includes DES number 2003081 by reference with the contract number R-44024.

This project is located in Hamilton, Tipton, and Madison Counties. Hamilton and Madison County is currently a maintenance area for the 1997 Ozone 8-Hour Standard, which was revoked in 2015 but is being evaluated for conformity due to the February 16, 2018, South Coast Air Quality Management District V. Environmental Protection Agency, Et. Al. Decision. This project has been identified as being exempt from air quality analysis in accordance with 40 CFR Part 93.126 and this project is not a project of air quality concern (40 CFR Part 93.123). Therefore, the project will have no significant impact on air quality.

Tipton County is currently in attainment for all criteria pollutants. Therefore, the conformity procedures of 40 CFR Part 93 do not apply. The project will have no significant impact on air quality.

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 *INDOT Traffic Noise Analysis Procedure*, this action does not require a formal noise analysis.

SECTION H – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

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

Yes No

☒ ☐

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?

☐ ☒

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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)

	X
X	
X	

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 Hamilton County 2020 Comprehensive Plan (<https://www.hamiltoncounty.in.gov/593/Comprehensive-Plan>), the Madison County 2035 Comprehensive Plan (https://www.madisoncounty.in.gov/files/ugd/33570c_daf99c6ff7ee4096a4ef0f33c643fa3a.pdf), and the 2013 Comprehensive Plan for Tipton County (https://www.tiptongov.com/egov/documents/1448920787_67444.pdf) were reviewed by KEG on November 21, 2023. The Plans have adopted a strategy to assist with ensuring the built environment contributes to the safety of the community. The project is not anticipated to negatively affect community cohesion, the local tax base, or property values, since transportation within the community and connectivity to community resources will not be permanently affected.

On October 8, 2024, KEG reviewed www.indianafestivals.org for any special events or festivals in Hamilton County, Madison County, and Tipton County during the construction season (April – October). Nineteen special events or festivals were noted for Hamilton County, twelve special events or festivals were noted for Madison County, and two were noted for Tipton County that occurred in 2024 between April and October that may occur again in 2026. If these events are held during the proposed construction activities, the commute times to events may be impacted causing a short-term impact. Announcements regarding construction activities will be published on the INDOT social media pages and coordination with the community will occur to minimize disruption to the extent possible.

SR 13 will close for approximately 2-3 months. Delays shall occur during construction but will cease with project completion. Temporary community and economic impacts will occur due to increased travel time and expense; therefore, no long-term negative impacts to the community or its economy are expected.

In April 2022, Hamilton County adopted the 2010 ADA Standards for Accessible Design <https://www.hamiltoncounty.in.gov/804/ADA-Transition-Plan-2022>. The Hamilton County ADA Self-Evaluation and Transition Plan includes Title II ADA and Title VI assurances with INDOT and FHWA standards.

In April 2013, the Madison County Council of Governments adopted the 2010 ADA Standards for Accessible Design for the City of Elwood (nearest to the project site) <https://www.heartlandmpo.org/ADATitleVI>. The City of Elwood ADA Transition Plan includes Title II ADA and Title VI assurances with INDOT and FHWA standards.

In September 2022, Tipton County adopted the 2010 ADA Standards for Accessible Design <https://www.tiptongov.com/county/departments/index.php?structureid=164>. The Tipton ADA Transition Plan for Public Facilities is currently in draft and includes Title II ADA and Title VI assurances with INDOT and FHWA standards.

There is no existing ADA infrastructure within the project limits and no ADA infrastructure will be incorporated into the project.

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, page 1), and the RFI report (Appendix E) there is one public facility within the 0.5-mile search radius. There is one trail segment within or adjacent to the project area. No trail segment was observed during the site visit on May 10, and August 9, 2023, by KEG. Coordination with Hamilton County Planning Commission occurred on July 10, 2023. No response was received. Therefore, no impacts are expected. Access to all properties will be maintained during construction.

Although not located within the 0.5-mile search radius, a public use airport, Elwood Airport, is located within 3.8 miles (20,000 feet) of the project area. An early coordination response from INDOT Aviation was received on July 11, 2023, stating that no tall structure

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permit is required for the project as long as all equipment being used is under 200 feet in height (Appendix C, page 16).

Coordination letters were sent to local schools regarding the project. No responses were received. 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?

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

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

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

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 and adverse effect on EJ populations and explain your reasoning. If yes, describe actions to avoid, minimize and mitigate these effects.

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 EJ Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. The project will require 3.26 acres of permanent 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 exist 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's are Hamilton County, Madison County, and Tipton County. The community that overlaps the project area is called the affected community (AC). In this project, the AC-1 is Census Tract 1101.02, Hamilton County, the AC-2 is Census Tract 104, Madison County, and the AC-3 is Census Tract 201, Tipton County. 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 2021 ACS 5-Year Estimates was obtained from the U.S. Census website (<https://data.census.gov/cedsci/>) on November 21, 2023, by KEG. The data collected for minority and low-income populations within the AC are summarized in the below table.

Table: Minority and Low-Income Data (2021: US Census Bureau, ACS 5-Year Estimates)

	COC – Hamilton County	AC-1 – Census Tract 1101.02, Hamilton County
Percent Minority	18	8
125% of COC	22	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	4	1
125% of COC	5	AC < 125% COC
EJ Population of Concern		No

Table: Minority and Low-Income Data (2021: US Census Bureau, ACS 5-Year Estimates)

	COC – Madison County	AC-2 – Census Tract 104, Madison County
Percent Minority	16	5
125% of COC	20	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	15	7
125% of COC	19	AC < 125% COC
EJ Population of Concern		No

Table: Minority and Low-Income Data (2021: US Census Bureau, ACS 5-Year Estimates)

	COC – Tipton County	AC-3 – Census Tract 201, Tipton County
Percent Minority	5	10

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125% of COC	7	AC > 125% COC
EJ Population of Concern		Yes
Percent Low-Income	11	14
125% of COC	13	AC > 125% COC
EJ Population of Concern		Yes

AC-1, Census Tract 1101.02, Hamilton County has a percent minority of 8% which is below 50% and is below the 125% COC threshold. Therefore, AC-1 does not contain a minority population of EJ concern.

AC-1, Census Tract 1101.02, Hamilton County has a percent low-income of 1% which is below 50% and is below the 125% COC threshold. Therefore, AC-1 does not contain a low-income population of EJ concern.

AC-2, Census Tract 104, Madison County has a percent minority of 5% which is below 50% and is below the 125% COC threshold. Therefore, AC-2 does not contain a minority population of EJ concern.

AC-2, Census Tract 104, Madison County has a percent low-income of 7% which is below 50% and is below the 125% COC threshold. Therefore, AC-2 does not contain a low-income population of EJ concern.

AC-3 Census Tract 201, Tipton County has a percent minority of 10% which is below 50% but is above the 125% COC threshold. Therefore, AC-3 has a minority population of EJ concern.

AC-3 Census Tract 201, Tipton County has a percent low-income of 14%, which is below 50% but is above the 125% COC threshold. Therefore, AC-3 has a low-income population of EJ concern.

The identified EJ populations in Tipton County will benefit from the project by having an improved intersection at the project location. Overall, the negative impacts to the identified EJ population of concern will consist of short-term construction impacts resulting from the temporary closures of SR 13 and SR 128. In relationship to the project, the nearest urbanized areas likely servicing the affected community are the City of Elwood, which is approximately four miles to the north on SR 13 and the Town of Frankton, which is approximately four miles to the east on SR 128. During the closures, which are anticipated to last for approximately one construction season and occur in phases, the affected community will be able to use the signed detour via SR 13, SR 28, SR 9, SR 213, and SR 37 to navigate around the closures. Once construction is complete, access along SR 13 and SR 128 at this location will be restored.

The proposed detour of phase one will add approximately 27 miles to vehicle travel. The proposed detour of phase two will add approximately 95 total miles to vehicle travel. The proposed detour of phase three will add approximately 11 miles to vehicle travel. The availability of several local county roads, adding approximately 12 to 15 miles to vehicle travel, offers additional unofficial detours to navigate around the closure area.

The prepared EJ Analysis was sent to INDOT ESD on April 4, 2024. INDOT ESD concurred on April 26, 2024 (Appendix I, page 29). Although the project may cause a temporary adverse impact to the community, impacts have been reduced as much as possible via project design. In addition, the project's detour will be experienced by both EJ and non-EJ populations. Several unofficial detours, offering a slightly shorter route concerning vehicle miles, are also available. The positive impacts of the project will equally benefit the EJ and the non-EJ populations. Therefore, the identified population of EJ concern is not expected to experience a disproportionately high and adverse impact from the project.

The completed analysis, census data sheets, map, and calculations can be found in Appendix I, pages 17 to 28 No further environmental justice analysis is warranted.

Yes No

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?

	X
	X

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.

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No relocations of people, businesses, or farms will take place as a result of this project.

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

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?

Documentation

X

Date RFI concurrence by INDOT SAM (if applicable): June 8, 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 1, 2023, by KEG and INDOT SAM provided their concurrence on June 8, 2023 (Appendix E). One State Cleanup Site is located within 0.5 mile of the project area. KEG reviewed the GIS again on November 19, 2024 and no additional sites were found. None of the hazmat sites identified will impact the project. Further investigation for hazardous material concerns or regulated substances 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

X

IN Department of Environmental Management (401/Rule 5)

Nationwide Permit (NWP)
Regional General Permit (RGP)
Individual Permit (IP)
Isolated Wetlands
Rule 5
Other

X
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."

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Per coordination with INDOT EWPO on May 20, 2024, and INDOT Stormwater Specialists on June 5, 2024, a Construction Stormwater General Permit (CSGP), formerly Rule 5, is anticipated for this project due to at least 1 acre of soil disturbance. Additionally, a 401/404 NWP 14 permit is anticipated for this project. No IDNR Construction in a Floodway (CIF) permit is required because the scope of work falls under the INDOT IDNR Memorandum of Understanding (MOU).

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 ROW amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT Greenfield 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 that would block or limit access (INDOT ESD)
3. Any work in a wetland area within right-of-way or in borrow/waste areas is prohibited unless specifically allowed in the U.S. Army Corps of Engineers permit. (INDOT ESD)
4. Announcements regarding construction activities will be published on the INDOT social media pages and coordination with the community will occur to minimize disruption to the extent possible. (INDOT ESD)
5. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
6. Lighting AMM 2: When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. (USFWS)
7. 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. (USFWS)
8. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
9. Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS and IDNR DFW)
10. Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)
11. Tree Removal AMM 4: Do not remove documented Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or documented foraging habitat any time of year. (USFWS)
Duck Creek is listed 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. (INDOT SAM)
12. Wetland 1, UNT 1 to Duck Creek, UNT 3 to Duck Creek, and the portion of UNT 2 to Duck Creek outside of construction limits will be marked "Do Not Disturb" on project plans. (INDOT ESD)
13. In the event any prehistoric or archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, must be reported under state law within two (2) business days to IDNR-DHPA (IN SHPO).
14. USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after August 9, 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)

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15. Structure CLV-013-048-20.9 (CLV-43727) and the project's surrounding habitat is conducive for use (i.e., nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the 107-C-273 Migratory Bird Protection Recurring Special Provision (RSP). (INDOT ESD)
16. Duck Creek is a regulated drain, and the Hamilton County section is under a maintenance program. Any outlets into Duck Creek must be approved by the Hamilton County Surveyor's Office per IC26-9-27-17. In addition, Hamilton County requires runoff from additional impervious surfaces be detained prior to release. (Hamilton County Surveyor)
17. Coordination with Hamilton County Surveyor regarding section corners and benchmarks will occur prior to Final Tracings. (Hamilton County Surveyor)

Further Consideration:

18. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30. (IDNR-DFW)
19. Plant five trees, one inch to two inches in diameter-at-breast height, for each tree which is removed that is 10 inches or greater in diameter-at-breast height. (IDNR-DFW)
20. Ensure that all repairs are completed with the least toxic epoxy product available, both now and during future maintenance. (IDNR-DFW)
21. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR-DFW)
22. The international Dark-Sky Association has developed recommendations (<https://darksky.org/resources/what-is-light-pollution/light-pollution-solutions/lighting/>) for communities choosing LED lighting systems that will aid in the selection of lighting that is energy and cost efficient, yet ensures safety and security, protects wildlife, and promotes the goal of reducing light pollution: - Always choose fully shielded fixtures that emit no light upward. - Use “warm-white” or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) to minimize harmful blue light emission. - Look for products with adaptive controls like dimmers, timers, and motion sensors. - Consider dimming or turning off lights during non-peak overnight hours. - Avoid the temptation to over-light because of the higher luminous efficiency of LEDs. - Only light the exact space and in the amount required for particular tasks. (IDNR-DFW)
23. The use of sealants that are free of petroleum and coal tar based products is encouraged whenever possible. Where possible, road runoff should be directed to riprap turnouts and sediment filtration prior to entering a stream to reduce impacts to aquatic species. We recommend the use of pollutant trapping technology such as storm drain inserts to reduce the runoff of roadside pollutants. (IDNR-DFW)
24. The Division of Fish and Wildlife recommends considering a more sustainable approach to stormwater management. A more sustainable approach should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, rain gardens, etc.) and recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.). (IDNR-DFW)

Categorical Exclusion Level 2
SR 13 - DES 2003081, Intersection Improvement
Hamilton, Madison, and Tipton Counties, Indiana

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INDOT Aviation	C-16
Hamilton County Surveyor	C-17
United States Coast Guard, Division 8	C-26
USFWS Official IPaC Species List	C-27
USFWS Concurrence Letter.....	C-39
USFWS Bridge/Structure Bat Assessment Form.....	C-54
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Effect Finding, 800.11 Document	D-1
E: Red Flag and Hazardous Materials	
Red Flag Investigation	E-1
F: Water Resources	
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H: Air Quality	
FHWA and FTA Indiana FY2024-2028 STIP Approval Letter	H-1
INDOT MPO Amendment Approval Letter.....	H-3
MCCOG TIP FY 2024-2028	H-4
I: Additional Information	
Engineering Assessment Report.....	I-1
Hamilton, Madison, and Tipton County LWCF Sites.....	I-14

EJ Analysis – US Census Data Sheets, Maps, Calculations, and INDOT ESD	
Concurrence Email	I-17

APPENDIX A

INDOT Supporting Documents

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 <ul style="list-style-type: none"> • District Env. (DE) • Env. Serv. Div. (ESD) • FHWA 	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and 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.

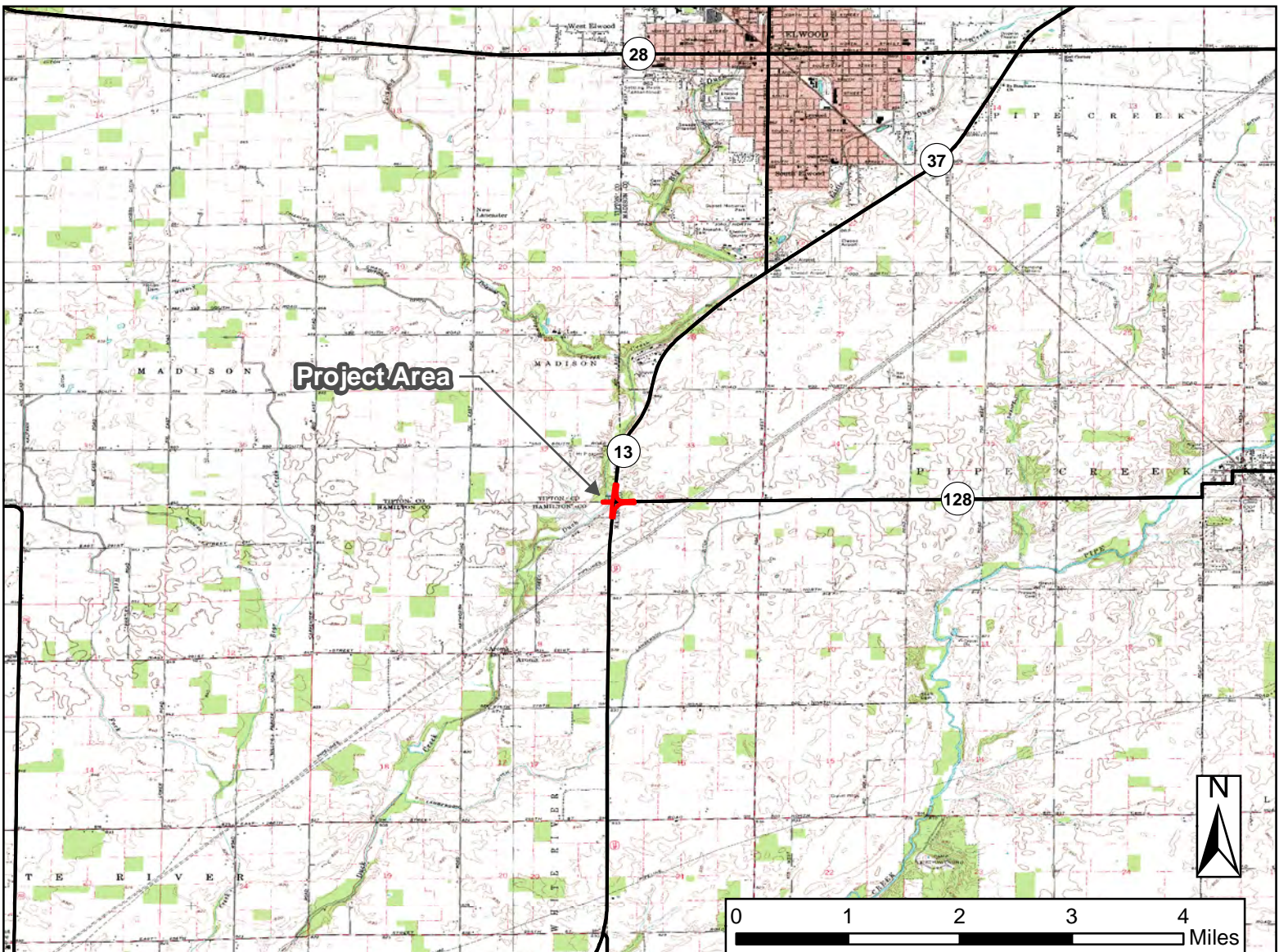
¹¹ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

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

APPENDIX B

Graphics



Site Location Map
SR 13 and SR 128
Des. No. 2003081
Intersection Improvement
Hamilton, Madison, and
Tipton Counties, Indiana

 Project Area



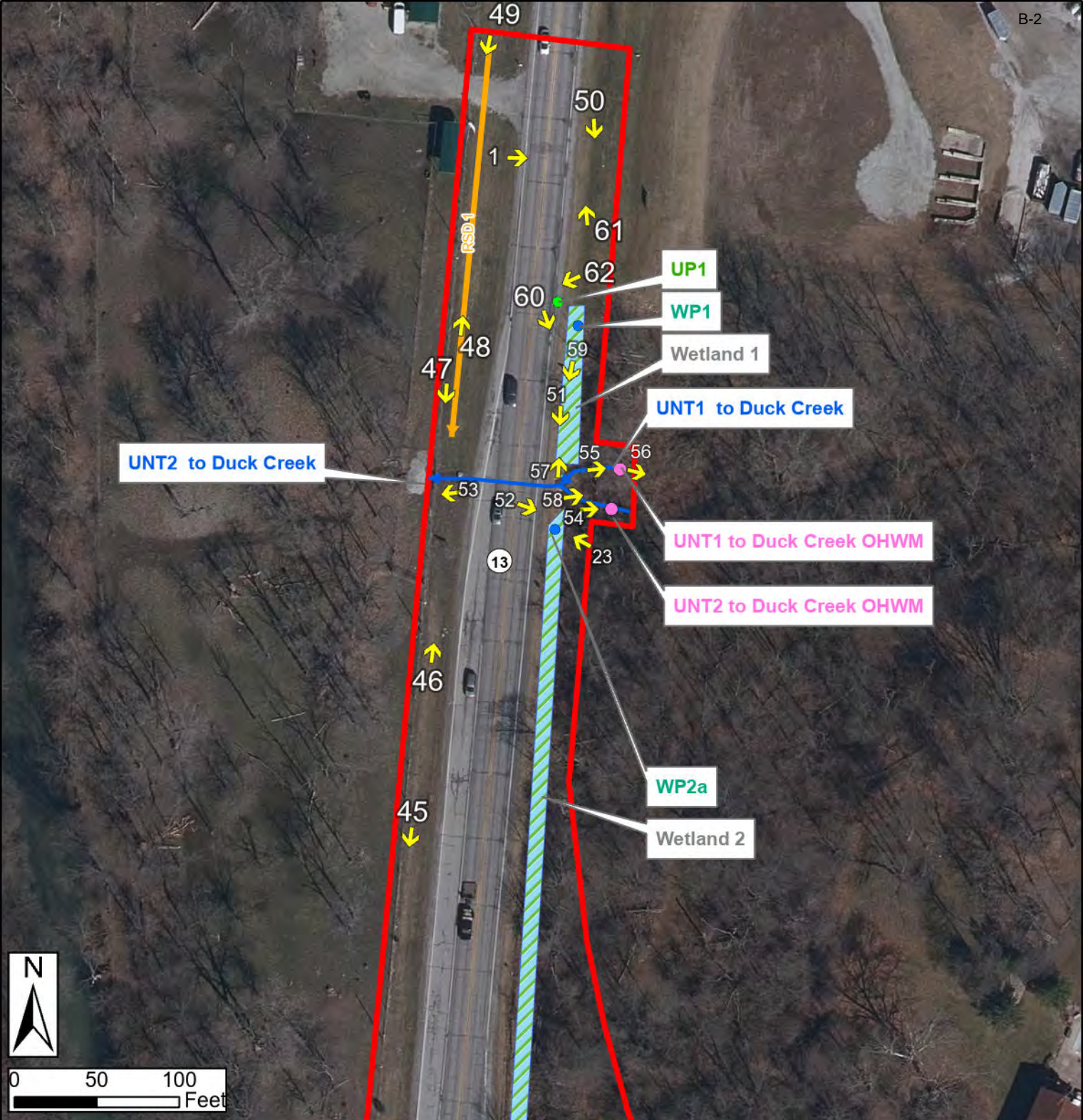


Figure 10 Photo Map
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison,
and Tipton Counties, Indiana
Des. No. 2003081

- Investigated Area
- Wetland
- Ordinary High Water Mark
- Wetland Point
- Upland Point
- Ditch
- Stream
- ↑ Photo Direction

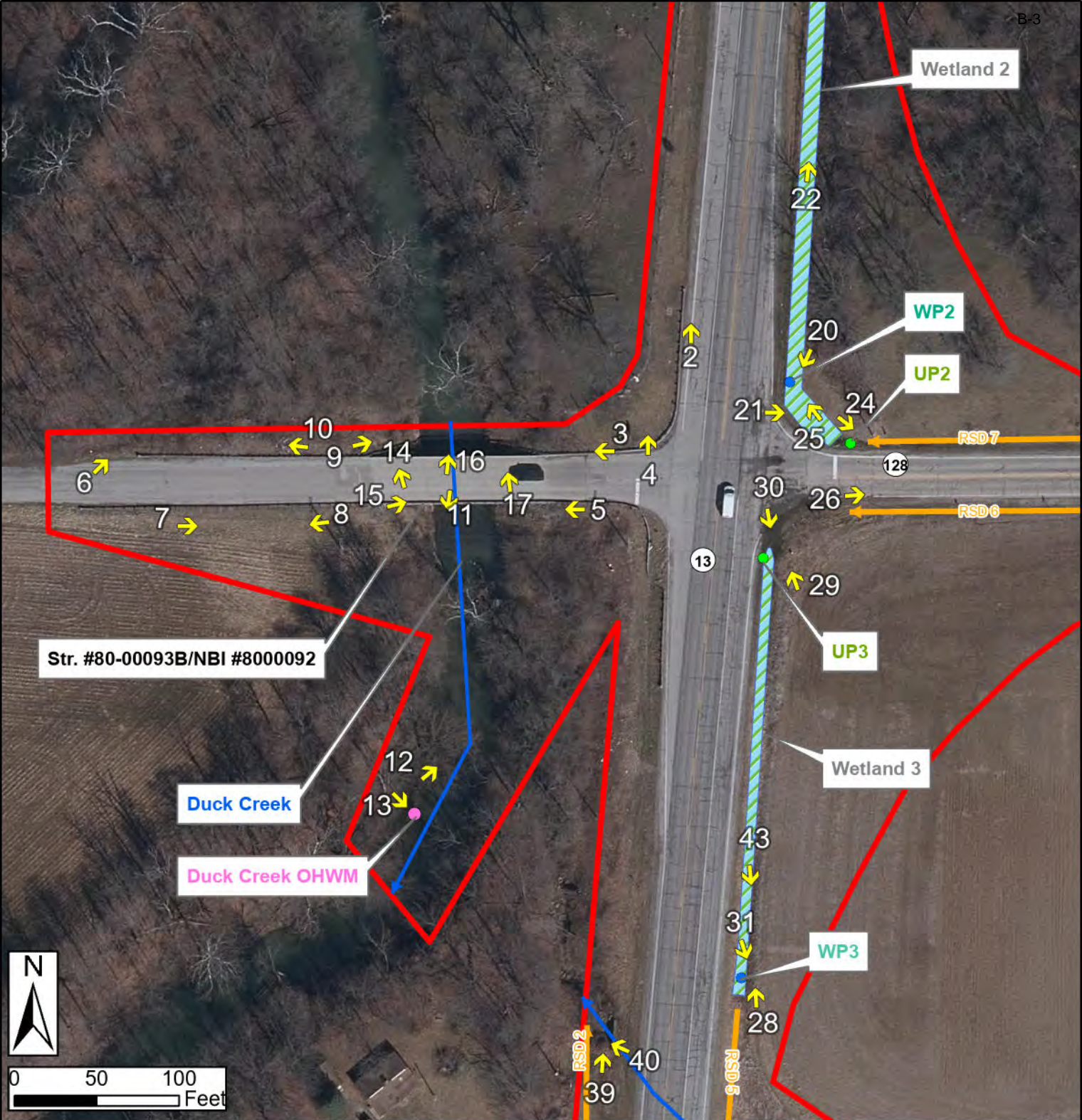


Figure 10 Photo Map
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison,
and Tipton Counties, Indiana
Des. No. 2003081

- Investigated Area
- Wetland
- Ordinary High Water Mark
- Wetland Point
- Upland Point
- Ditch
- Stream
- ↑ Photo Direction



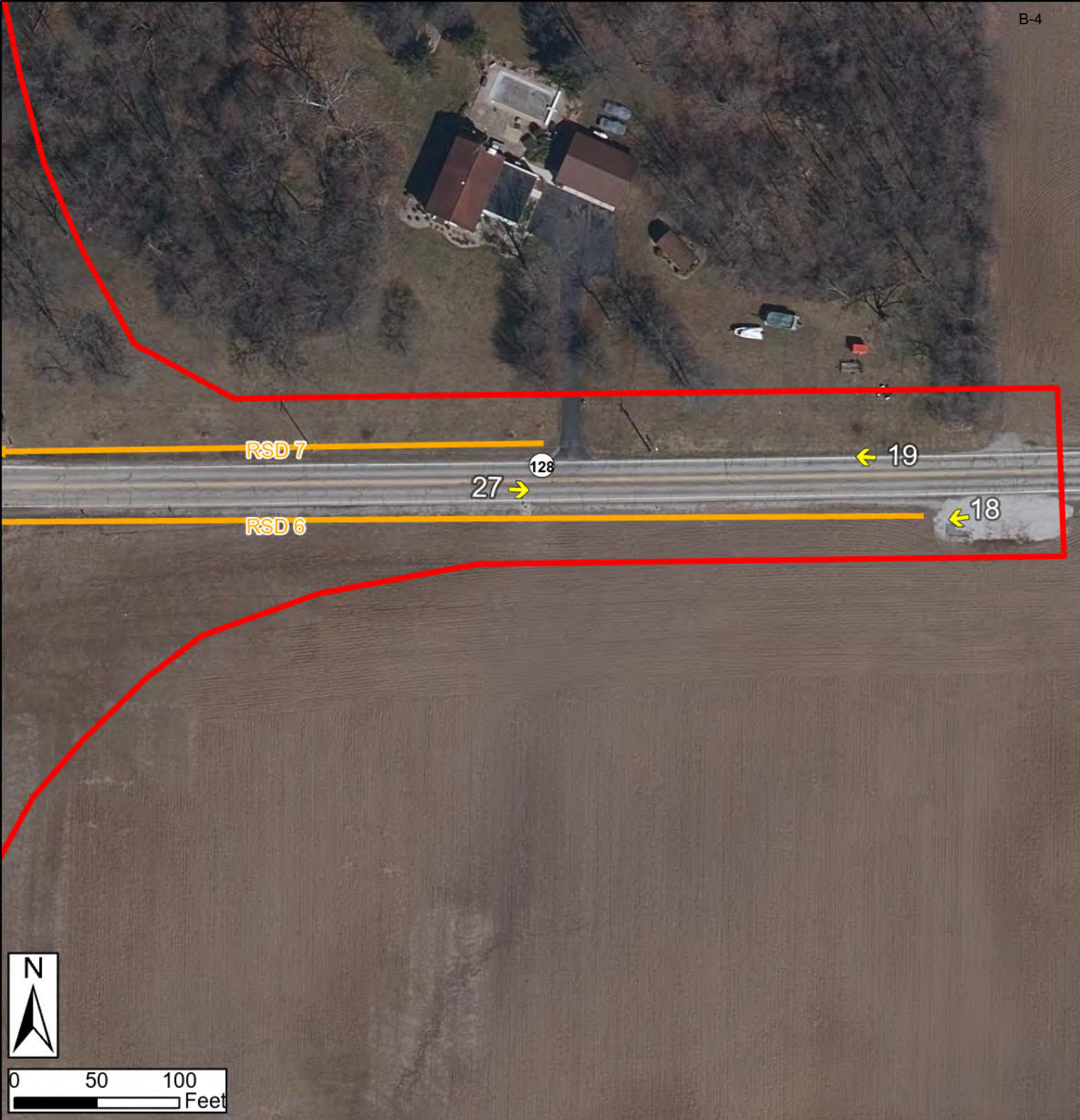


Figure 10 Photo Map
 SR 13 and SR 128
 Intersection Improvement
 Hamilton, Madison,
 and Tipton Counties, Indiana
 Des. No. 2003081

- Investigated Area
- Wetland
- Ordinary High Water Mark
- Wetland Point
- Upland Point
- Ditch
- Stream
- Photo Direction

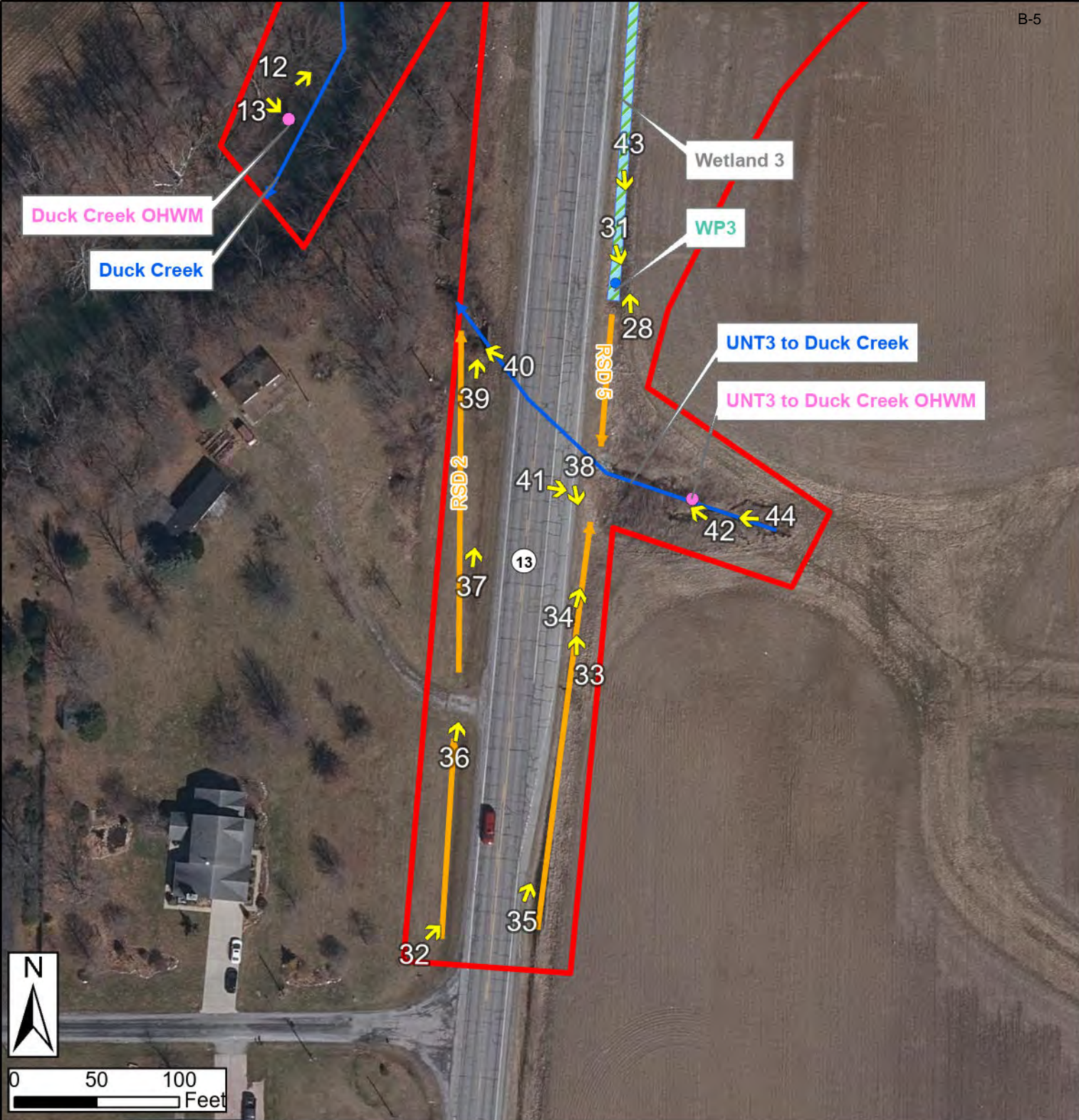


Figure 10 Photo Map
 SR 13 and SR 128
 Intersection Improvement
 Hamilton, Madison,
 and Tipton Counties, Indiana
 Des. No. 2003081

- Investigated Area
- Wetland
- Ordinary High Water Mark
- Wetland Point
- Upland Point
- Ditch
- Stream
- ↑ Photo Direction

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



1. Looking east across SR 13 towards the northeast quadrant.



2. Looking north on SR 13 with the northwest quadrant to the left.



3. Looking west down SR 128 towards Str. #80-00093B/NBI #8000092 over Duck Creek.



4. Looking north from SR 120 towards the northeast quadrant, with SR 13 to the right in the background.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



5. Looking west towards Str. #80-00093B/NBI #8000092 and the southwest quadrant from SR 128.



6. Looking northeast towards the northwest quadrant from SR 128, downstream of towards Str. #80-00093B/NBI #8000092.



7. Looking east towards Duck Creek from the southwest quadrant.



8. Looking west towards the southwest quadrant, with SR 128 to the right.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



9. Looking east towards Duck Creek from the north side of Str. #80-00093B/NBI #8000092 on SR 128



10. Looking west towards the northwest quadrant, north of SR 128.



11. Looking south, downstream, towards Duck Creek from the south deck of Str. #80-00093B/NBI #8000092.



12. Looking northeast from the west bank of Duck Creek, downstream of Str. #80-00093B/NBI #8000092.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



Duck Creek Ordinary High Water Mark
Coordinates: 40.218372, -85.8626

13. Looking southeast on Duck Creek. The OWH was measured approximately 204 feet downstream of Str. #80-00093B/NBI #8000092. The OWHM was observed to be approximately 30-feet wide and 3-feet deep.



14. Looking northwest towards the western backwall of Str. #80-00093B/NBI #8000092.



15. Looking northwest towards the pylon of Str. #80-00093B/NBI #8000092 on the west bank of Duck Creek.



16. Looking north towards Duck Creek from the deck of Str. #80-00093B/NBI #8000092 on SR 128.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



17. Looking north through the eastern backwall of Str. #80-00093B/NBI #8000092.



18. Looking west on SR 128 from the southeast quadrant towards RSD 6 and the SR 13 intersection.



19. Looking west towards RSD 7 from the northeast quadrant towards the SR 13 intersection.



Wetland Point 2
Coordinates: 40.2191, -85.8617

20. The sampled soil profile for Wetland Point 2. The soil was determined to be hydric.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



21. Looking east towards the edge of Wetland 2 north of SR 128. Dominant hydrophytic vegetation included Meadow Foxtail (*Alopecurus pratensis* FACW) and Foxtail Barley (*Hordeum jubatum*, FAC).



22. Looking north towards Wetland 2 in the northwest quadrant. Dominant hydrophytic vegetation included Meadow Foxtail (*Alopecurus pratensis* FACW) and Foxtail Barley (*Hordeum jubatum*, FAC).



23. The sampled soil profile for Wetland Point 2a. The soil was determined to be hydric.



24. The observed soil profile for the sampled point Upland Point 2. The soil was determined to be non-hydric.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



25. Looking northwest towards Wetland 2 on the edge of the northeast quadrant. Dominant hydrophytic vegetation included Meadow Foxtail (*Alopecurus pratensis* FACW) and Foxtail Barley (*Hordeum jubatum*, FAC).



26. Looking east towards RSD 6 in the southeast quadrant.



27. Looking east towards RSD 6 in the southeast quadrant.



28. Looking north towards Wetland 3 from RSD 5 in the southeast quadrant.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



29. The observed soil profile for the sampled point Upland 3. The soil was determined to be non-hydric.



30. Looking south towards Wetland 3 in the southeast quadrant.



31. The observed soil profile for the sampled point Wetland 3. The soil was determined to be hydric.



32. Looking northeast towards RSD 3 in the southwest quadrant.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



33. Looking northeast towards RSD 4 in the southeast quadrant.



34. Looking northeast towards RSD 4 in the southeast quadrant.



35. Looking north towards the edge of RSD 4 in the southeast quadrant.



36. Looking north towards the edge of RSD 3 in the southwest quadrant.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



37. Looking north towards the start of RSD 2 in the southwest quadrant.



38. Looking southeast towards RSD 4 in the southeast quadrant.



39. Looking north towards UNT3 to Duck Creek in the southwest quadrant.



40. Looking northwest downstream towards UNT3 to Duck Creek in the southwest quadrant.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



UNT 3 to Duck Creek OHWM
Coordinates: 40.218372, -85.8626



41. Looking east upstream towards UNT 3 to Duck Creek in the southeast quadrant.

42. Looking northwest upstream of UNT 3 to Duck Creek. The OHWM was measured 70 feet upstream of SR 13. The OHWM was observed to be 6.25 feet wide and 2.41 feet high.



43. Looking south towards Wetland 3 and RSD 5 in the southeast quadrant.

44. Looking west downstream of UNT 3 to Duck Creek towards SR 13.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



45. Looking south towards the northwest quadrant.

46. Looking north towards the northwest quadrant.



47. Looking south towards UNT 2 to Duck Creek in the northwest quadrant.

48. Looking north towards RSD 1 the northwest quadrant.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



49. Looking southwest towards RSD 1 in the northwest quadrant.



50. Looking south towards the northeast quadrant, east of SR 13.



51. Looking south towards Wetland 1 in the northeast quadrant.



52. Looking southeast towards upstream UNT 2 to Duck Creek.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



53. Looking west downstream of UNT 2 to Duck Creek in the northwest quadrant.



54. Looking east upstream of UNT 2 to Duck Creek. The OHWM was measured 38.47 feet from SR 13 and was observed to be 3 feet wide and 0.42 feet high measured from the stream bed.



55. Looking east upstream of UNT 1 to Duck Creek. The OHWM was measured 34.86 feet from SR 13 and was observed to be 2.16 feet wide and 0.25 feet high measured from the stream bed.



56. Looking southeast upstream of UNT 1 to Duck Creek.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



57. Looking north across UNT 2 to Duck Creek in the northeast quadrant.



58. Looking east upstream of UNT 2 to Duck Creek in the northeast quadrant.



Wetland 1

59. Looking south towards Wetland 1 in the northeast quadrant.



Wetland Point 1
Coordinates: 40.2207, -85.8615

60. The sampled soil profile for Wetland Point 1. The soil was determined to be hydric.

Photo Log
Des No. 2003081

SR 13 & SR 128 Intersection, Roundabout Project
Photos Taken: May 10, 2023 and August 9, 2023



61. Looking north towards UP1 in the northeast quadrant, east of SR 13.



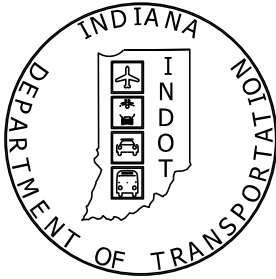
Upland Point 1
Coordinates: 40.2208, -85.8616

62. The observed soil profile for the sampled point Upland Point 1. The soil was determined to be non-hydric.

PROJECT	DESIGNATION
2003082	2003081
CONTRACT	BRIDGE FILE
R-44024	

KIN PROJECT INFORMATION TABLE		
DES. NO.	WORK TYPE	LOCATION
2003082	INTERSECTION IMPROVEMENT	SR13 & STRAWTOWN AVE. (LEAD)
2003081	ROUNDBOUT CONSTRUCTION	SR13 & SR 128/ 296TH STREET

INDIANA DEPARTMENT
OF TRANSPORTATION



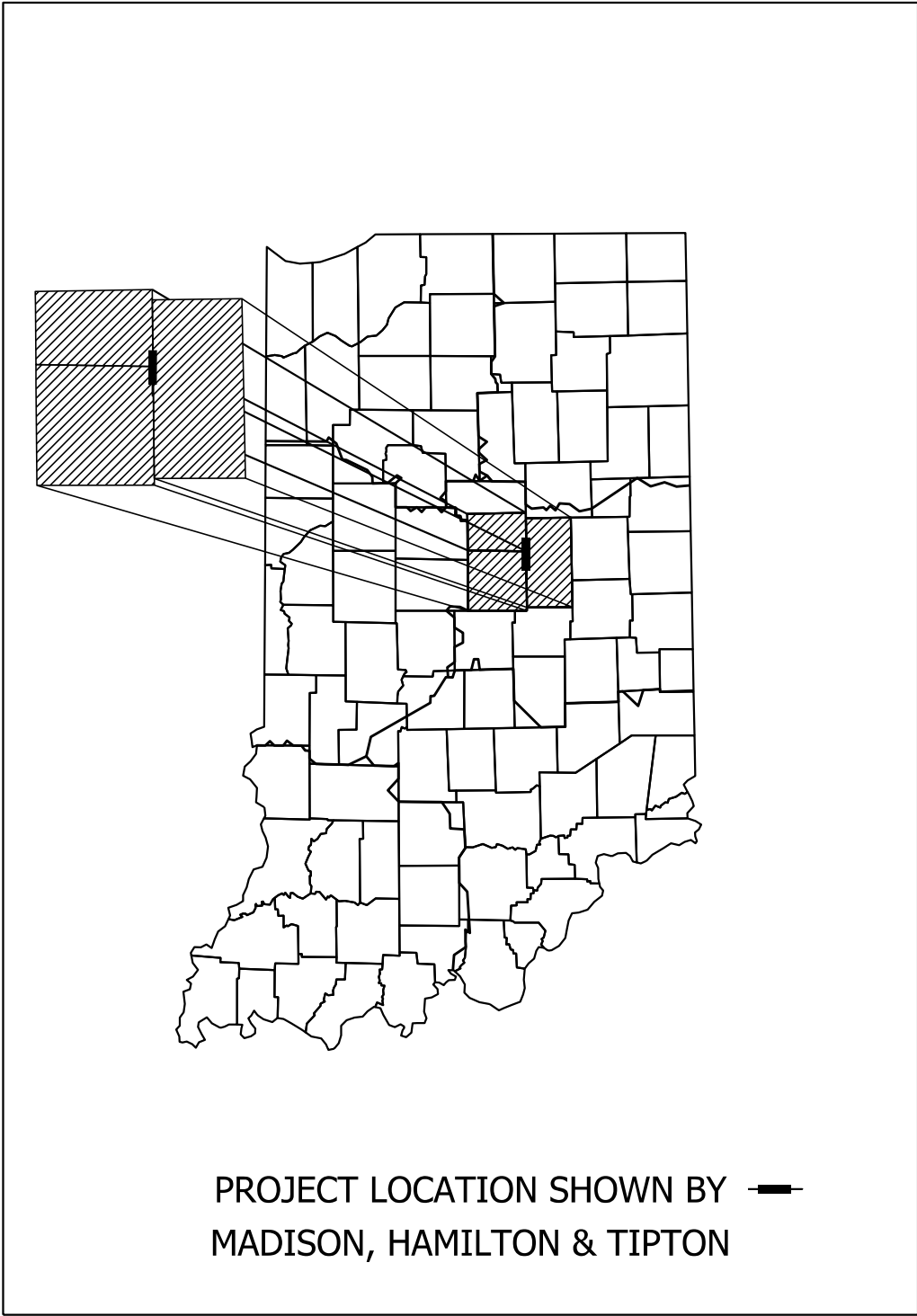
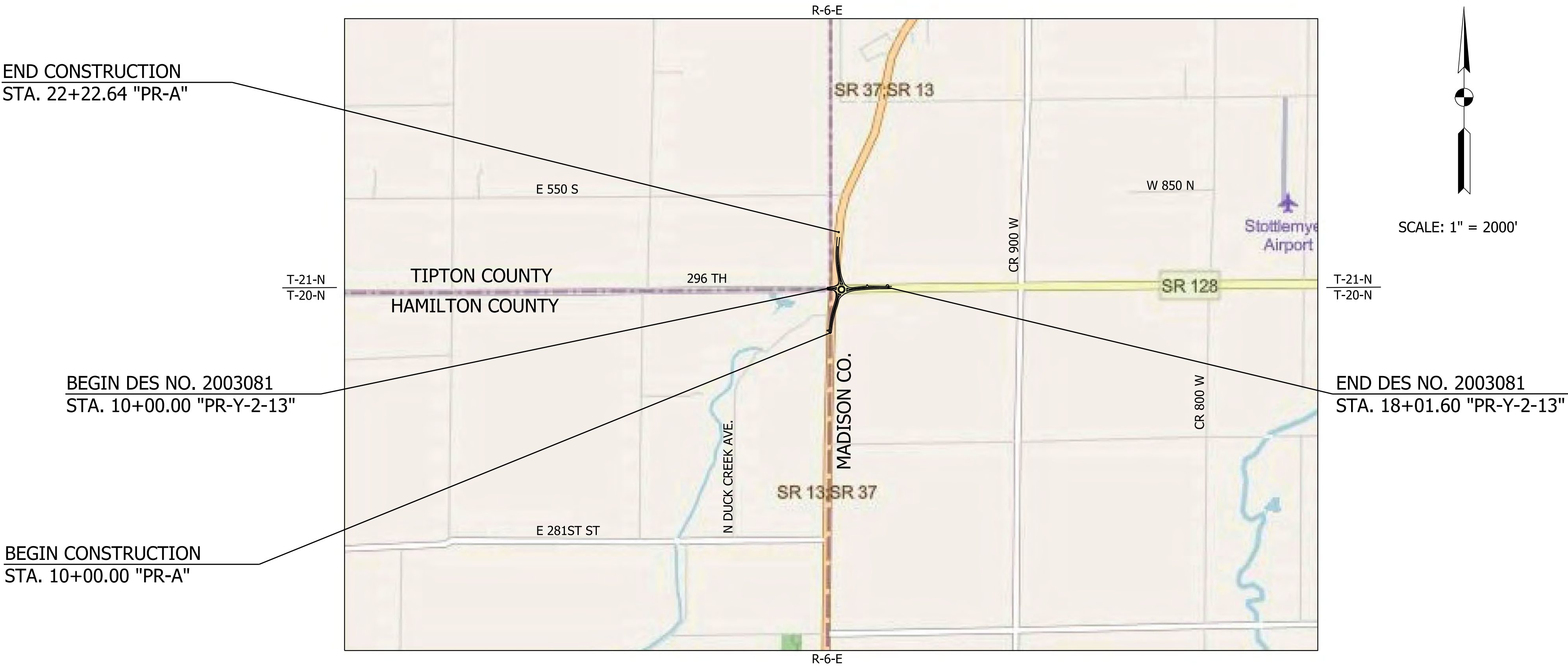
TRAFFIC DATA	SR13	SR 128	296TH ST
AADT (2026)	8,636 VPD	1,452VPD	1,545VPD
AADT (2046)	10,266 VPD	1,725 VPD	1,842 VPD
DHV	1,011 VPH	192 VPH	174 VPH
Directional Distribution	50.3% (NB)	50.1% (EB)	51.2% (EB)
Trucks (% DHV)	3.9% DHV	4.6% DHV	5.7% DHV
Trucks (% ADT)	6.9% ADT	3.6% ADT	6.1% ADT
Design Speed	55 MPH	55 MPH	55 MPH
Project Design Criteria	Reconstruction (Non-Freeway)	Reconstruction (Non-Freeway)	Reconstruction (Non-Freeway)
Functional Classification	Minor Arterial	Major Collector	Major Collector
Rural/Urban	Rural	Rural	Rural
Terrain	Level	Level	Level
Access Control	None	None	None

ROAD PLANS

ROUTE: SR 13 FROM: RP 20+75 TO: RP 21+25

PROJECT NO. 2003082 P.E.
2003082 R/W
2003082 CONST.

ROUNDBOUT CONSTRUCTION AT THE INTERSECTION OF SR 13/37 WITH SR 128 TO THE EAST, AND WITH E 296TH ST TO THE WEST,
ON THE BOUNDARIES OF MADISON, TIPTON, AND HAMILTON COUNTIES.



LATITUDE: 40° 13' 8.13" N, LONGITUDE: 85° 51' 43" W

HUC 12-051202010505

BRIDGE LENGTH:	N/A	MI.
ROADWAY LENGTH:	0.34	MI.
TOTAL LENGTH:	0.34	MI.
MAX. GRADE:	3.80	%

LOCATION MAP
MADISON, HAMILTON & TIPTON

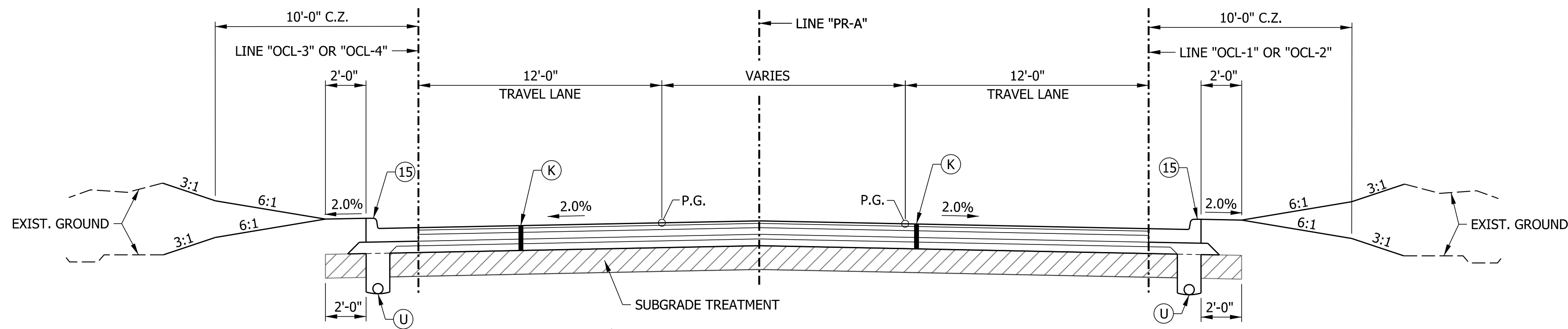
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2024
TO BE USED WITH THESE PLANS

Michael Baker
INTERNATIONAL

Michael Baker International, Inc.
3815 River Crossing Parkway, Suite 20
Indianapolis, IN 46240
Tel: 317-663-8430 Fax: 317-663-8410
www.mbakertntl.com

PLANS PREPARED BY:	Michael Baker International, Inc.	317-663-8430 PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

	BRIDGE FILE		
	DESIGNATION		
	2003081		
SURVEY BOOK	SHEETS		
	1	of	60
CONTRACT	PROJECT		
R-44024	2003082		

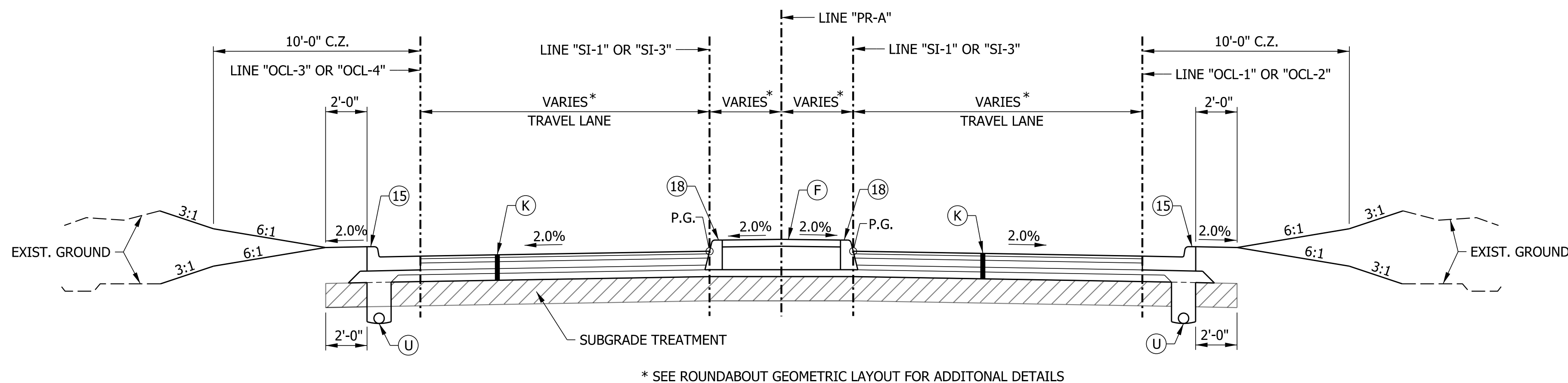


TYPICAL SECTION - COMBINED CURB & GUTTER, ROUNDABOUT APPROACH

STA. 11+50.00 TO STA. 13+26.80 LINE "PR-A"
STA. 19+65.77 TO STA. 21+10.00 LINE "PR-A"

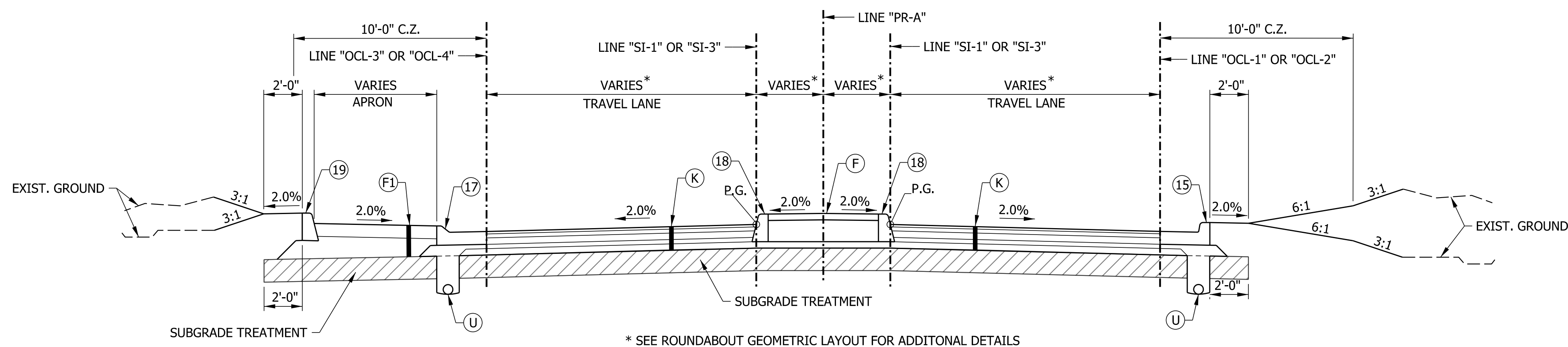
LEGEND

- (K) FULL DEPTH HMA PAVEMENT (TBD)
- (R) HMA, MILL AND OVERLAY (TBD)
- (F) SIDEWALK, CONCRETE
- (F1) TRUCK APRON (TBD)
- (O) COMPACTED AGGREGATE, NO. 53
- (U) UNDERDRAIN, TYPE 4, 6"
- (15) CURB & GUTTER, CONCRETE
- (17) CURB & GUTTER, B, CONCRETE, MODIFIED I
- (18) CURB, CONCRETE
- (19) CURB, INTEGRAL, CONCRETE
- (20) CURB & GUTTER, B, CONCRETE, MODIFIED II
- (26) MULCHED SEEDING, R



TYPICAL SECTION - COMBINED CURB & GUTTER, MEDIAN CONCRETE ISLAND

STA. 13+26.80 TO STA. 14+83.65 LINE "PR-A"
STA. 17+44.24 TO STA. 19+65.77 LINE "PR-A"



TYPICAL SECTION - COMBINED CURB & GUTTER, MEDIAN CONCRETE ISLAND, LEFT APRON

STA. 14+83.65 TO STA. 15+76.20 LINE "PR-A"
STA. 17+17.81 TO STA. 17+44.24 LINE "PR-A"

RECOMMENDED
FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AGO

DRAWN: JEC

CHECKED: WRC

CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS
LINE "PR-A"

HORIZONTAL SCALE

1/4" = 1'-0"

VERTICAL SCALE

1/4" = 1'-0"

SURVEY BOOK

CONTRACT

R-44024

BRIDGE FILE

DESIGNATION

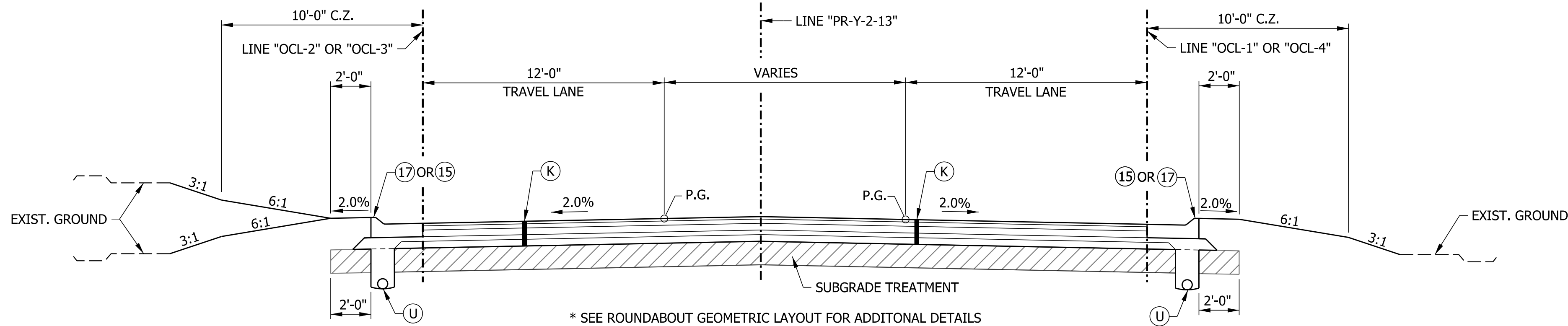
2003081

SHEETS

3 of 60

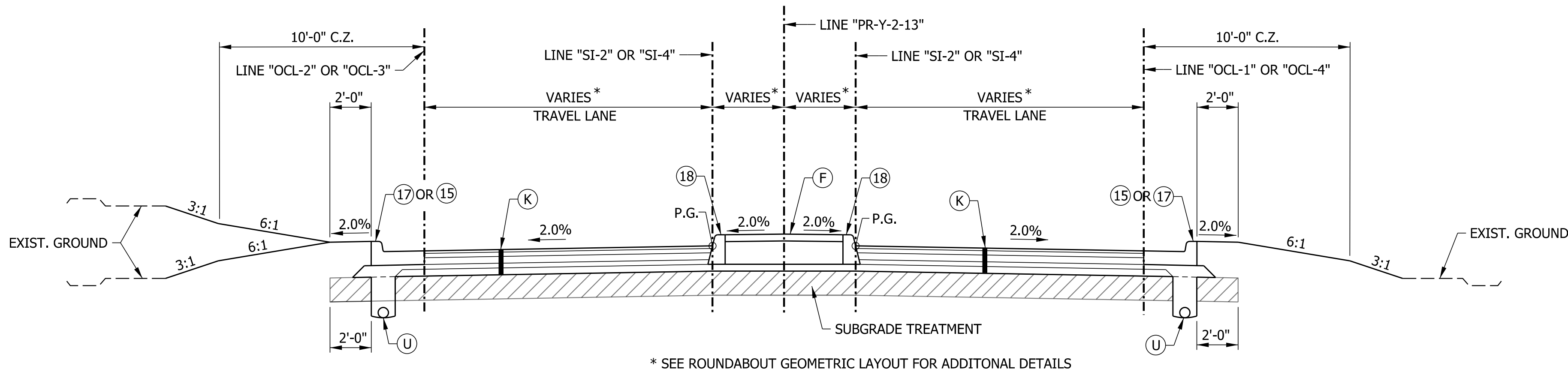
PROJECT

2003082



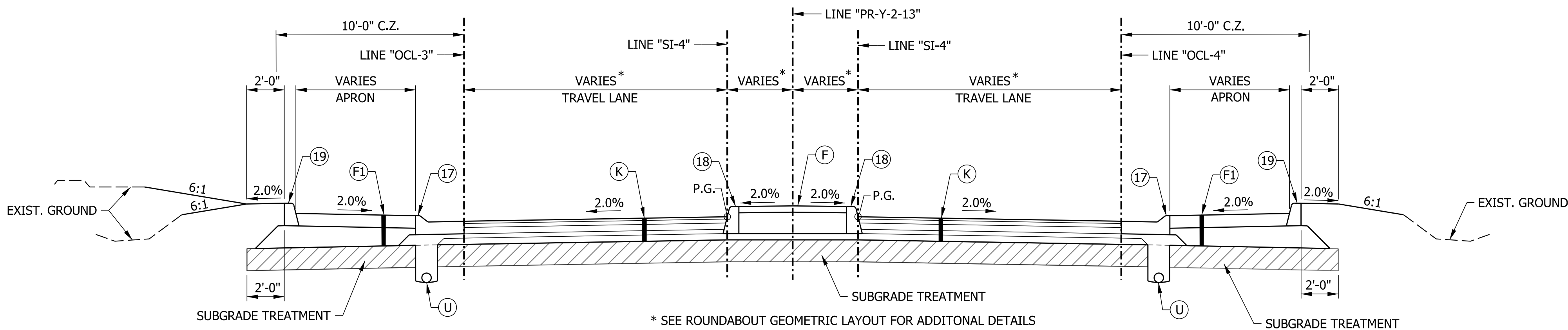
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STA. 10+00.00 TO STA. 10+51.65 LINE "PR-Y-2-13"
STA. 15+02.22 TO STA. 18+01.58 LINE "PR-Y-2-13"



TYPICAL SECTION - COMBINED CURB & GUTTER, MEDIAN CONCRETE ISLAND

STA. 10+51.65 TO STA. 10+72.90 LINE "PR-Y-2-13"
STA. 12+53.91 TO STA. 15+04.42 LINE "PR-Y-2-13"



TYPICAL SECTION - COMBINED CURB & GUTTER, MEDIAN CONCRETE ISLAND, LEFT AND RIGHT TRUCK APRONS

STA. 10+72.90 TO STA. 11+10.12 LINE "PR-Y-2-13"

LEGEND

- (K) FULL DEPTH HMA PAVEMENT (TBD)
- (R) HMA, MILL AND OVERLAY (TBD)
- (F) SIDEWALK, CONCRETE
- (F1) TRUCK APRON (TBD)
- (O) COMPACTED AGGREGATE, NO. 53
- (U) UNDERDRAIN, TYPE 4, 6"
- (15) CURB & GUTTER, CONCRETE
- (17) CURB & GUTTER, B, CONCRETE, MODIFIED I
- (18) CURB, CONCRETE
- (19) CURB, INTEGRAL, CONCRETE
- (20) CURB & GUTTER, B, CONCRETE, MODIFIED II
- (26) SODDING, NURSERY

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: AGO DRAWN: JEC
CHECKED: WRC CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS
LINE "PR-Y-2-13"

HORIZONTAL SCALE

1/4" = 1'-0"

VERTICAL SCALE

1/4" = 1'-0"

SURVEY BOOK

CONTRACT

R-44024

BRIDGE FILE

DESIGNATION

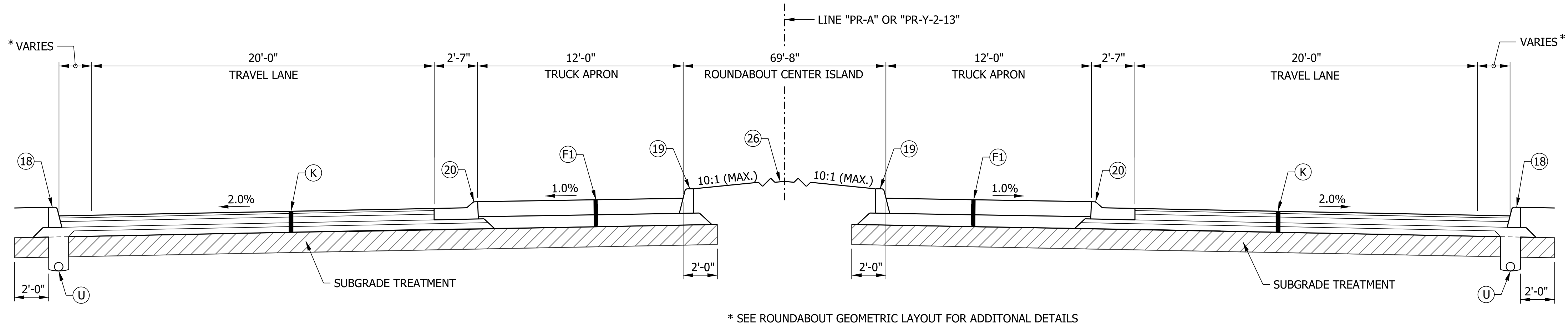
2003081

SHEETS

4 of 60

PROJECT

2003082

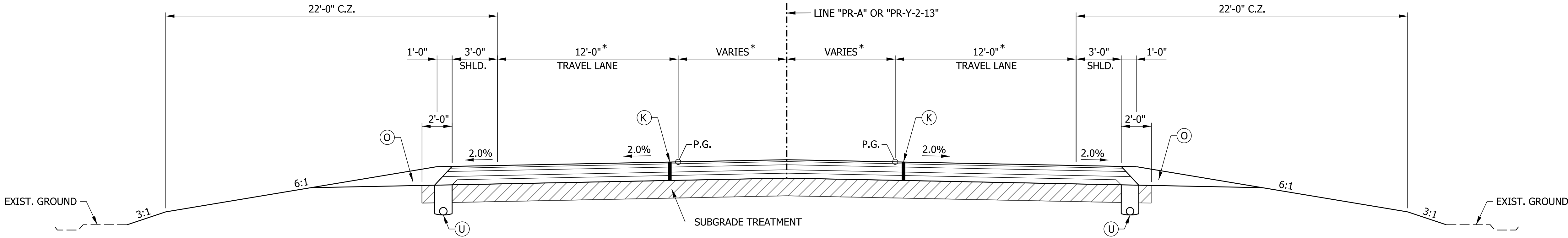


- LEGEND**
- (K) FULL DEPTH HMA PAVEMENT (TBD)
 - (R) HMA, MILL AND OVERLAY (TBD)
 - (F) SIDEWALK, CONCRETE
 - (F1) TRUCK APRON (TBD)
 - (O) COMPACTED AGGREGATE, NO. 53
 - (U) UNDERDRAIN, TYPE 4, 6"
 - (15) CURB & GUTTER, CONCRETE
 - (17) CURB & GUTTER, B, CONCRETE, MODIFIED I
 - (18) CURB, CONCRETE
 - (19) CURB, INTEGRAL, CONCRETE
 - (20) CURB & GUTTER, B, CONCRETE, MODIFIED II
 - (26) SODDING, NURSERY

* SEE ROUNDABOUT GEOMETRIC LAYOUT FOR ADDITIONAL DETAILS

TYPICAL SECTION - ROUNDABOUT

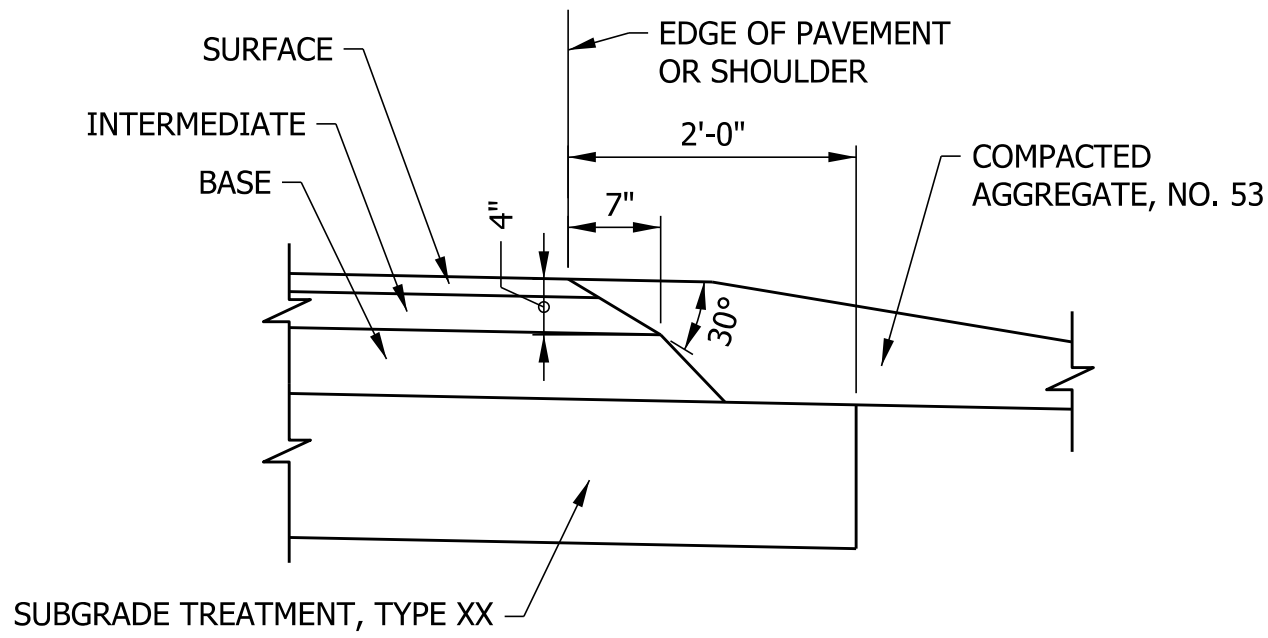
STA. 15+48.51 TO STA. 16+45.94 LINE "PR-A"
STA. 11+32.17 TO STA. 12+31.90 LINE "PR-Y-2-13"



* SEE ROUNDABOUT GEOMETRIC LAYOUT FOR ADDITIONAL DETAILS

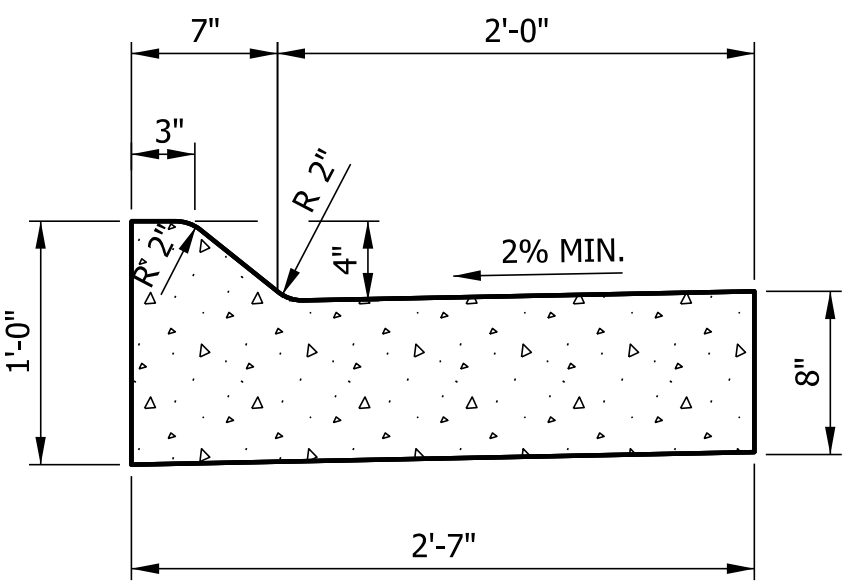
TYPICAL SECTION

STA. 10+00.00 TO STA. 11+50.00 LINE "PR-A"
STA. 21+10.00 TO STA. 22+22.64 LINE "PR-A"
STA. 15+04.42 TO STA. 18+00.00 LINE "PR-Y-2-13"



SAFETY EDGE ON HMA PAVEMENT

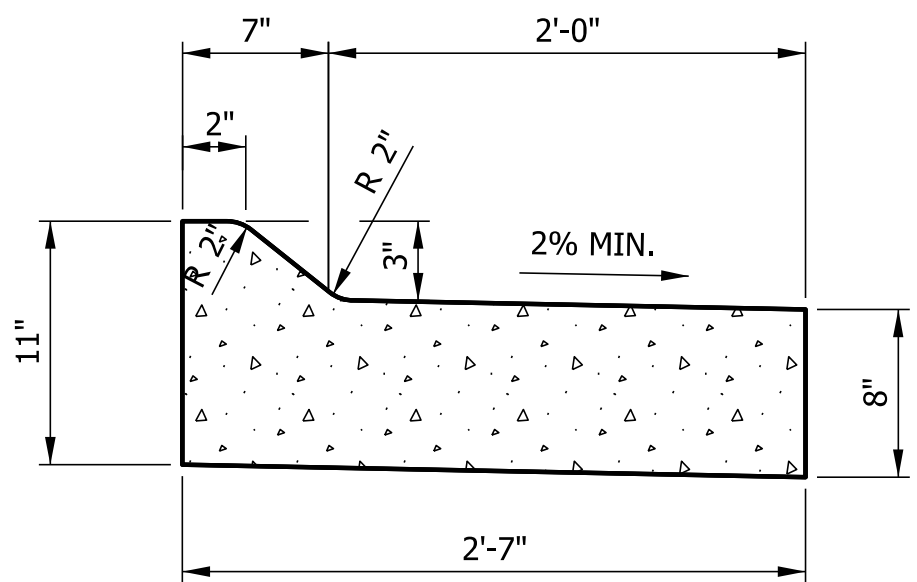
SCALE: N.T.S.



CURB AND GUTTER, B, CONCRETE MODIFIED, I

NOT TO SCALE

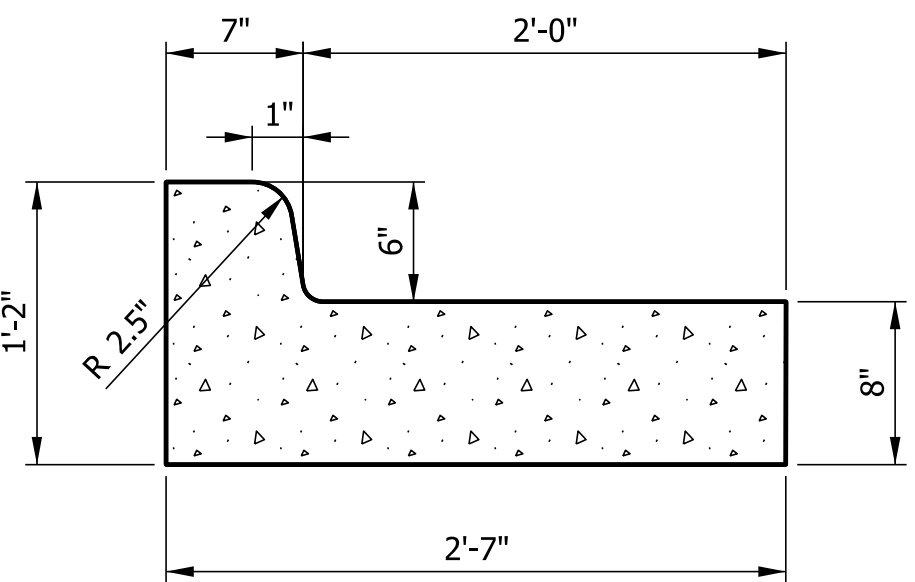
(17)



CURB AND GUTTER, B, CONCRETE MODIFIED, II

NOT TO SCALE

(20)



COMBINED CONCRETE CURB AND GUTTER

NOT TO SCALE

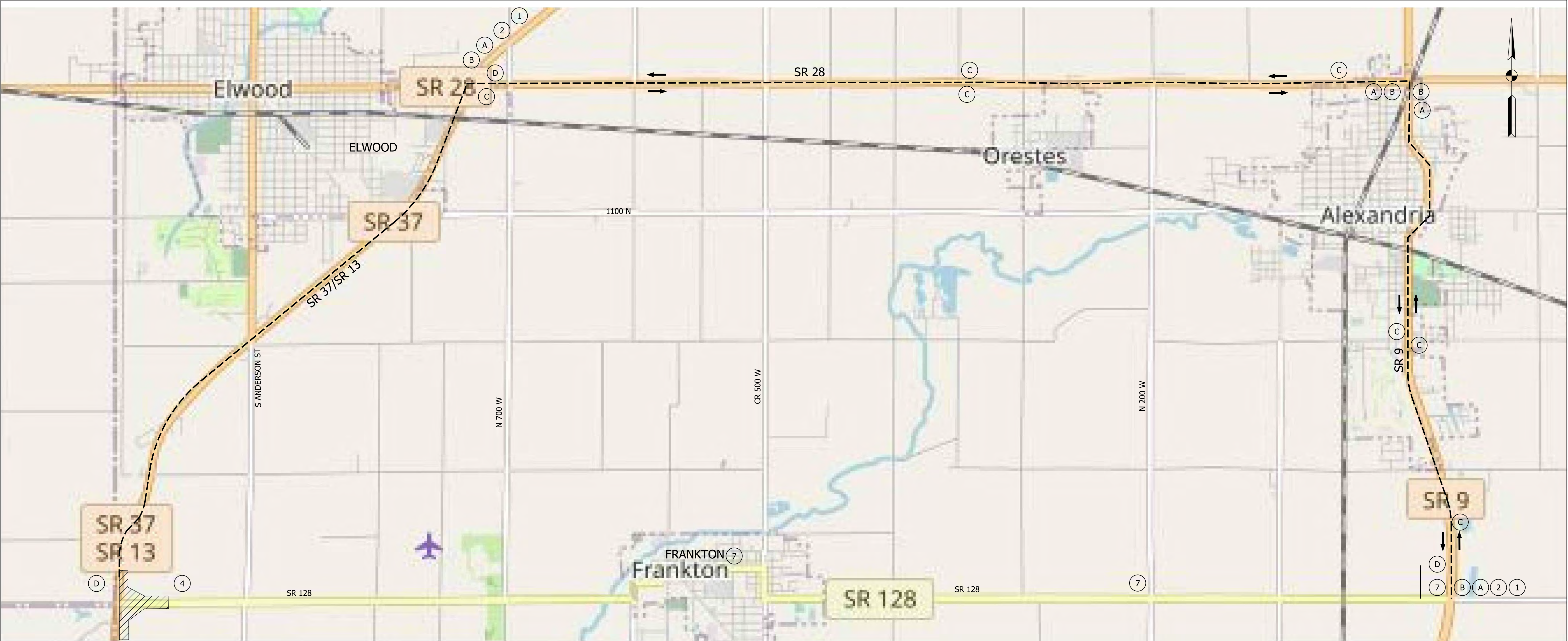
(15)

RECOMMENDED FOR APPROVAL	
DESIGNED: AGO	DRAWN: JEC
CHECKED: WRC	CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS
LINE "PR-A" AND LINE "PR-Y-2-13"

HORIZONTAL SCALE	BRIDGE FILE	
1/4" = 1'-0"		
VERTICAL SCALE	DESIGNATION	
1/4" = 1'-0"	2003081	
SURVEY BOOK	SHEETS	
	5	of 60
CONTRACT	PROJECT	
R-44024	2003082	



SIGN LEGEND



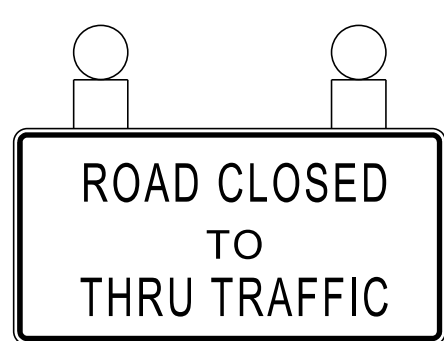
XW20-2

1



XW20-3

2



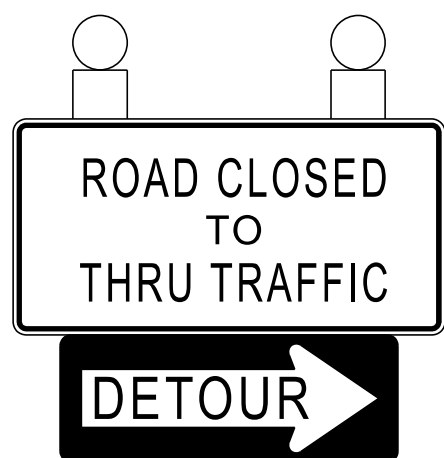
R11-4
RCSA-1

3



R11-2
RCSA-2

4



R11-4
XM4-10 (L or R)
RCSA-3

5



R11-3A
RCSA-4

6



R11-3A
XM4-10 (L or R)
RCSA-5

7

DETOUR ROUTE SR 128
TO SR 13/37 NB (PHASE I & II)

SUMMARY OF MOT PHASES

PHASE I:

CONSTRUCT CIRCULATORY ROADWAY, EAST APPROACH, AND NORTH/SOUTH APPROACHES TO A POINT JUST OUTSIDE OF SR 13.

1. CLOSE AND DETOUR SR 128 (EAST LEG).
2. 296TH STREET ACCESS TO SR 13 WILL REMAIN OPEN DURING THIS PHASE.

PHASE II:

CONSTRUCT THE NORTH AND SOUTH TIE-IN ALONG SR 13.

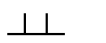
1. SR 128 (EAST LEG) WILL REMAIN CLOSED.
2. CLOSE AND DETOUR SR 13 AT SR 128 (SHORT TERM CLOSURE).

PHASE III:

CONSTRUCT 296TH STREET APPROACH.

1. CLOSE AND DETOUR 296TH STREET (WEST LEG).

LEGEND



CONSTRUCTION SIGN, TYPE A



CONSTRUCTION WARNING LIGHT, TYPE "A"



DETOUR ROUTE MARKER ASSEMBLY



BARRICADE, TYPE III-B



CONSTRUCTION AREA



DETOUR ROUTE



DIRECTION OF TRAFFIC FLOW

QUANTITY SUMMARY

DETOUR ROUTE	TOTAL THIS SHEET	UNITS
DETOUR ROUTE MARKER ASSEMBLY		EACH
CONSTRUCTION SIGN, A		EACH
CONSTRUCTION SIGN, B		EACH
ROAD CLOSURE SIGN ASSEMBLY		EACH
BARRICADE, TYPE III-B		LFT

NOTES:

1. FOR DETOUR ROUTE MARKER ASSEMBLIES A, B, C, AND D, SEE STANDARD DRAWING E801-TCDT-03.
2. ALSO SEE INDOT STANDARD DRAWINGS E801-TCDV, E801-TCLG AND E801-TCSN FOR FURTHER DETAILS OF TRAFFIC CONTROL SIGNS AND PLACEMENT.
3. POSTED SPEED LIMIT ON SR 9 IS XX MPH IN RURAL SECTION AND XX MILES PER HOUR IN URBAN SECTION. POSTED SPEED LIMIT ON SR 28 IS XX MPH IN RURAL SECTION AND XX MILES PER HOUR IN URBAN SECTION.
4. ADJACENT DRIVEWAY ACCESS TO REMAIN OPEN AT ALL TIMES.

RECOMMENDED
FOR APPROVAL

DESIGN ENGINEER

DATE

DESIGNED: WRC

DRAWN: JEC

CHECKED: AGO

CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
NORTH DETOUR ROUTE SR 128 (PHASE I & II)

HORIZONTAL SCALE

1" = 2000'

VERTICAL SCALE

N/A

SURVEY BOOK

CONTRACT
R-44024

BRIDGE FILE

DESIGNATION

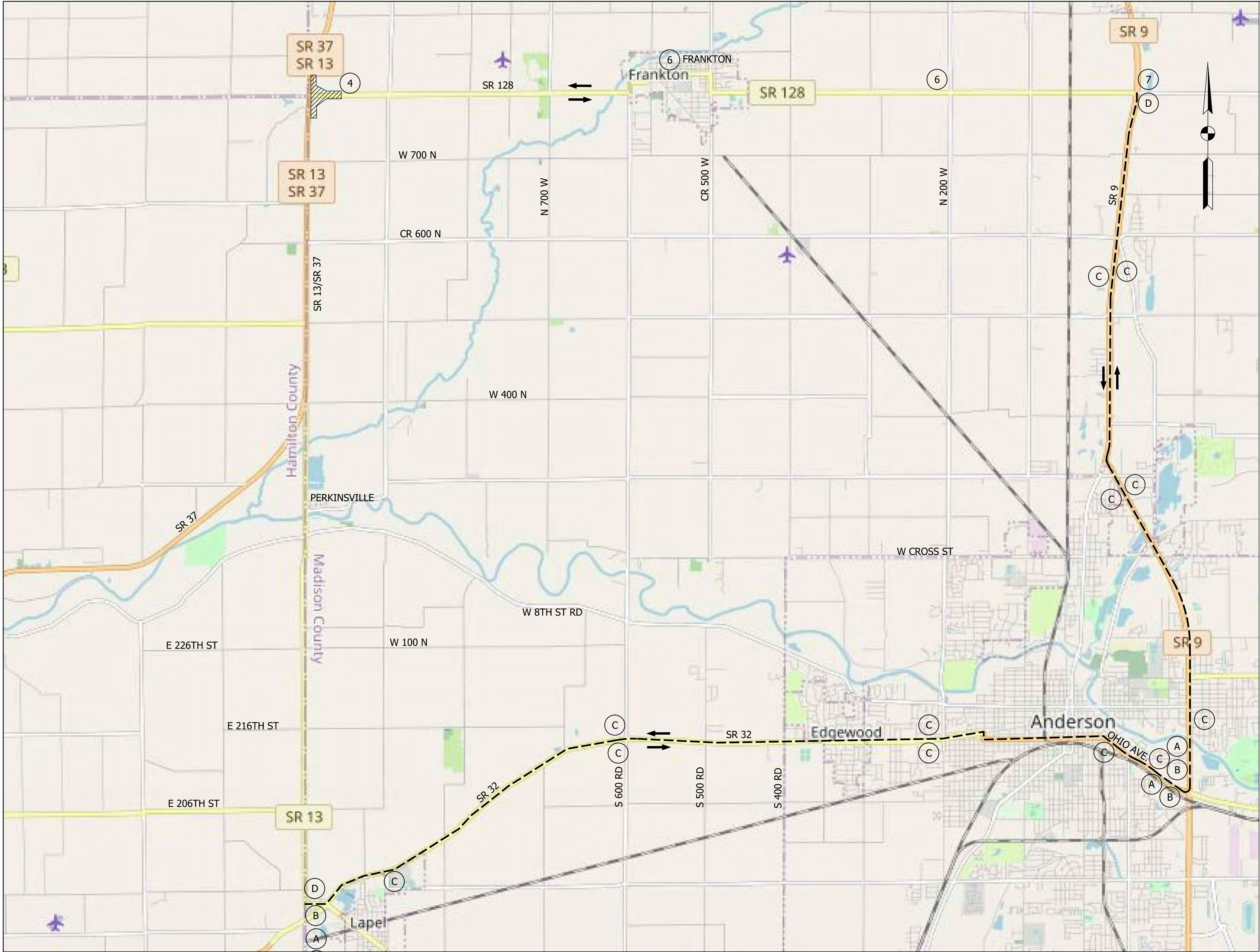
2003081

SHEETS

10 of 60

PROJECT

2003082



DETOUR ROUTE
SR 128 TO SR 13 / SR 9 / SR 37 SB (PHASE I & II)

QUANTITY SUMMARY		
DETOUR ROUTE	TOTAL THIS SHEET	UNITS
DETOUR ROUTE MARKER ASSEMBLY		EACH
CONSTRUCTION SIGN, A		EACH
CONSTRUCTION SIGN, B		EACH
ROAD CLOSURE SIGN ASSEMBLY		EACH
BARRICADE, TYPE III-B		LFT

ROAD CLOSED AHEAD

XW20-2

1

DETOUR AHEAD

XW20-3

2

ROAD CLOSED TO THRU TRAFFIC

R11-4
RCSA-1

3

ROAD CLOSED

R11-2
RCSA-2

4

ROAD CLOSED TO THRU TRAFFIC

DETOUR

R11-4
XM4-10 (L or R)
RCSA-3

5

ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY

R11-3A
RCSA-4

6

ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY

DETOUR

R11-3A
XM4-10 (L or R)
RCSA-5

7

SIGN LEGEND

LEGEND

- +—

CONSTRUCTION SIGN, TYPE A
- ⊗

CONSTRUCTION WARNING LIGHT, TYPE "A"
- +—

DETOUR ROUTE MARKER ASSEMBLY
- +—

BARRICADE, TYPE III-B
- ▨

CONSTRUCTION AREA
- - -

DETOUR ROUTE
- ←

DIRECTION OF TRAFFIC FLOW
- (A)

ADVANCE TURN D.R.M.A.
- (B)

DIRECTIONAL D.R.M.A.
- (C)

CONFIRMING D.R.M.A.
- (D)

END D.R.M.A.

NOTES:

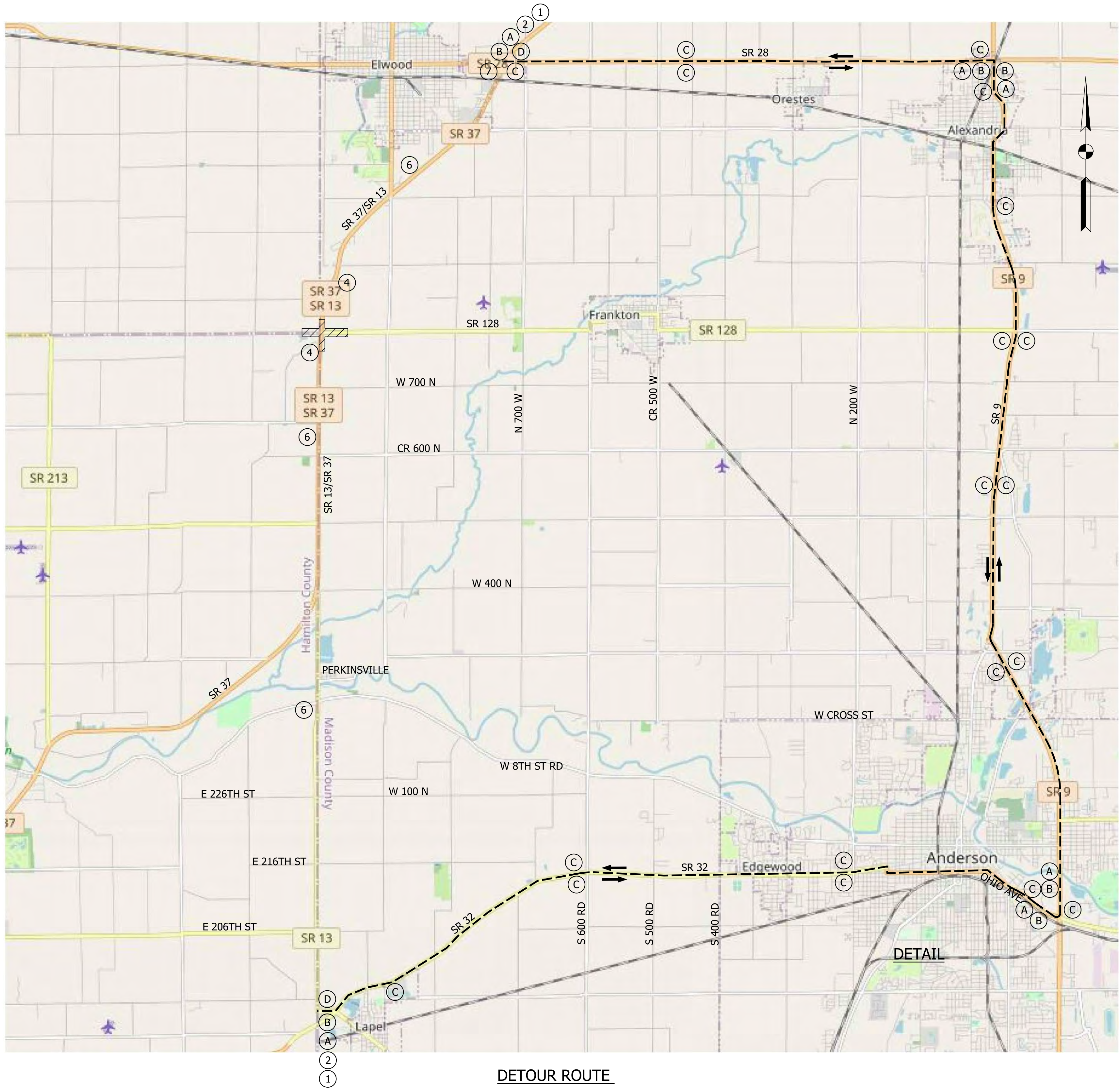
1. FOR DETOUR ROUTE MARKER ASSEMBLIES A, B, C, AND D, SEE STANDARD DRAWING E801-TCDT-03.
2. ALSO SEE INDOT STANDARD DRAWINGS E801-TCDV, E801-TCLG AND E801-TCSN FOR FURTHER DETAILS OF TRAFFIC CONTROL SIGNS AND PLACEMENT.
3. POSTED SPEED LIMIT ON SR 128 IS XX MPH IN RURAL SECTION AND XX MILES PER HOUR IN URBAN SECTION. POSTED SPEED LIMIT ON SR 9 IS XX MPH IN RURAL SECTION AND XX MILES PER HOUR IN URBAN SECTION. POSTED SPEED LIMIT ON SR32 IS XX MPH IN RURAL SECTION AND XX MILES PER HOUR IN URBAN SECTION.
4. ADJACENT DRIVEWAY ACCESS TO REMAIN OPEN AT ALL TIMES.

RECOMMENDED FOR APPROVAL _____	
DESIGNED: WRC	DRAWN: JEC
CHECKED: AGO	CHECKED: WRC

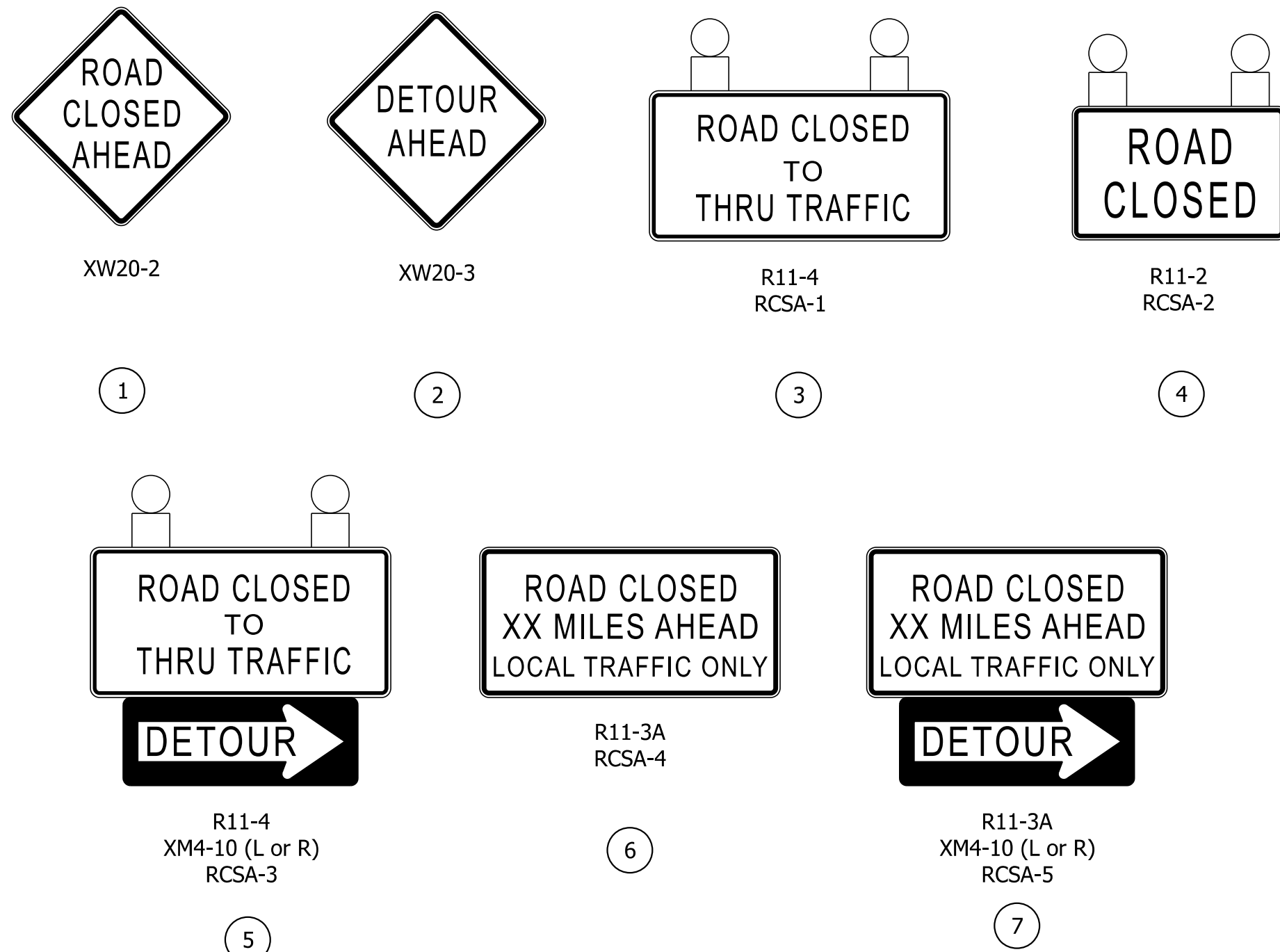
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
SOUTH DETOUR ROUTE SR 128 (PHASE I & II)

HORIZONTAL SCALE	BRIDGE FILE
1" = 4000'	
VERTICAL SCALE	DESIGNATION
N/A	2003081
SURVEY BOOK	SHEETS
	11 of 60
CONTRACT	PROJECT
R-44024	2003082



DETOUR ROUTE
SR 13 (PHASE II)



SIGN LEGEND

LEGEND

- CONSTRUCTION SIGN, TYPE A
- CONSTRUCTION WARNING LIGHT, TYPE "A"
- DETOUR ROUTE MARKER ASSEMBLY
- BARRICADE, TYPE III-B
- CONSTRUCTION AREA
- DETOUR ROUTE
- DIRECTION OF TRAFFIC FLOW
- ADVANCE TURN D.R.M.A.
- DIRECTIONAL D.R.M.A.
- CONFIRMING D.R.M.A.
- END D.R.M.A.

NOTES:

- FOR DETOUR ROUTE MARKER ASSEMBLIES A, B, C, AND D, SEE STANDARD DRAWING E801-TCDD-03.
- ALSO SEE INDOT STANDARD DRAWINGS E801-TCDV, E801-TCLG AND E801-TCSN FOR FURTHER DETAILS OF TRAFFIC CONTROL SIGNS AND PLACEMENT.
- POSTED SPEED LIMIT ON SR XX IS XX MPH IN RURAL SECTION AND XX MILES PER HOUR IN URBAN SECTION.
- ADJACENT DRIVEWAY ACCESS TO REMAIN OPEN AT ALL TIMES.

QUANTITY SUMMARY		
DETOUR ROUTE	TOTAL THIS SHEET	UNITS
DETOUR ROUTE MARKER ASSEMBLY		EACH
CONSTRUCTION SIGN, A		EACH
CONSTRUCTION SIGN, B		EACH
ROAD CLOSURE SIGN ASSEMBLY		EACH
BARRICADE, TYPE III-B		LFT

RECOMMENDED FOR APPROVAL	
DESIGNED: AGO	DRAWN: JEC
CHECKED: WRC	CHECKED: WRC

INDIANA DEPARTMENT OF TRANSPORTATION	
MAINTENANCE OF TRAFFIC DETOUR ROUTE SR 13 (PHASE II)	

HORIZONTAL SCALE 1" = 5000'	BRIDGE FILE	
VERTICAL SCALE N/A	DESIGNATION 2003081	
SURVEY BOOK	SHEETS 12 of 60	
CONTRACT R-44024	PROJECT 2003082	

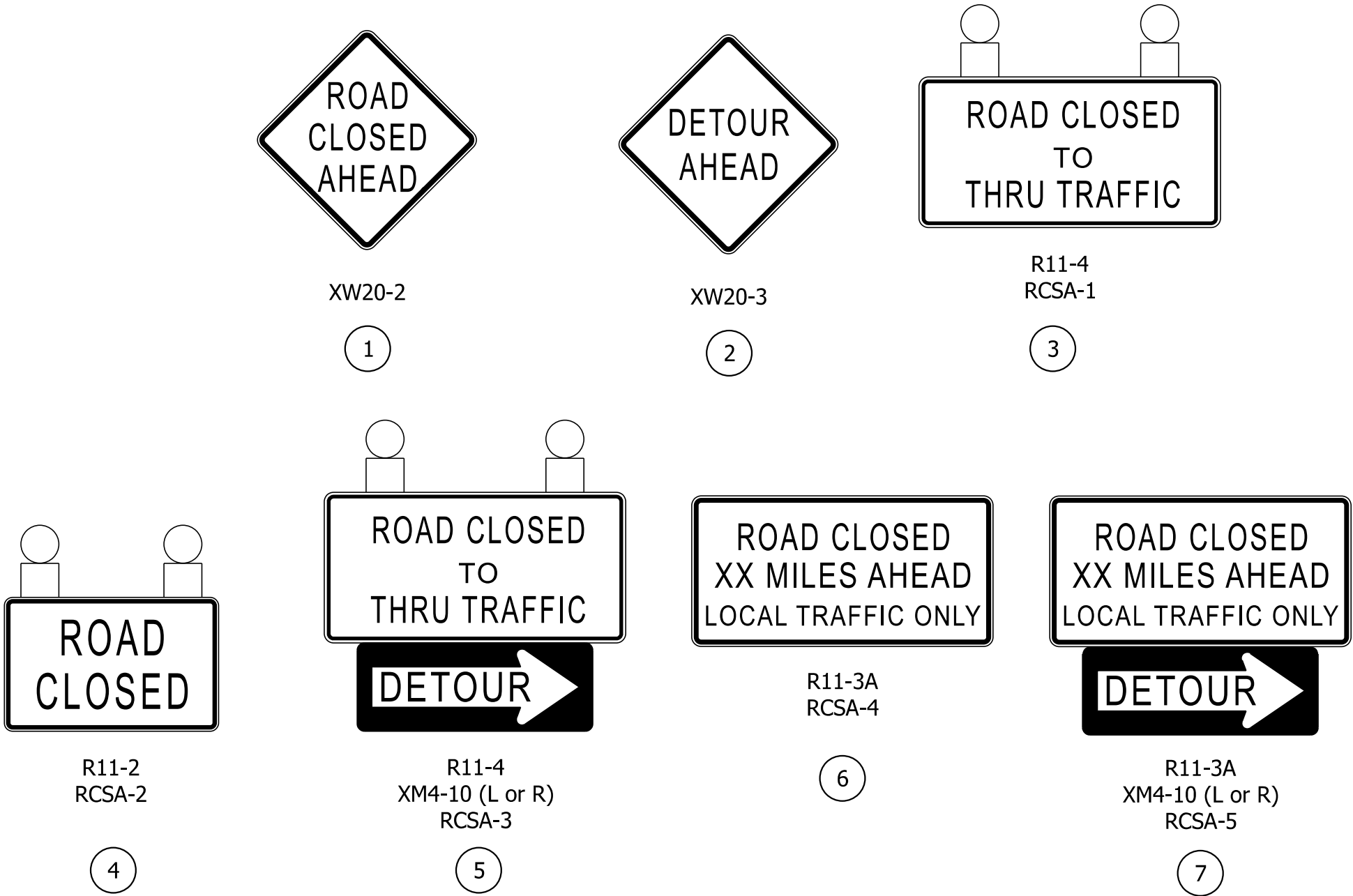


DETOUR ROUTE
E 296TH STREET (PHASE II & III)

Note to Reviewer:

Detour route for East 296th St to NB SR13 will be developed and added to the plans at the next submission.

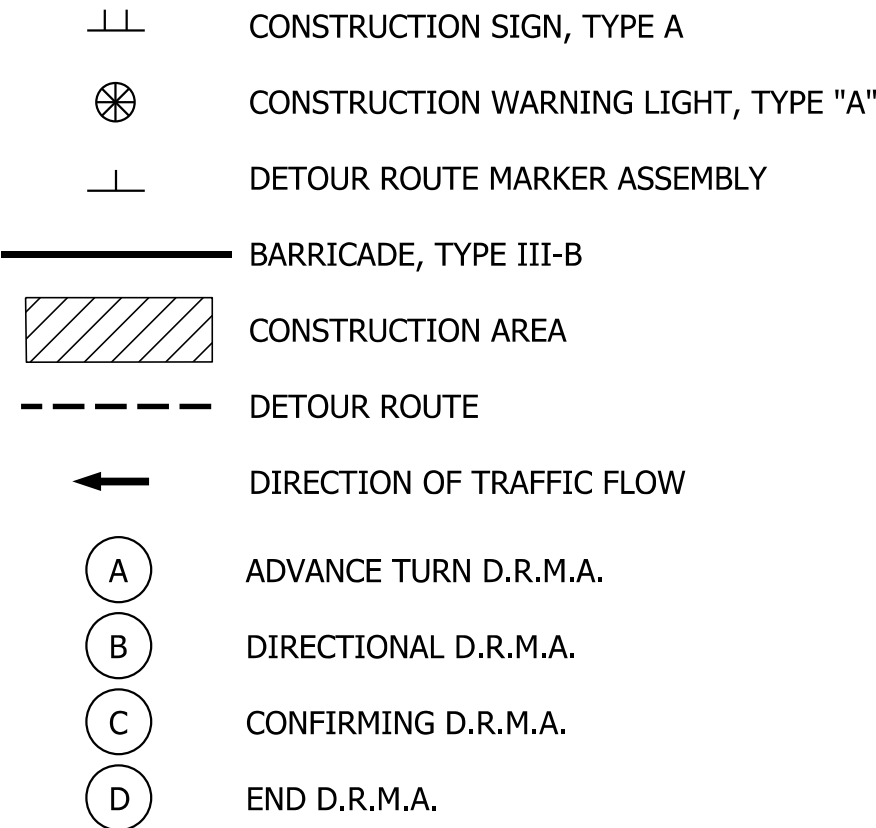
SIGN LEGEND



QUANTITY SUMMARY

DETOUR ROUTE	TOTAL THIS SHEET	UNITS
DETOUR ROUTE MARKER ASSEMBLY		EACH
CONSTRUCTION SIGN, A		EACH
CONSTRUCTION SIGN, B		EACH
ROAD CLOSURE SIGN ASSEMBLY		EACH
BARRICADE, TYPE III-B		LFT

LEGEND



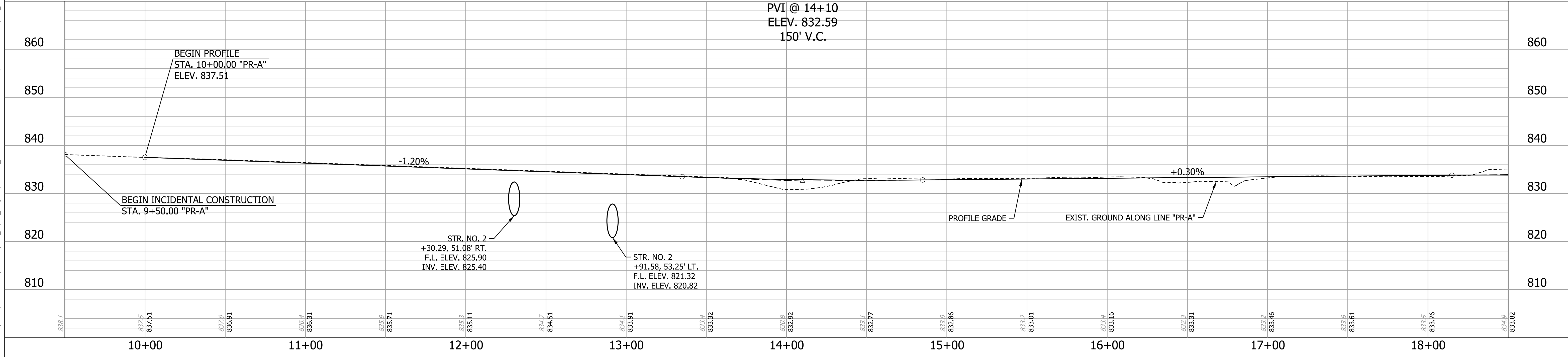
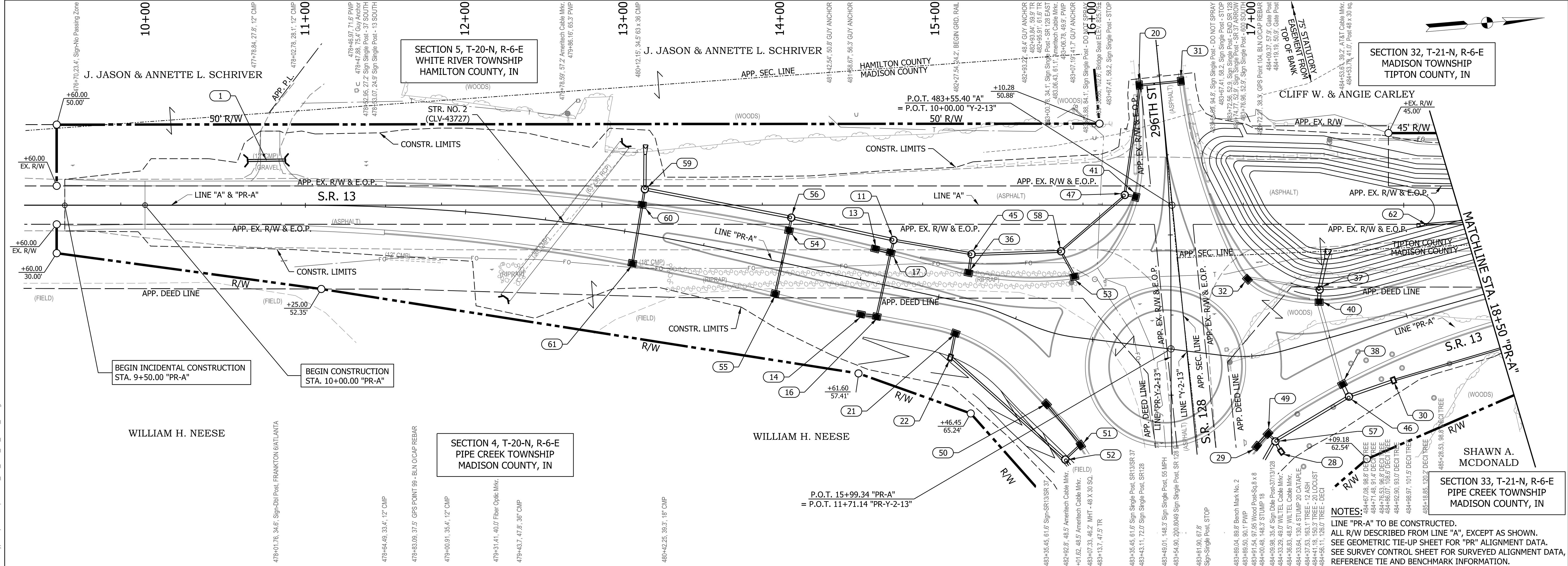
NOTES:

- FOR DETOUR ROUTE MARKER ASSEMBLIES A, B, C, AND D, SEE STANDARD DRAWING E801-TCDT-03.
- ALSO SEE INDOT STANDARD DRAWINGS E801-TCDV, E801-TCLG AND E801-TCSN FOR FURTHER DETAILS OF TRAFFIC CONTROL SIGNS AND PLACEMENT.
- POSTED SPEED LIMIT ON SR 213 IS 55 MPH IN RURAL SECTION AND 45 MILES PER HOUR IN URBAN SECTION. POSTED SPEED LIMIT ON E 281ST ST IS 45 MPH. POSTED SPEED LIMIT ON SR13/37 IS XX MPH.
- ADJACENT DRIVEWAY ACCESS TO REMAIN OPEN AT ALL TIMES.

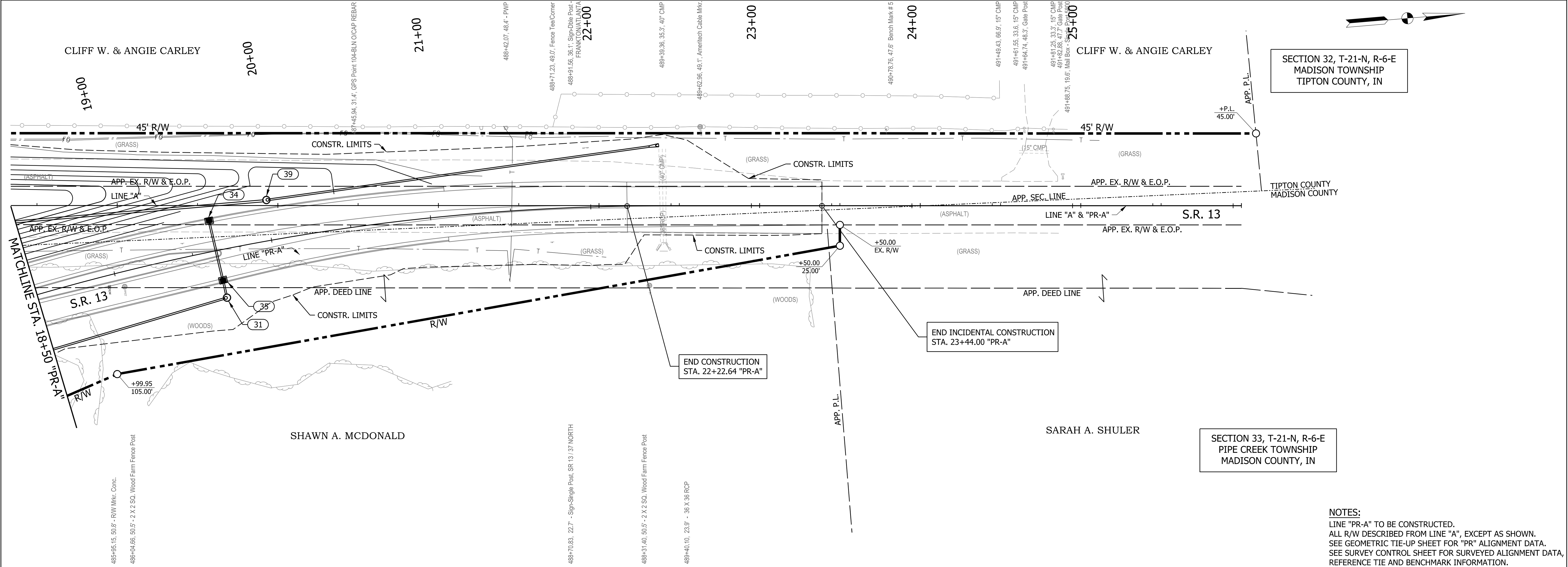
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: AGO	DRAWN: JEC	
CHECKED: WRC	CHECKED: WRC	

INDIANA DEPARTMENT OF TRANSPORTATION
MAINTENANCE OF TRAFFIC DETOUR ROUTE E 296TH ST. (PHASE II & III)

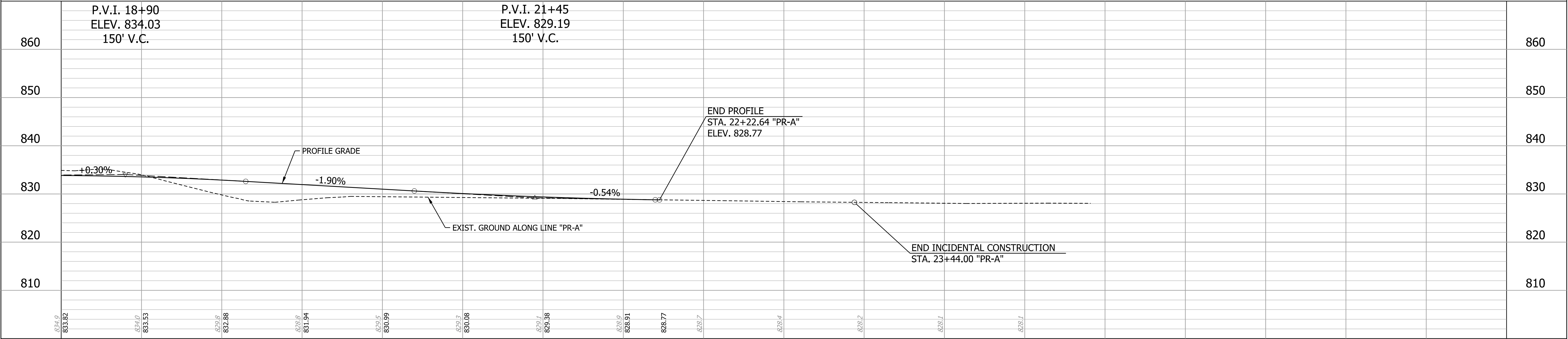
HORIZONTAL SCALE 1"=2000'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 2003081
SURVEY BOOK	SHEETS 13 of 60
CONTRACT R-44024	PROJECT 2003082



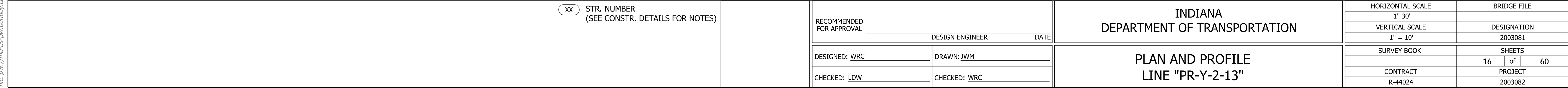
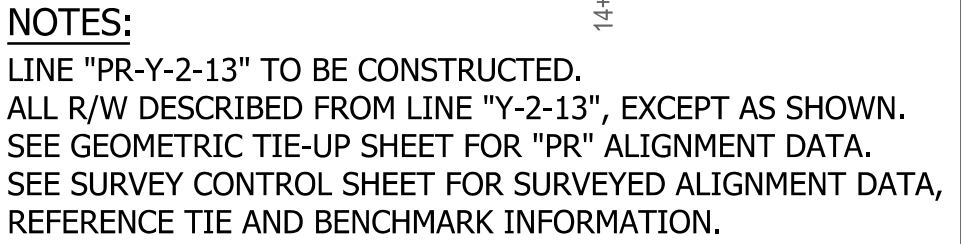
XX STR. NUMBER (SEE CONSTR. DETAILS FOR NOTES)		RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 30'		BRIDGE FILE	
DESIGNED: WRC		DRAWN: JWM		CHECKED: LDW		CHECKED: WRC		SURVEY BOOK		VERTICAL SCALE 1" = 10'		DESIGNATION 2003081	
CONTRACT R-44024		PROJECT 2003082		SHEETS 14 of 60		PLAN AND PROFILE LINE "PR-A"							

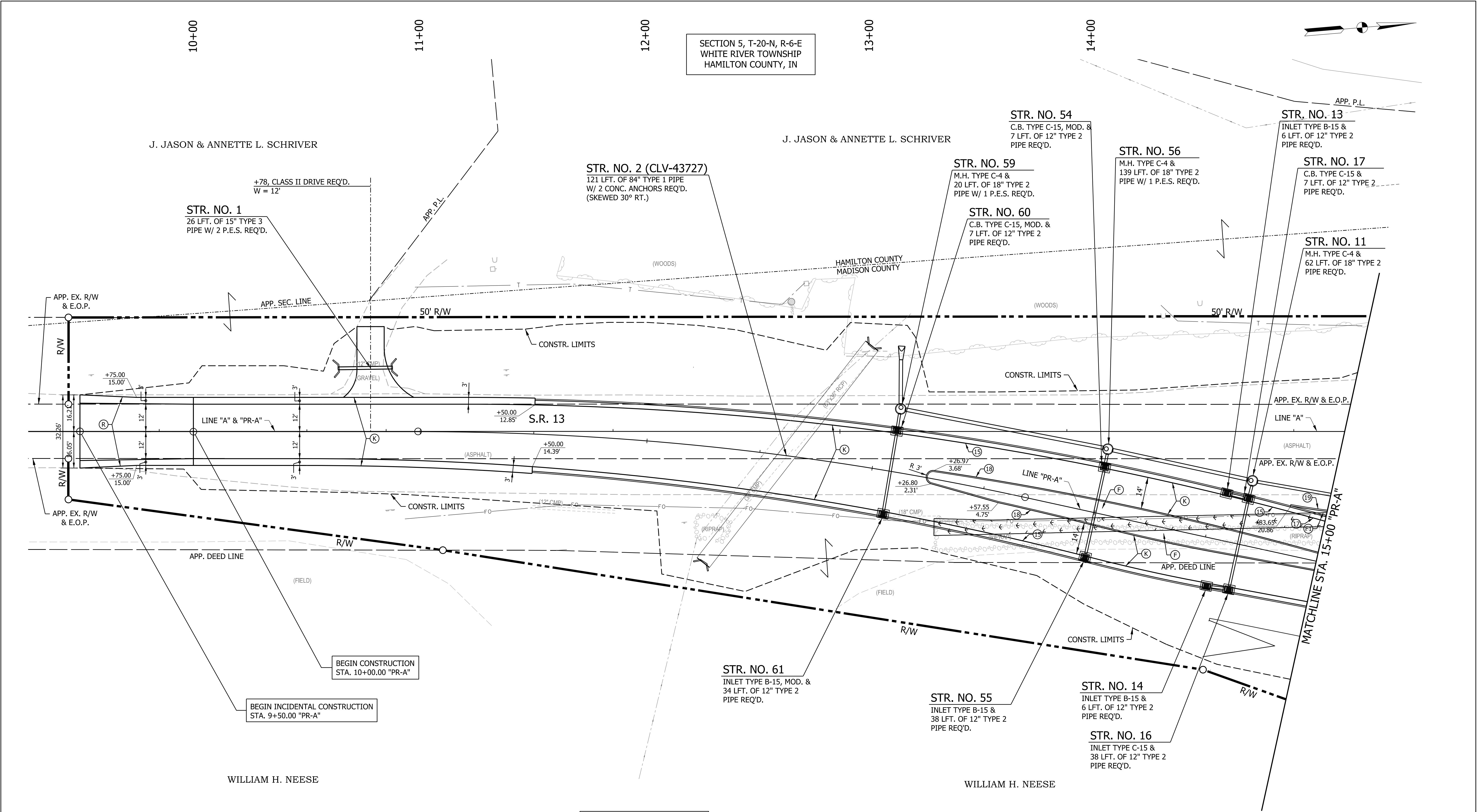


NOTES:
LINE "PR-A" TO BE CONSTRUCTED.
ALL R/W DESCRIBED FROM LINE "A", EXCEPT AS SHOWN.
SEE GEOMETRIC TIE-UP SHEET FOR "PR" ALIGNMENT DATA.
SEE SURVEY CONTROL SHEET FOR SURVEYED ALIGNMENT DATA,
REFERENCE TIE AND BENCHMARK INFORMATION.



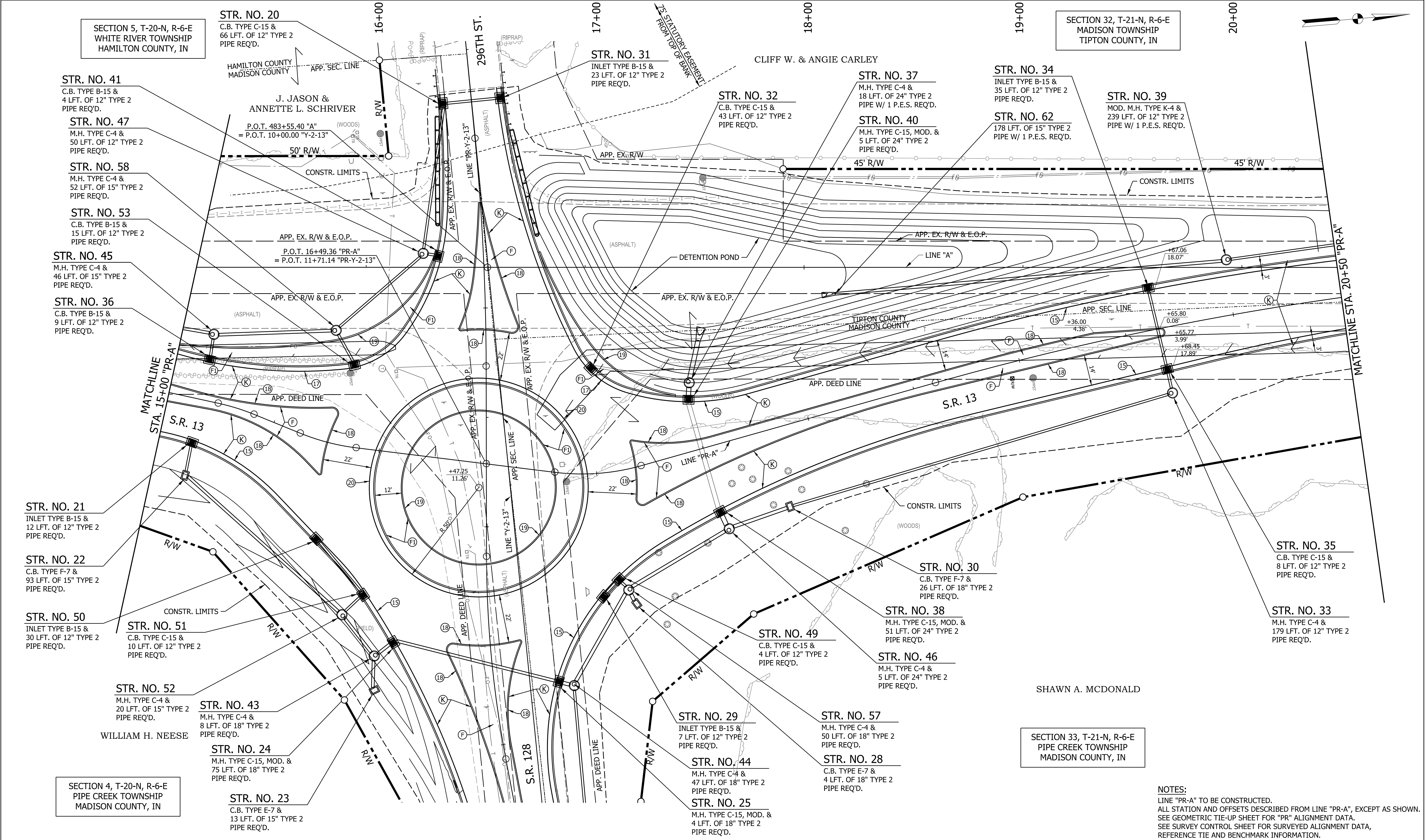
STR. NUMBER (SEE CONSTR. DETAILS FOR NOTES)		RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 30'		BRIDGE FILE	
DESIGNED: WRC		DRAWN: JWM								VERTICAL SCALE 1" = 10'		DESIGNATION 2003081	
CHECKED: LDW		CHECKED: WRC								SURVEY BOOK		SHEETS 15 of 60	
										CONTRACT R-44024		PROJECT 2003082	






NOTES:
LINE "PR-A" TO BE CONSTRUCTED.
ALL STATION AND OFFSETS DESCRIBED FROM LINE "PR-A", EXCEPT AS SHOWN.
SEE GEOMETRIC TIE-UP SHEET FOR "PR" ALIGNMENT DATA.
SEE SURVEY CONTROL SHEET FOR SURVEYED ALIGNMENT DATA,
REFERENCE TIE AND BENCHMARK INFORMATION.

LEGEND			RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE	
(K) FULL DEPTH HMA PAVEMENT (SEE TYPICAL SECTION FOR MORE DETAIL)	(F1) TRUCK APRON (SEE TYPICAL SECTION FOR MORE DETAIL)	(19) CURB, INTEGRAL, CONCRETE					VERTICAL SCALE N/A		DESIGNATION 2003081	
(R) HMA, MILL AND OVERLAY (SEE TYPICAL SECTION FOR MORE DETAIL)	(15) CURB & GUTTER, CONCRETE	(20) CURB & GUTTER, B, CONCRETE, MODIFIED II	DESIGNED: WRC	DRAWN: JWM	CONSTRUCTION DETAIL LINE "PR-A"		SURVEY BOOK		SHEETS	
(F) SIDEWALK, CONCRETE	(17) CURB & GUTTER, B, CONCRETE, MODIFIED I	(19) CURB, CONCRETE	CHECKED: LDW	CHECKED: WRC			CONTRACT R-44024		PROJECT 2003082	
									23 of 60	



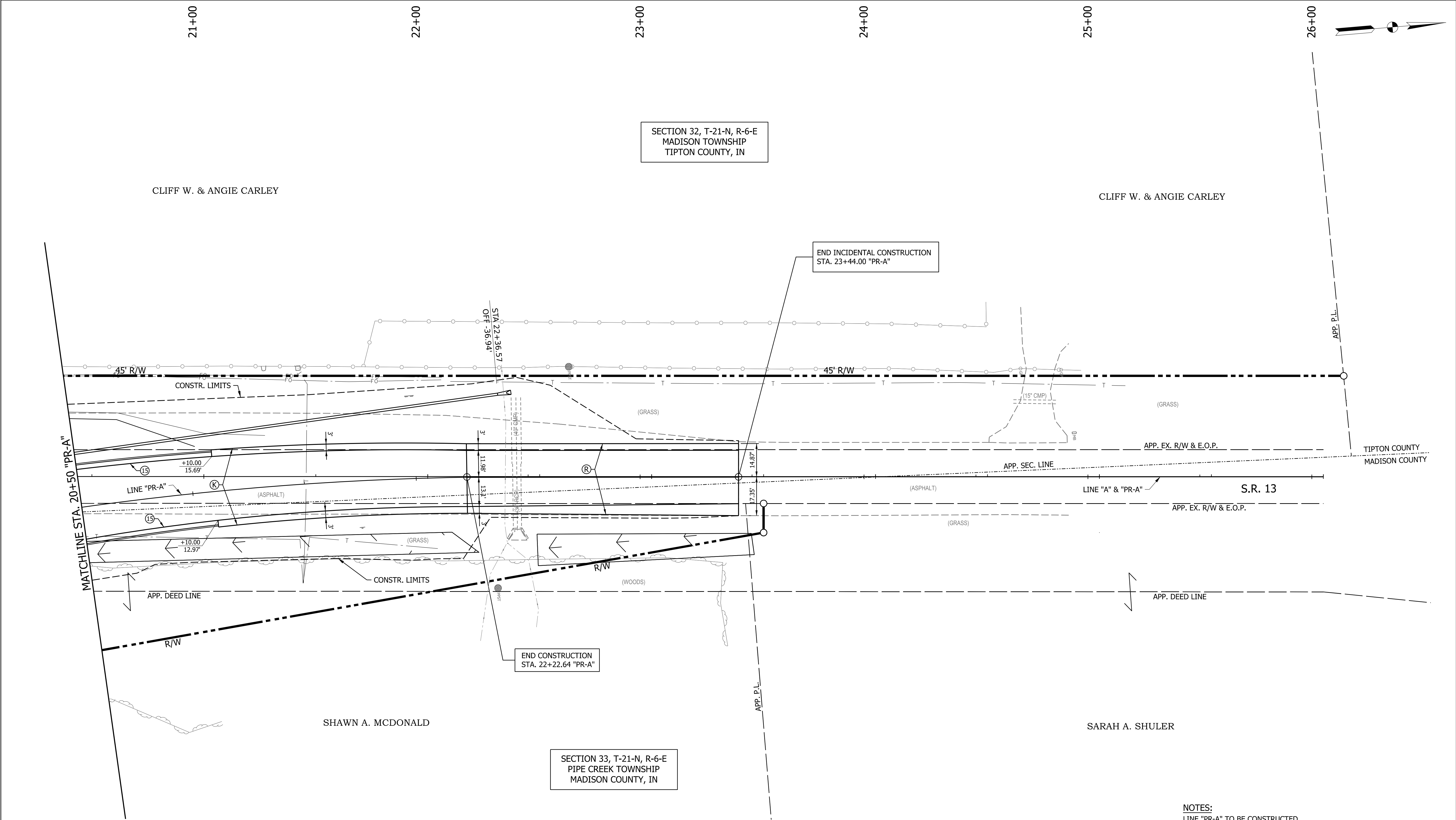
LEGEND		
(K)	FULL DEPTH HMA PAVEMENT (SEE TYPICAL SECTION FOR MORE DETAIL)	(F1) TRUCK APRON (SEE TYPICAL SECTION FOR MORE DETAIL)
(R)	HMA, MILL AND OVERLAY (SEE TYPICAL SECTION FOR MORE DETAIL)	(15) CURB & GUTTER, CONCRETE
(P)	SIDEWALK, CONCRETE	(17) CURB & GUTTER, B, CONCRETE, MODIFIED I
		(18) CURB, CONCRETE
		(19) CURB, INTEGRAL, CONCRETE
		(20) CURB & GUTTER, B, CONCRETE, MODIFIED II
		 WETLAND

RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE	
DESIGNED: WRC		DRAWN: JWM			
CHECKED: LDW		CHECKED: WRC			

INDIANA DEPARTMENT OF TRANSPORTATION	
CONSTRUCTION DETAIL LINE "PR-A"	

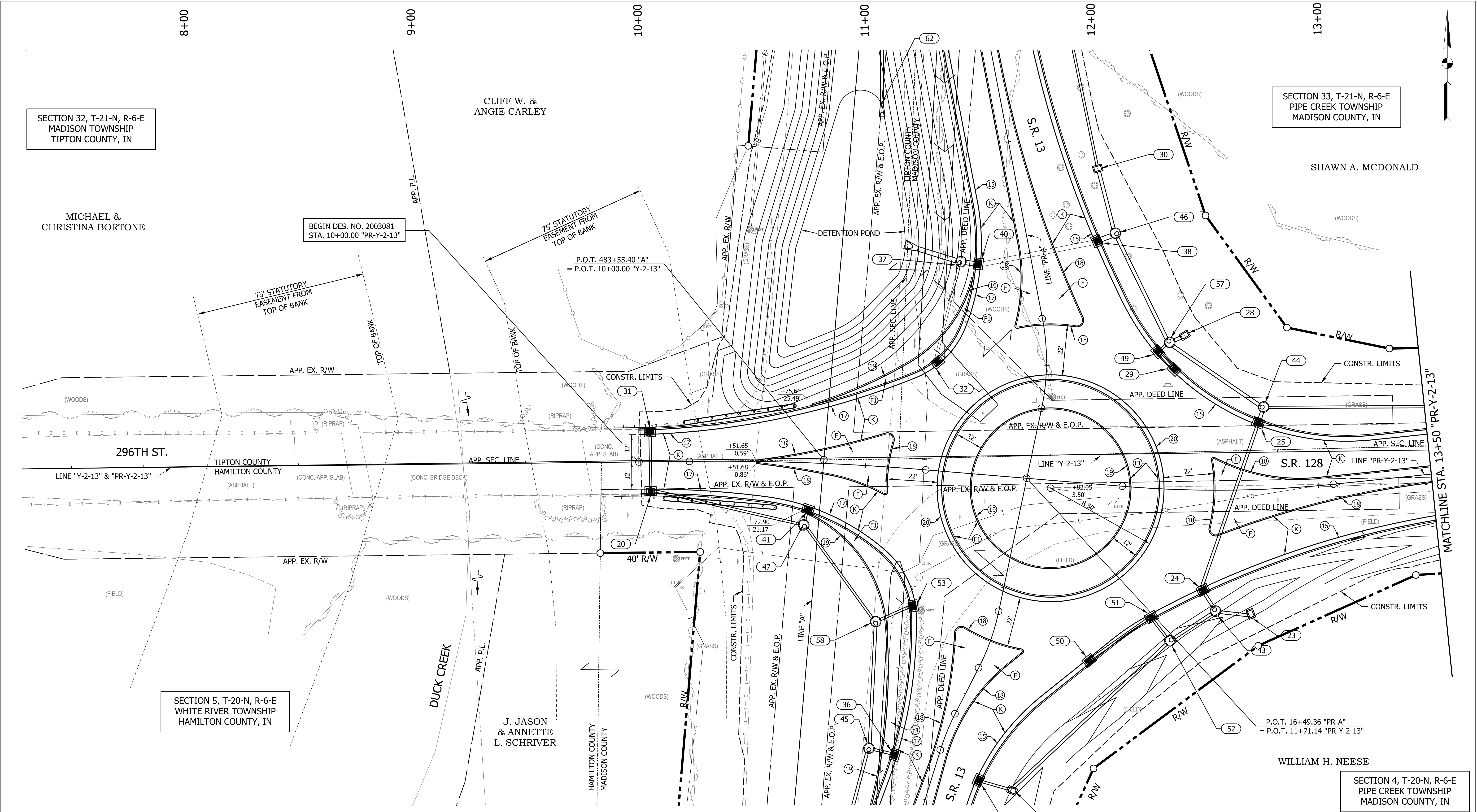
HORIZONTAL SCALE 1" = 20'		BRIDGE FILE	
VERTICAL SCALE N/A		DESIGNATION 2003081	
SURVEY BOOK		SHEETS	
CONTRACT R-44024		24 of 60	
		PROJECT 2003082	

NOTES:
LINE "PR-A" TO BE CONSTRUCTED.
ALL STATION AND OFFSETS DESCRIBED FROM LINE "PR-A", EXCEPT AS SHOWN.
SEE GEOMETRIC TIE-UP SHEET FOR "PR" ALIGNMENT DATA.
SEE SURVEY CONTROL SHEET FOR SURVEYED ALIGNMENT DATA,
REFERENCE TIE AND BENCHMARK INFORMATION.



NOTES:
LINE "PR-A" TO BE CONSTRUCTED.
ALL STATION AND OFFSETS DESCRIBED FROM LINE "PR-A", EXCEPT AS SHOWN.
SEE GEOMETRIC TIE-UP SHEET FOR "PR" ALIGNMENT DATA.
SEE SURVEY CONTROL SHEET FOR SURVEYED ALIGNMENT DATA,
REFERENCE TIE AND BENCHMARK INFORMATION.

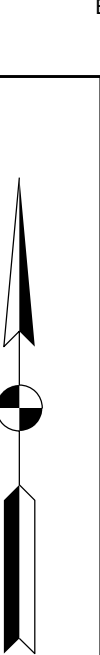
LEGEND (K) FULL DEPTH HMA PAVEMENT (SEE TYPICAL SECTION FOR MORE DETAIL) (R) HMA, MILL AND OVERLAY (SEE TYPICAL SECTION FOR MORE DETAIL) (F) SIDEWALK, CONCRETE (F1) TRUCK APRON (SEE TYPICAL SECTION FOR MORE DETAIL) (15) CURB & GUTTER, CONCRETE (17) CURB & GUTTER, B, CONCRETE, MODIFIED I (19) CURB, CONCRETE (19) CURB, INTEGRAL, CONCRETE (20) CURB & GUTTER, B, CONCRETE, MODIFIED II (WETLAND)			RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A		BRIDGE FILE 2003081	
			DESIGNED: WRC CHECKED: LDW		DRAWN: JWM CHECKED: WRC		CONSTRUCTION DETAIL LINE "PR-A"		SURVEY BOOK CONTRACT R-44024	
									SHEETS 25 of 60 PROJECT 2003082	



NOTES:
LINE "PR-Y-2-13" TO BE CONSTRUCTED.
ALL STATION AND OFFSETS DESCRIBED FROM LINE "PR-Y-2-13", EXCEPT AS SHOWN.
SEE GEOMETRIC TIE-UP SHEET FOR "PR" ALIGNMENT DATA.
SEE SURVEY CONTROL SHEET FOR SURVEYED ALIGNMENT DATA,
REFERENCE TIE AND BENCHMARK INFORMATION.

LEGEND			RECOMMENDED FOR APPROVAL		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE	
(K) FULL DEPTH HMA PAVEMENT (SEE TYPICAL SECTION FOR MORE DETAIL)	(F1) TRUCK APRON (SEE TYPICAL SECTION FOR MORE DETAIL)	(19) CURB, INTEGRAL, CONCRETE	DESIGN ENGINEER		DATE		VERTICAL SCALE N/A		DESIGNATION 2003081	
(R) HMA, MILL AND OVERLAY (SEE TYPICAL SECTION FOR MORE DETAIL)	(15) CURB & GUTTER, CONCRETE	(20) CURB & GUTTER, B, CONCRETE, MODIFIED II	DESIGNED: WRC		DRAWN: JWM		SURVEY BOOK		SHEETS	
(F) SIDEWALK, CONCRETE	(17) CURB & GUTTER, B, CONCRETE, MODIFIED I	(XX) STR. NUMBER (SEE CONSTR. DETAIL SHEETS - LINE "PR-A" FOR NOTES)	CHECKED: LDW		CHECKED: WRC		CONTRACT R-44024		26 of 60	
	(19) CURB, CONCRETE						PROJECT 2003082			

CONSTRUCTION DETAIL
LINE "PR-Y-2-13"

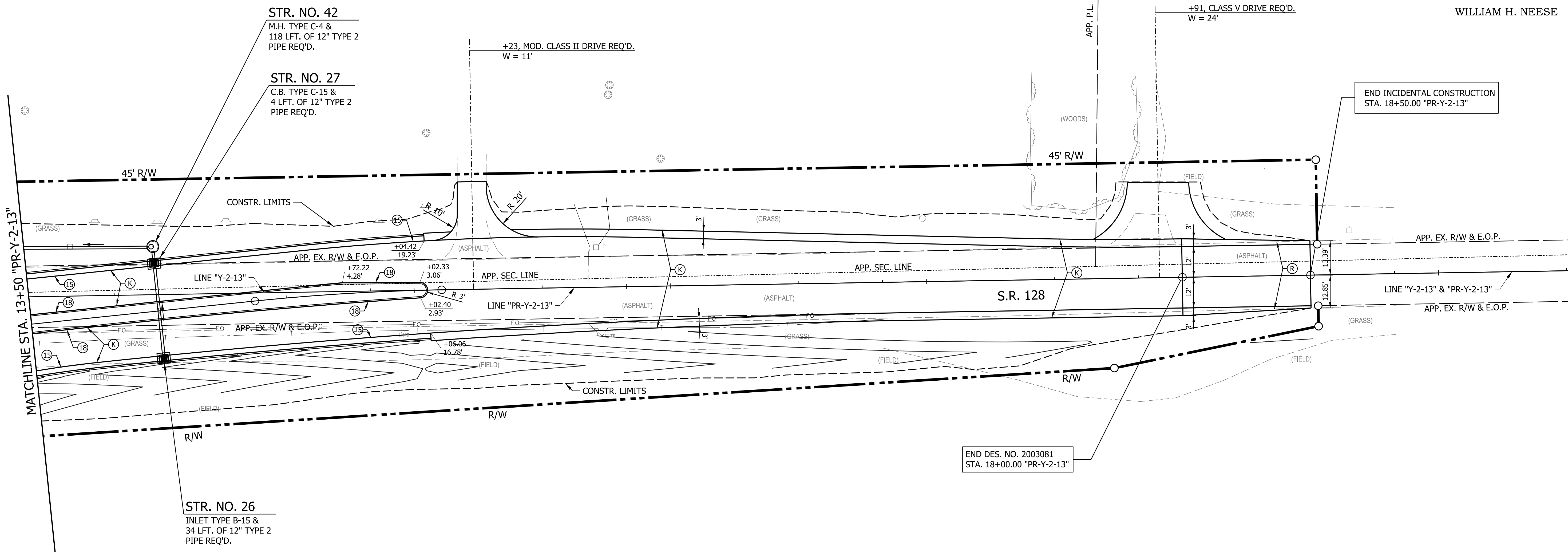


SECTION 33, T-21-N, R-6-E
PIPE CREEK TOWNSHIP
MADISON COUNTY, IN

SHAWN A. MCDONALD

SHAWN A. MCDONALD

WILLIAM H. NEESE



END DES. NO. 2003081
STA. 18+00.00 "PR-Y-2-13"

END INCIDENTAL CONSTRUCTION
STA. 18+50.00 "PR-Y-2-13"

WILLIAM H. NEESE

SECTION 4, T-20-N, R-6-E
PIPE CREEK TOWNSHIP
MADISON COUNTY, IN

WILLIAM H. NEESE

NOTES:
LINE "PR-Y-2-13" TO BE CONSTRUCTED.
ALL STATION AND OFFSETS DESCRIBED FROM LINE "PR-Y-2-13", EXCEPT AS SHOWN.
SEE GEOMETRIC TIE-UP SHEET FOR "PR" ALIGNMENT DATA.
SEE SURVEY CONTROL SHEET FOR SURVEYED ALIGNMENT DATA, REFERENCE TIE
AND BENCHMARK INFORMATION.

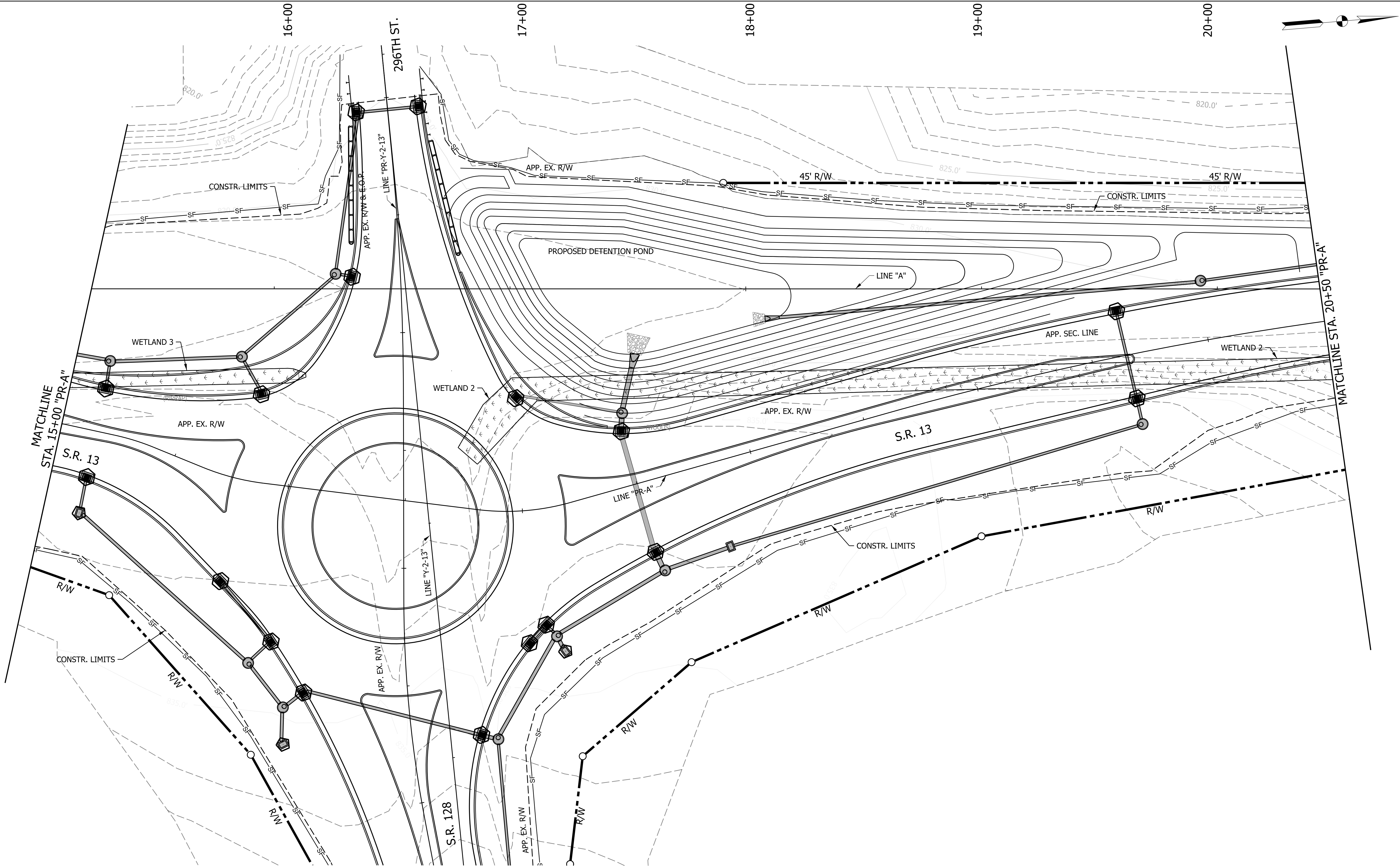
LEGEND		
(K) FULL DEPTH HMA PAVEMENT (SEE TYPICAL SECTION FOR MORE DETAIL)	(F1) TRUCK APRON (SEE TYPICAL SECTION FOR MORE DETAIL)	(19) CURB, INTEGRAL, CONCRETE
(R) HMA, MILL AND OVERLAY (SEE TYPICAL SECTION FOR MORE DETAIL)	(15) CURB & GUTTER, CONCRETE	(20) CURB & GUTTER, B, CONCRETE, MODIFIED II
(F) SIDEWALK, CONCRETE	(17) CURB & GUTTER, B, CONCRETE, MODIFIED I	
	(18) CURB, CONCRETE	

RECOMMENDED FOR APPROVAL	
DESIGNED: WRC	DRAWN: JWM
CHECKED: LDW	CHECKED: WRC

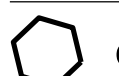
INDIANA DEPARTMENT OF TRANSPORTATION	
CONSTRUCTION DETAIL LINE "PR-Y-2-13"	


HORIZONTAL SCALE 1" = 20'	BRIDGE FILE	
VERTICAL SCALE N/A	DESIGNATION 2003081	
SURVEY BOOK	SHEETS	
CONTRACT R-44024	27	of 60
	PROJECT 2003082	


Jared Thurman
10/16/2024
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file: pw:/mb-us-pw-bentley.com/mb-us-pw-03/Documents/Indianapolis_IN/01_L_Projects/193213_SR_13 and SR 128 Roundabout/3.0 deliverables/3.7_Roadway/DGN/SHEETS/193213_RD_SHT_EROSIONCTRL_002.dgn

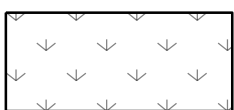


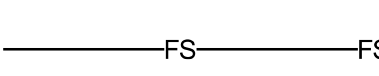
LEGEND

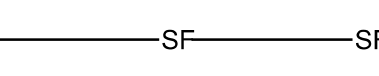
- 

CURB INLET PROTECTION
- 

DITCH INLET PROTECTION
- 

TEMPORARY CHECK DAM, TRAVERSABLE
- 

WETLANDS
- 

FS FS FILTER SOCK
- 

SF SF SILT FENCE

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

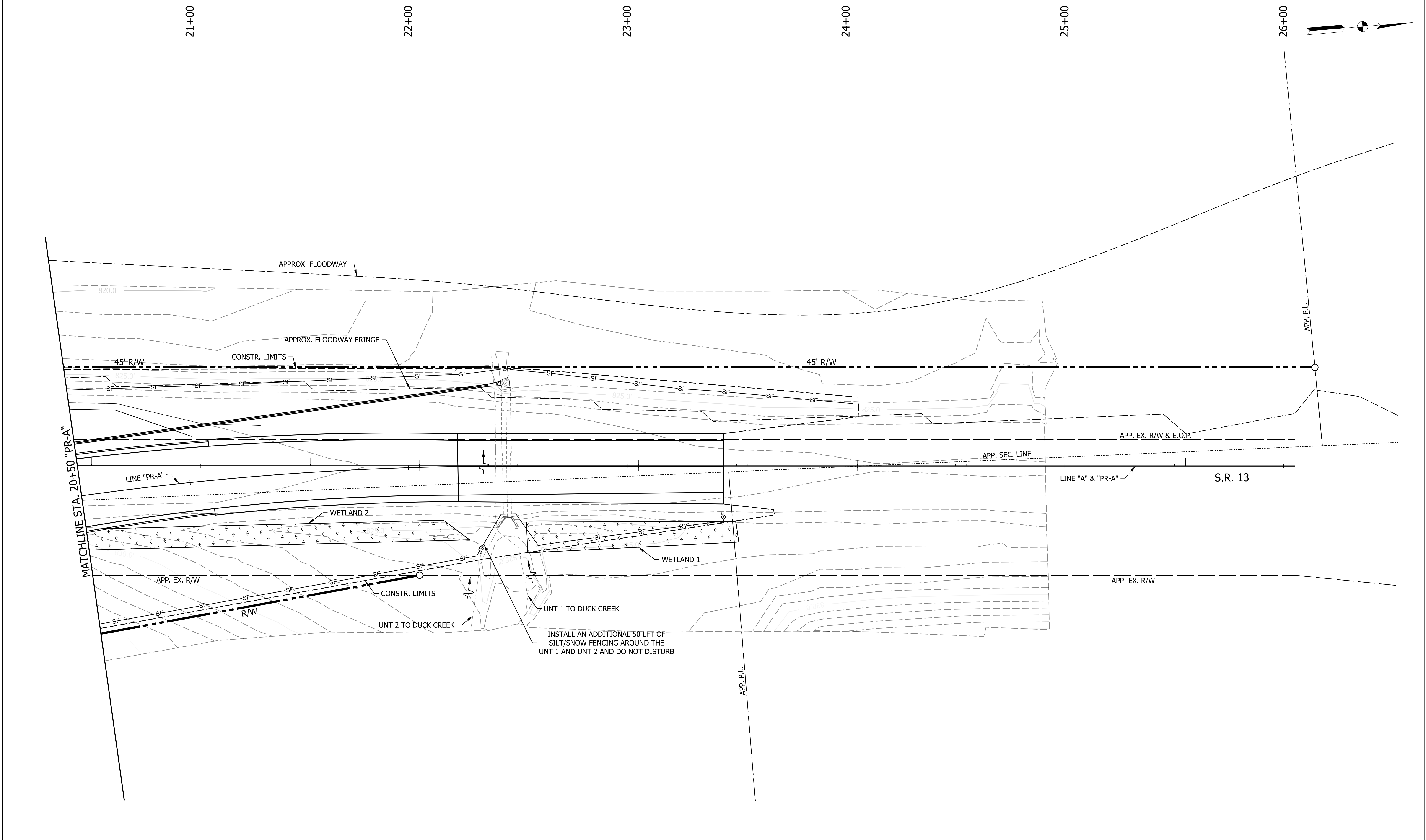
DESIGNED: WRC DRAWN: JWM
CHECKED: LDW CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 2003081
SURVEY BOOK	SHEETS of
CONTRACT R-44024	PROJECT 2003082

Jared Thurman
12/10/2024
model: Default
file: pw:/mb-us-pw-bentley.com/mb-us-pw-03/Documents/Indianapolis_IN/01_L_Projects/193213_SR_13 and SR 128 Roundabout/3.0 deliverables/3.7_Roadway/DGN/SHEETS/193213_RD_SHT_EROSIONCTRL_003.dgn



LEGEND

- CURB INLET PROTECTION
- DITCH INLET PROTECTION

- TEMPORARY CHECK DAM, TRAVERSABLE
- WETLANDS

- FS FS FILTER SOCK
- SF SF SILT FENCE

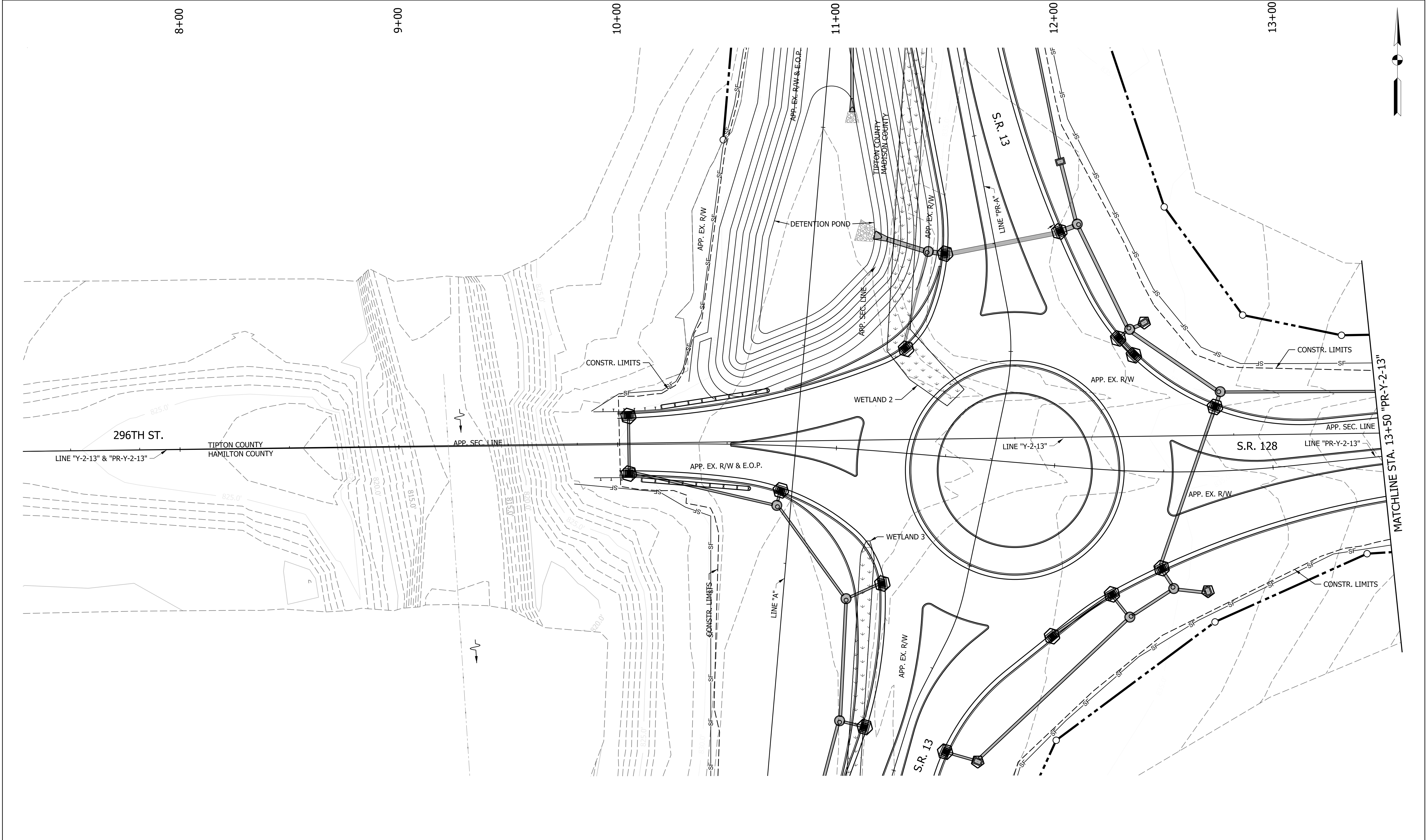
RECOMMENDED FOR APPROVAL _____	
DESIGNED: WRC	DRAWN: JWM
CHECKED: LDW	CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DETAIL
LINE "PR-A"

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 2003081
SURVEY BOOK	SHEETS of
CONTRACT R-44024	PROJECT 2003082

Jared Thurman
10/16/2024
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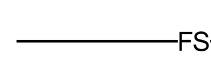


LEGEND

 CURB INLET PROTECTION

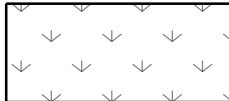


TEMPORARY CHECK DAM, TRAVERSABLE

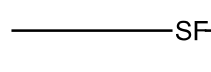


FS FS FILTER SOCK

 DITCH INLET PROTECTION



WETLANDS



SF SF SILT FENCE

RECOMMENDED
FOR APPROVAL

DESIGN ENGINEER

DATE

WRC
DESIGNED: WRC

JWM

DRAWN: JWM

LDW

CHECKED: LDW

WRC

CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

HORIZONTAL SCALE

1" = 20'

VERTICAL SCALE

N/A

SURVEY BOOK

CONTRACT

R-44024

BRIDGE FILE

DESIGNATION

2003081

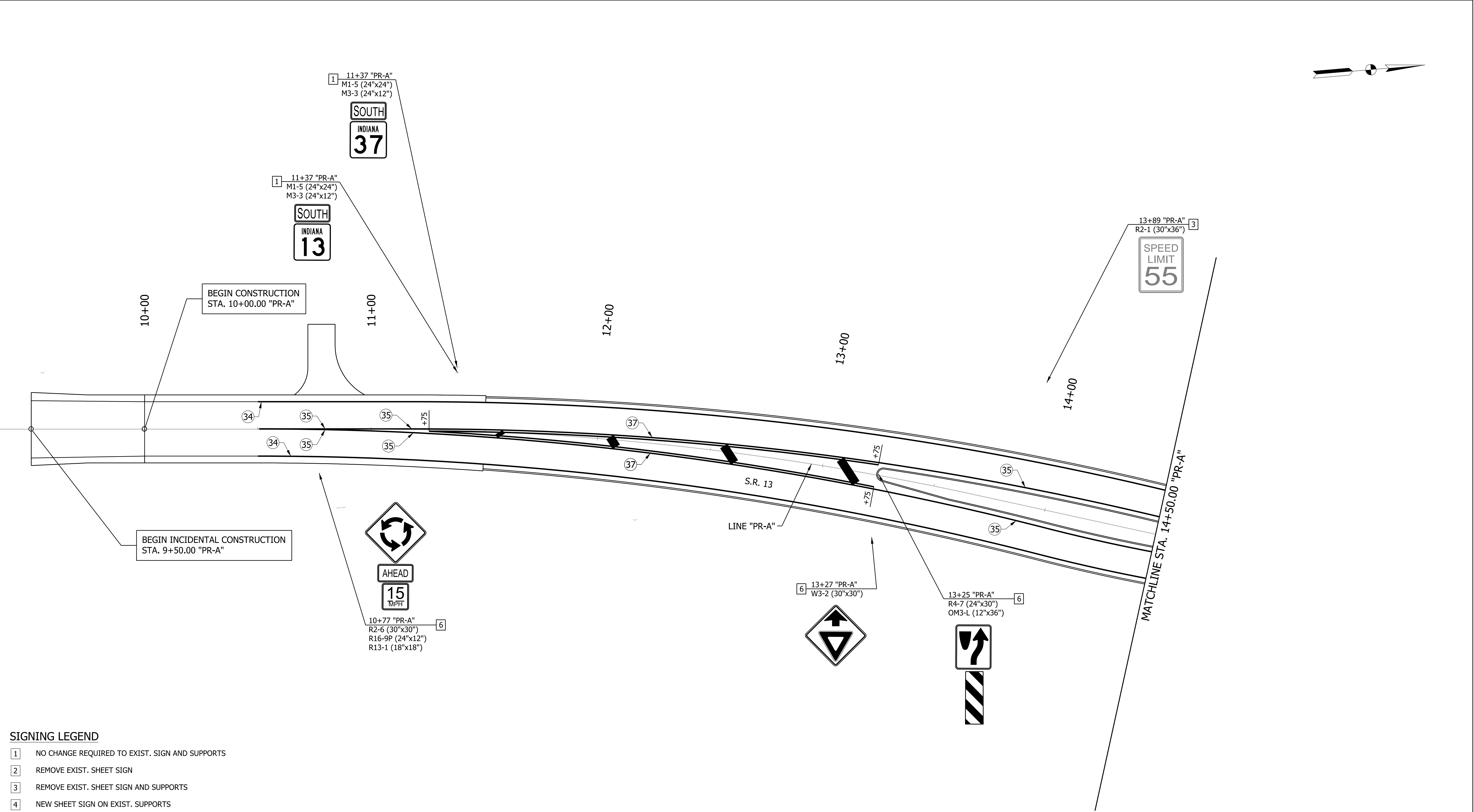
SHEETS

of

PROJECT

2003082

Jared Thurman
10/15/2024
model: Default
file: pw:/mb-us-pw-bentley.com/mb-us-pw-03/Documents/Indianapolis_IN/01_L_Pprojects/193213_SR_13 and SR 128 Roundabout/3.0 deliverables/3.7_Roadway/DGN/SHEETS/193213_RD_SHT_PWMT_MKCG-1.dgn



SIGNING LEGEND

- | | |
|---|--|
| 1 | NO CHANGE REQUIRED TO EXIST. SIGN AND SUPPORTS |
| 2 | REMOVE EXIST. SHEET SIGN |
| 3 | REMOVE EXIST. SHEET SIGN AND SUPPORTS |
| 4 | NEW SHEET SIGN ON EXIST. SUPPORTS |
| 5 | NEW SHEET SIGN ON EXIST. POLE |
| 6 | NEW SHEET SIGN AND SUPPORTS |
| 7 | RELOCATE EXIST. SIGN AND SUPPORTS |

LEGEND

- | | | | |
|----|--|----|---|
| 33 | LINE, THERMOPLASTIC, DOTTED, WHITE, 8 IN. | 37 | LINE, THERMOPLASTIC, DOUBLE, YELLOW, 6 IN. |
| 34 | LINE, THERMOPLASTIC, SOLID, WHITE, 6 IN. | 39 | TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24 IN. |
| 35 | LINE, THERMOPLASTIC, SOLID, YELLOW, 6 IN. | 46 | TRANSVERSE MARKING, THERMOPLASTIC, YIELD LINE, WHITE, 27 IN. |
| 36 | LINE, THERMOPLASTIC, BROKEN, YELLOW, 6 IN. | 47 | TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, YELLOW, 24 IN. AT 40' SPACING |

RECOMMENDED
FOR APPROVAL

DESIGN ENGINEER

DATE

DESIGNED: WRC

DRAWN: JEC

CHECKED: AGO

CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS AND SIGNAGE
LINE "PR-A"

HORIZONTAL SCALE

1" = 20'

VERTICAL SCALE

N/A

SURVEY BOOK

CONTRACT

R-44024

BRIDGE FILE

DESIGNATION

2003081

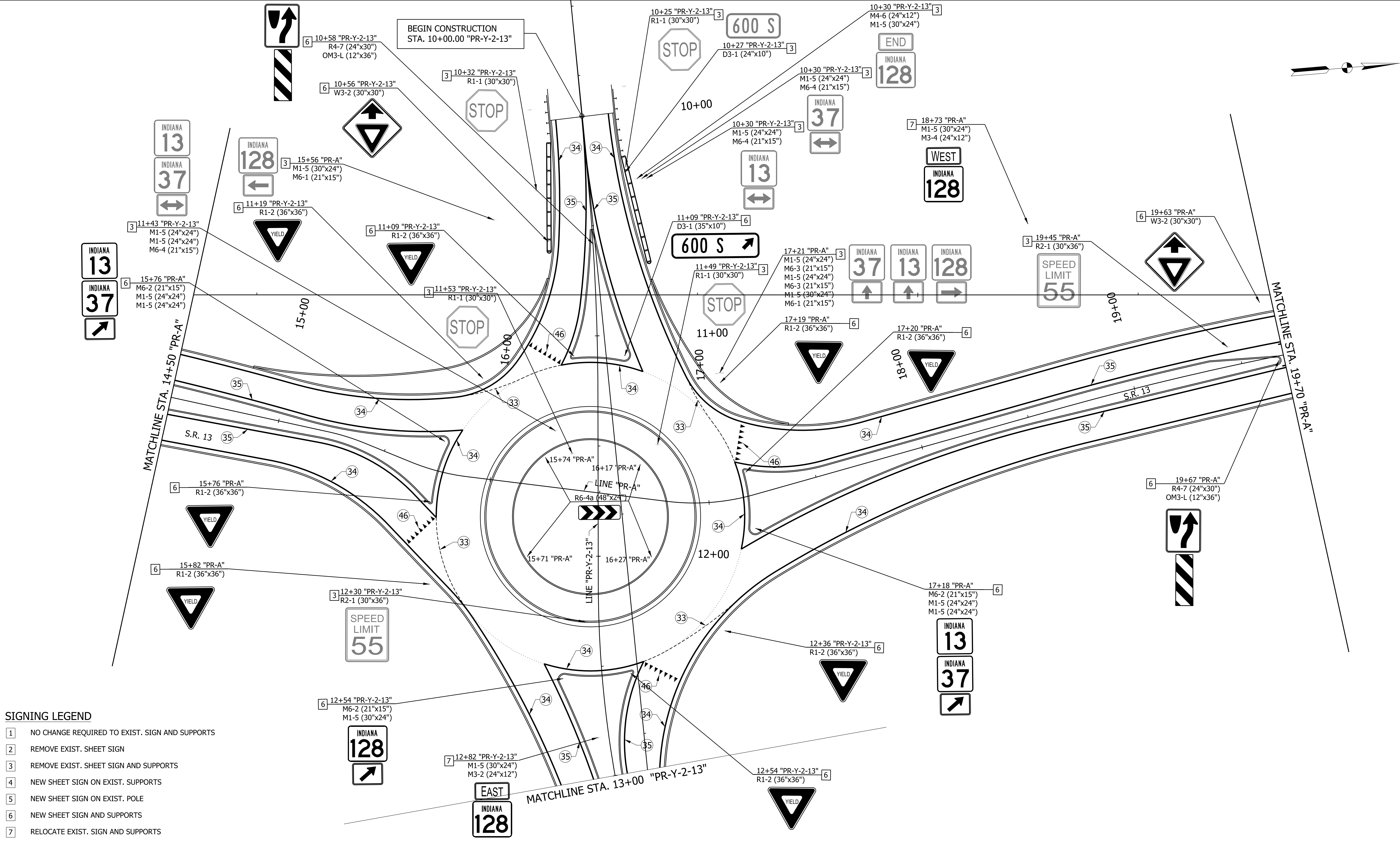
SHEETS

of

PROJECT

2003082

Jared Thurman
10/15/2024
model: Default
file: pw:/mb-us-pw-bentley.com/mb-us-pw-03/Documents/Indianapolis_IN/01L_Projects/193213_SR_13 and SR 128 Roundabout/3.0 deliverables/3.7_Roadway/DGN/SHEETS/193213_RD_SHT_PWMT_MKCG-2.dgn



SIGNING LEGEND

- | | |
|---|--|
| 1 | NO CHANGE REQUIRED TO EXIST. SIGN AND SUPPORTS |
| 2 | REMOVE EXIST. SHEET SIGN |
| 3 | REMOVE EXIST. SHEET SIGN AND SUPPORTS |
| 4 | NEW SHEET SIGN ON EXIST. SUPPORTS |
| 5 | NEW SHEET SIGN ON EXIST. POLE |
| 6 | NEW SHEET SIGN AND SUPPORTS |
| 7 | RELOCATE EXIST. SIGN AND SUPPORTS |

LEGEND

- | | | | |
|----|--|----|---|
| 33 | LINE, THERMOPLASTIC, DOTTED, WHITE, 8 IN. | 37 | LINE, THERMOPLASTIC, DOUBLE, YELLOW, 6 IN. |
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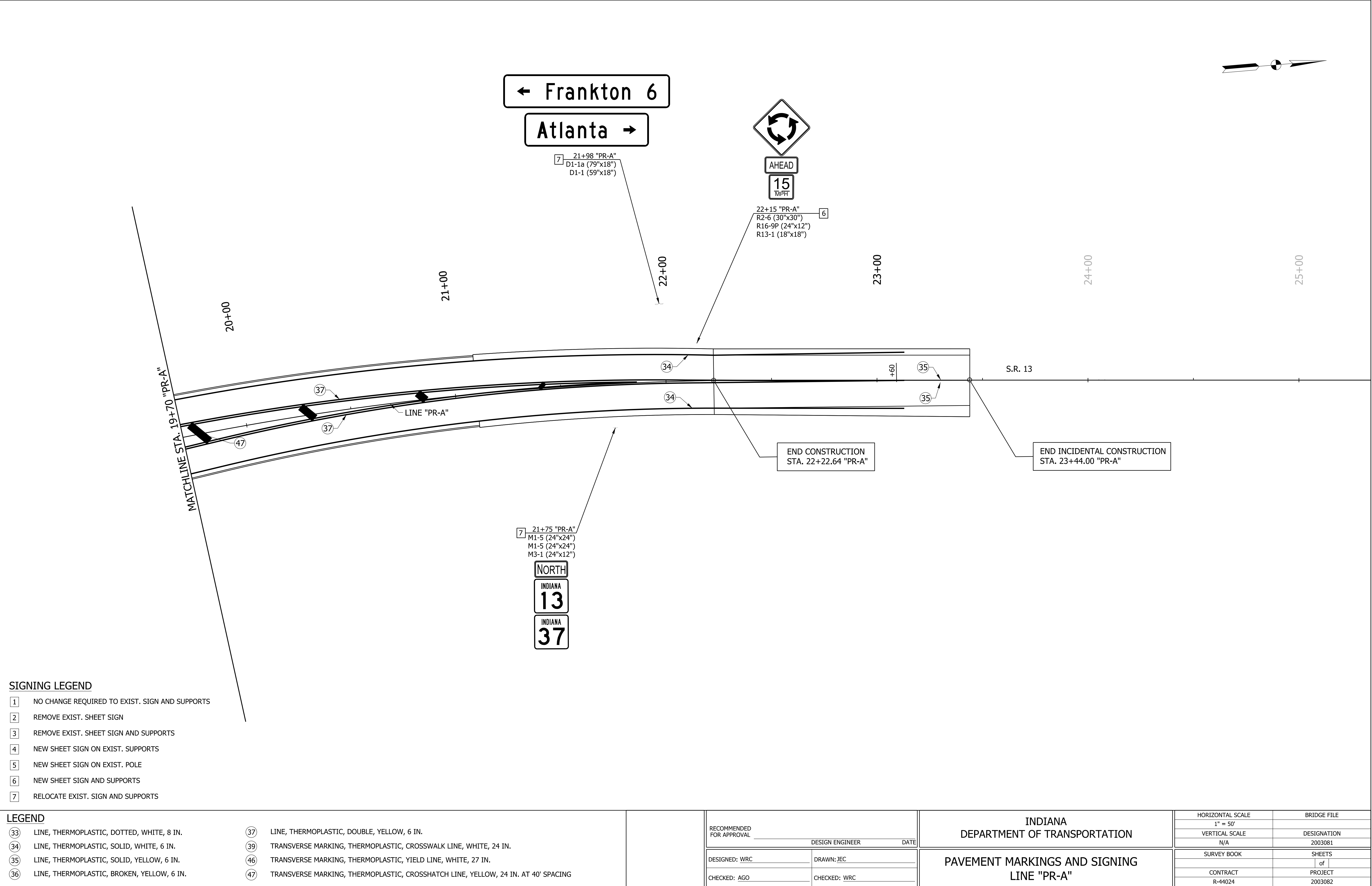
RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____		DATE _____	
DESIGNED: WRC		DRAWN: JEC			
CHECKED: AGO		CHECKED: WRC			

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS AND SIGNAGE
LINE "PR-A"

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE	DESIGNATION 2003081
SURVEY BOOK	SHEETS of
CONTRACT R-44024	PROJECT 2003082

Jared Thurman
10/15/2024
model: Default
file: pw:/mb-us-pw-bentley.com/mb-us-pw-03/Documents/Indianapolis_IN/01_L_Projects/193213_SR_13 and SR 128 Roundabout/3.0 deliverables/3.7_Roadway/DGN/SHEETS/193213_RD_SHT_PWMT_MKKG-3.dgn



Jared Thurman
10/15/2024
model: Default
file: pw:/mb-us-pw-bentley.com/mb-us-pw-03/Documents/Indianapolis_IN/01_L_Pprojects/193213_SR_13 and SR 128 Roundabout/3.0 deliverables/3.7_Roadway/DGN/SHEETS/193213_RD_SHT_PWMT_MKKG-4.dgn

SIGNING LEGEND

- 1

NO CHANGE REQUIRED TO EXIST. SIGN AND SUPPORTS
- 2

REMOVE EXIST. SHEET SIGN
- 3

REMOVE EXIST. SHEET SIGN AND SUPPORTS
- 4

NEW SHEET SIGN ON EXIST. SUPPORTS
- 5

NEW SHEET SIGN ON EXIST. POLE
- 6

NEW SHEET SIGN AND SUPPORTS
- 7

RELOCATE EXIST. SIGN AND SUPPORTS

LEGEND

- 33

LINE, THERMOPLASTIC, DOTTED, WHITE, 8 IN.
- 34

LINE, THERMOPLASTIC, SOLID, WHITE, 6 IN.
- 35

LINE, THERMOPLASTIC, SOLID, YELLOW, 6 IN.
- 36

LINE, THERMOPLASTIC, BROKEN, YELLOW, 6 IN.
- 37

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- 39

TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24 IN.
- 46

TRANSVERSE MARKING, THERMOPLASTIC, YIELD LINE, WHITE, 27 IN.
- 47

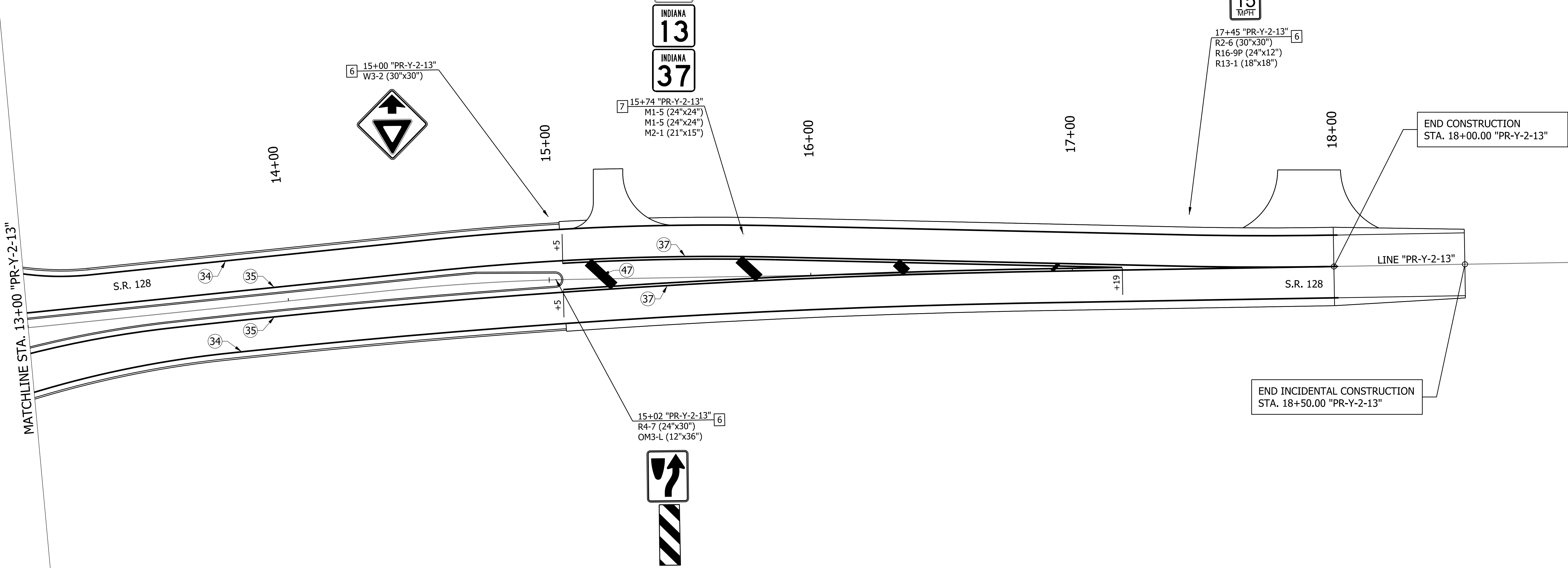
TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, YELLOW, 24 IN. AT 40' SPACING

RECOMMENDED FOR APPROVAL _____	
DESIGNED: AGO	DRAWN: JEC
CHECKED: WRC	CHECKED: WRC
DESIGN ENGINEER _____ DATE _____	

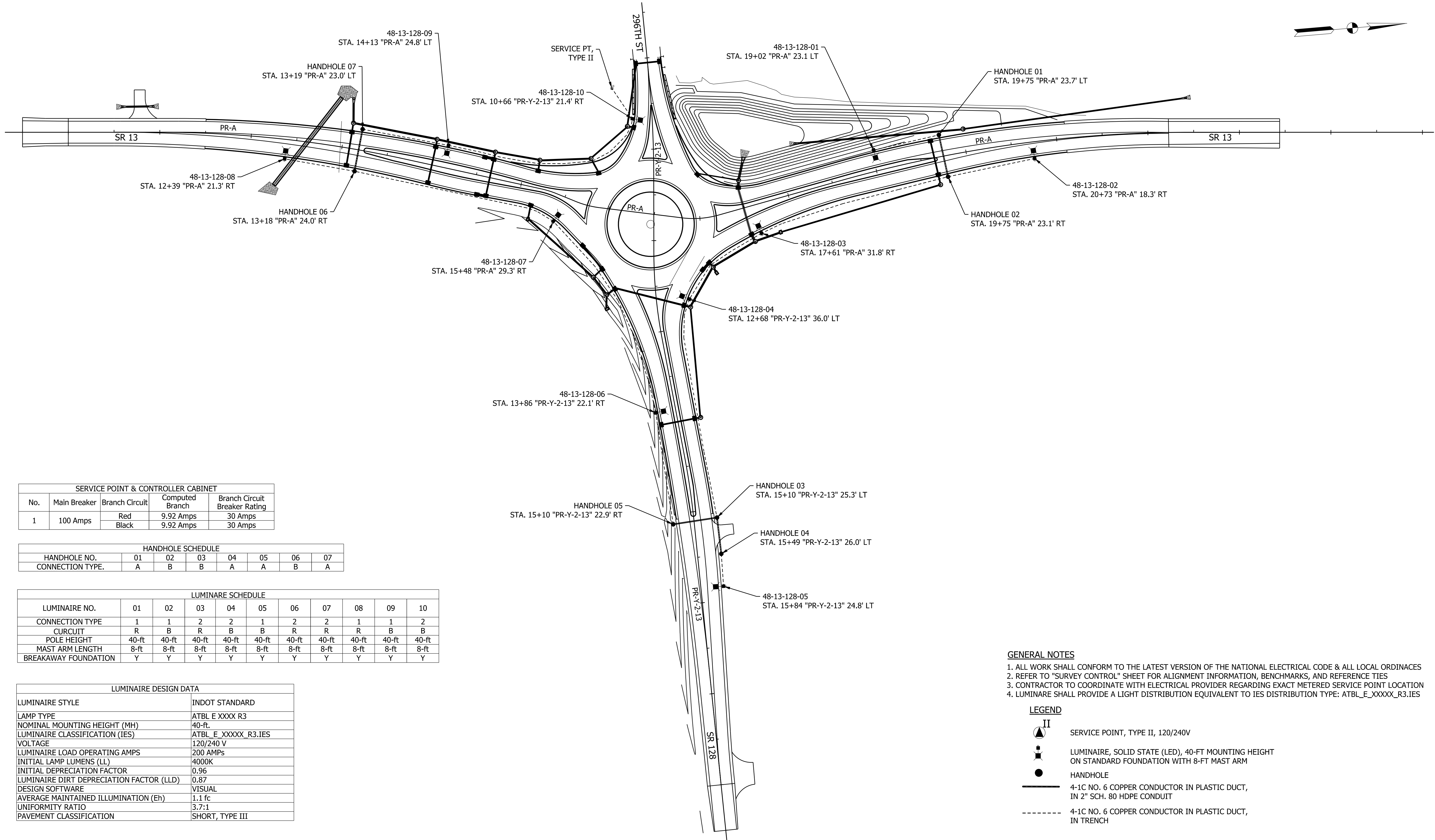
INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS AND SIGNAGE
LINE "PR-Y-2-13"

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 2003081
SURVEY BOOK	SHEETS of
CONTRACT R-44024	PROJECT 2003082



Jared Thurman
10/15/2024
model: Default
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SERVICE POINT & CONTROLLER CABINET				
No.	Main Breaker	Branch Circuit	Computed Branch	Branch Circuit Breaker Rating
1	100 Amps	Red	9.92 Amps	30 Amps
		Black	9.92 Amps	30 Amps

HANDHOLE SCHEDULE							
HANDHOLE NO.	01	02	03	04	05	06	07
CONNECTION TYPE.	A	B	B	A	A	B	A


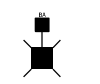


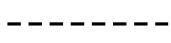
LUMINAIRE SCHEDULE										
LUMINAIRE NO.	01	02	03	04	05	06	07	08	09	10
CONNECTION TYPE	1	1	2	2	1	2	2	1	1	2
CURCUIT	R	B	R	B	B	R	R	R	B	B
POLE HEIGHT	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft
MAST ARM LENGTH	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft
BREAKAWAY FOUNDATION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

LUMINAIRE DESIGN DATA	
LUMINAIRE STYLE	INDOT STANDARD
LAMP TYPE	ATBL E XXXX R3
NOMINAL MOUNTING HEIGHT (MH)	40-ft.
LUMINAIRE CLASSIFICATION (IES)	ATBL_E_XXXX_R3.IES
VOLTAGE	120/240 V
LUMINAIRE LOAD OPERATING AMPS	200 AMPS
INITIAL LAMP LUMENS (LL)	4000K
INITIAL DEPRECIATION FACTOR	0.96
LUMINAIRE DIRT DEPRECIATION FACTOR (LLD)	0.87
DESIGN SOFTWARE	VISUAL
AVERAGE MAINTAINED ILLUMINATION (Eh)	1.1 fc
UNIFORMITY RATIO	3.7:1
PAVEMENT CLASSIFICATION	SHORT, TYPE III

GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE & ALL LOCAL ORDINACES
- REFER TO "SURVEY CONTROL" SHEET FOR ALIGNMENT INFORMATION, BENCHMARKS, AND REFERENCE TIES
- CONTRACTOR TO COORDINATE WITH ELECTRICAL PROVIDER REGARDING EXACT METERED SERVICE POINT LOCATION
- LUMINAIRE SHALL PROVIDE A LIGHT DISTRIBUTION EQUIVALENT TO IES DISTRIBUTION TYPE: ATBL_E_XXXX_R3.IES

LEGEND

-  II
SERVICE POINT, TYPE II, 120/240V
-  LUMINAIRE, SOLID STATE (LED), 40-FT MOUNTING HEIGHT ON STANDARD FOUNDATION WITH 8-FT MAST ARM
-  HANDHOLE
-  4-1C NO. 6 COPPER CONDUCTOR IN PLASTIC DUCT, IN 2" SCH. 80 HDPE CONDUIT
-  4-1C NO. 6 COPPER CONDUCTOR IN PLASTIC DUCT, IN TRENCH

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JWM
CHECKED: LDW CHECKED: WRC

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS
S.R. 13

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	2003081
SURVEY BOOK	SHEETS
	of
CONTRACT	PROJECT
R-44024	2003082

APPENDIX C

Early Coordination



INDIANA DEPARTMENT OF TRANSPORTATION

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

PHONE: (317) 694-8283

Eric Holcomb, Governor
Michael Smith, Commissioner

SAMPLE

July 10, 2023

Re: Early Coordination Letter, Des. No.: 2003081, Intersection Improvement Project, SR 13 at SR 128
Hamilton, Madison, and Tipton Counties, Indiana
KEG No. 21-1155.03

Dear Interested Party,

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a project involving the aforementioned roadway in Hamilton, Madison, and Tipton Counties. 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 at the intersection of SR 13 and SR 128 and with E 296th Street to the west, in Hamilton, Madison, and Tipton Counties. This section of SR 13 and SR 128 is a two-lane *Rural-Minor-Arterial*. The existing SR 13 and SR 128 approaches consist of two 12' travel lanes bordered by 2' paved shoulders. The existing intersection is a two-way stop-controlled intersection. The draft need is due to the above average crash severity at the intersection. Per RoadHAT analysis (INDOT traffic engineering safety modeling software) of 2017-2019 crash data, the index of crash frequency (ICF) is 1.90 (well above average) and the index of crash cost (ICC) is 2.31 (well above average). These indices compare the crash cost and crash frequency for this intersection to intersections with similar volumes, roadway classifications, and control type throughout Indiana. The ICC and ICF exceed the threshold of 1.00 set by INDOT's Office of Traffic Safety, flagging the intersection as a safety concern. The draft purpose is to reduce crash potential at the intersection, improve the ICC and ICF to below 1.00, and provide a long-term solution to ensure safe and efficient operation of the intersection. The approximate existing right-of-way (ROW) from each side of centerline is 12' for SR 128, 40' for E 296th Street, and 12' for SR 13.

The proposed project is anticipated to include replacing the existing two-way stop with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants, new curb and gutters, a stormwater system, new roadside ditches, and lighting. The center of the RAB will shift approximately 100' to the east to avoid impacts to the historical bridge over Duck Creek located 100' west of the center of the current intersection. The project requires the acquisition of approximately 3.26 acres of permanent ROW. Proposed ROW widths from centerline along SR 13 are 60' and along SR 128 are 45'. The project will be approximately 1,360' in length along SR 13 and 800' in length along 296th Street/SR 128. The proposed method of traffic maintenance is anticipated to include lane shifts, lane closures, and detours. Approximately 0.96 acre of trees will be cleared as part of this project. The project is anticipated to begin construction in Spring 2026.

Land use in the vicinity of the project is primarily forested and agricultural, with residence in relative proximity to the northwest, northeast, and southwest quadrants of the project. Kaskaskia Engineering Group, 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.

Please provide your response within thirty (30) calendar days from the date of this letter. 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 me, at 217-213-3046 or jstern@kaskaskiaeng.com, or Kim Szewczak, INDOT Project Manager at 317-289-3193 or kszewczak@indot.in.gov. Thank you in advance for your input.

Sincerely,



Jessica Stern
Environmental Scientist
Kaskaskia Engineering Group, LLC

Attachment -

- Early Coordination Letter Recipient List
- Maps (Location, Aerial, Topographic)
- Photo Log

cc: Tom Heustis, Kimley-Horn
Kate Williams, Kimley-Horn
Curtis William, Michael Baker International

Organization and Project Information

Project ID: 21-1155.03
Des. ID: DES 2003081
Project Title: Intersection Improvement Project
Name of Organization: Kaskaskia Engineering Group
Requested by: JESSICA STERN

Environmental Assessment Report

1. Geological Hazards:
 - Moderate liquefaction potential
 - Floodway
2. Mineral Resources:
 - Bedrock Resource: High Potential
 - Sand and Gravel Resource: Low Potential
3. Active or abandoned mineral resources extraction sites:
 - Petroleum Exploration Wells

*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.

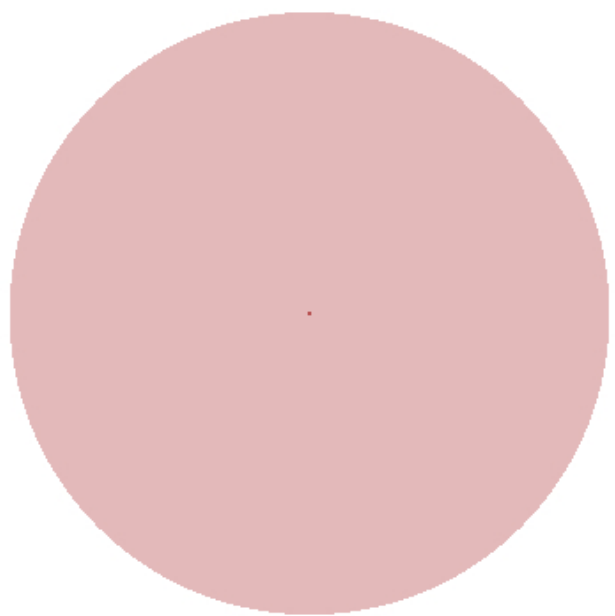
This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: July 10, 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

July 20, 2023

Jessica Stern
Environmental Scientist
301 N Neil St STE 400
Champaign, Illinois 61820

Dear Ms. Stern:

The proposed Intersection Improvement Project, SR 13 at SR 128 in Hamilton, Madison and Tipton Counties, Indiana (Des. No. 2003081), as referred to in your letter received July 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



Digitally signed by JOHN ALLEN
Date: 2023.07.20 13:18:12 -04'00'

JOHN ALLEN
State Soil Scientist

Enclosers

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request				
Name of Project DES2003081 SR13 Intersec Improv (Hal		Federal Agency Involved				
Proposed Land Use		County and State Hamilton County, IN				
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form: JRA		
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 checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size 218 ac	
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 175655 % 68	Amount of Farmland As Defined in FPPA Acres: 16941 % 66				
Name of Land Evaluation System Used LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 7/20/23				
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		0				
B. Total Acres To Be Converted Indirectly		0				
C. Total Acres In Site		0				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		0.12				
B. Total Acres Statewide Important or Local Important Farmland		0.00				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<0.001				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		137				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		67				
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)	10				
2. Perimeter In Non-urban Use	(10)	8				
3. Percent Of Site Being Farmed	(20)	5				
4. Protection Provided By State and Local Government	(20)	0				
5. Distance From Urban Built-up Area	(15)	7				
6. Distance To Urban Support Services	(15)	4				
7. Size Of Present Farm Unit Compared To Average	(10)	1				
8. Creation Of Non-farmable Farmland	(10)	1				
9. Availability Of Farm Support Services	(5)	1				
10. On-Farm Investments	(20)	1				
11. Effects Of Conversion On Farm Support Services	(10)	1				
12. Compatibility With Existing Agricultural Use	(10)	8				
TOTAL SITE ASSESSMENT POINTS		160	47	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	67	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	47	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	114	0	0	0
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: Jessica Stern						
Date: 8/29/23						

(See Instructions on reverse side)

Form AD-1006 (03-02)

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request				
Name of Project DES2003081 SR13 Intersec Improv (Tip		Federal Agency Involved				
Proposed Land Use		County and State Tipton County, IN				
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form: JRA		
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 checked="" type="checkbox"/> NO <input type="checkbox"/>		Acres Irrigated 399 ac		
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 166,225% 100	Amount of Farmland As Defined in FPPA Acres: 16588% 100				
Name of Land Evaluation System Used LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 7/20/23				
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		0				
B. Total Acres To Be Converted Indirectly		0				
C. Total Acres In Site		0				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		0.14				
B. Total Acres Statewide Important or Local Important Farmland		0.00				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<0.001				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		60				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		75				
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)	7				
2. Perimeter In Non-urban Use	(10)	8				
3. Percent Of Site Being Farmed	(20)	1				
4. Protection Provided By State and Local Government	(20)	0				
5. Distance From Urban Built-up Area	(15)	7				
6. Distance To Urban Support Services	(15)	7				
7. Size Of Present Farm Unit Compared To Average	(10)	1				
8. Creation Of Non-farmable Farmland	(10)	1				
9. Availability Of Farm Support Services	(5)	1				
10. On-Farm Investments	(20)	1				
11. Effects Of Conversion On Farm Support Services	(10)	1				
12. Compatibility With Existing Agricultural Use	(10)	1				
TOTAL SITE ASSESSMENT POINTS		160	36	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	75	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	36	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	111	0	0	0
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: Jessica Stern Date: 8/29/23						

(See Instructions on reverse side)

Form AD-1006 (03-02)

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request				
Name of Project DES2003081 SR13 Intersec Improv (Ma		Federal Agency Involved				
Proposed Land Use		County and State Madison County, IN				
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form: JRA		
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 checked="" type="checkbox"/> NO <input type="checkbox"/>		Acres Irrigated 312 ac		
Major Crop(s) Corn		Farmable Land In Govt. Jurisdiction Acres: 281875 % 97		Amount of Farmland As Defined in FPPA Acres: 270,12 % 93		
Name of Land Evaluation System Used LESA		Name of State or Local Site Assessment System		Date Land Evaluation Returned by NRCS 7/20/23		
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		0.72				
B. Total Acres To Be Converted Indirectly		0				
C. Total Acres In Site		0.72				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		1.60				
B. Total Acres Statewide Important or Local Important Farmland		0.00				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<0.001				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		80				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		73				
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)	7				
2. Perimeter In Non-urban Use	(10)	8				
3. Percent Of Site Being Farmed	(20)	10				
4. Protection Provided By State and Local Government	(20)	0				
5. Distance From Urban Built-up Area	(15)	7				
6. Distance To Urban Support Services	(15)	7				
7. Size Of Present Farm Unit Compared To Average	(10)	8				
8. Creation Of Non-farmable Farmland	(10)	1				
9. Availability Of Farm Support Services	(5)	1				
10. On-Farm Investments	(20)	1				
11. Effects Of Conversion On Farm Support Services	(10)	1				
12. Compatibility With Existing Agricultural Use	(10)	5				
TOTAL SITE ASSESSMENT POINTS		160	56	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	73	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	56	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	129	0	0	0
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: Jessica Stern						
Date: 8/29/23						

(See Instructions on reverse side)

Form AD-1006 (03-02)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

July 25, 2023

Kaskaskia Engineering Group, LLC
Attention: Jessica Stern
301 North Neil Street, Suite 400
Champaign, IL 61820

Dear Jessica Stern:

Re: Wellhead Protection Area
Proximity Determination
Des No 2003081
Intersection Improvement Project,
SR 13 at SR 128
Hamilton, Madison, and Tipton Counties, Indiana

Upon review of the above referenced project site, it has been determined that the proposed project area **is not located within** a Wellhead Protection Area. The information is accurate to the best of our knowledge; however, there are in some cases a few factors that could impact the accuracy of this determination. Some Wellhead Protection Area Delineations have not been submitted, and many have not been approved by this office. In these cases, we use a 3,000-foot fixed radius buffer to make the proximity determination. To find the status of a Public Water Supply System's (PWSS's) Wellhead Protection Area Delineation please visit our tracking database at <http://www.in.gov/idem/cleanwater/2456.htm> and scroll to the bottom of the page.

The project area **is located within** a Source Water Assessment Area for a PWSS's surface water intake. The Source Water Assessment Area relates to the surface water drainage area that water could potentially flow and influence water quality for a PWSS's source of drinking water. The PWSS that could be impacted by the project is Citizens Water – Indianapolis. A contact person for Citizens Water – Indianapolis is John Havard, and he could be reached via e-mail and/or phone at: JHavard@citizensenergygroup.com and 317-693-8716. The contact information is provided as a courtesy and reference for you if any issues arise that could potentially impact the water quality for the PWSS during the course of the project. It is not a requirement of IDEM that you contact the system regarding the project.

In the future, **please consider using this self-service tool** if it suits your needs. The Drinking Water Branch has a self-service tool which allows one to determine wellhead proximity without submitting the application form. Go to <https://www.in.gov/idem/cleanwater/pages/wellhead/> and use the instructions at the bottom of the page.



Please Reduce, Reuse, Recycle

Jessica Stern
Page 2

If you have any additional questions, please feel free to contact me at the address above or at 317-233-9158 and aturnbow@idem.in.gov.

Sincerely,

A handwritten signature in black ink that reads "Alisha Turnbow". The signature is written in a cursive, flowing style.

Alisha Turnbow,
Environmental Manager
Ground Water Section
Drinking Water Branch
Office of Water Quality

Electronic cc: John Havard, Citizens Water – Indianapolis

THIS IS NOT A PERMIT

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

DNR#: ER-25750

Request Received: July 10, 2023

Requestor:

Jessica Stern
 Kaskaskia Engineering Group, LLC
 301 North Neil Street, Suite 400
 Champaign, IL 61820

Project:

SR 13 & SR 128 roundabout construction; KEG #21-1155.03, Des #2003081

County/Site Info: Hamilton 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:

If any work is in the floodway of Duck Creek, the proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1. Please submit a copy of this letter with the permit application.

Natural Heritage Database:

The Natural Heritage Program's data have been checked. The Little Spectaclecase (*Villosa lienosa*), a Species of Special Concern in Indiana, has been documented within 0.5 miles of the project site.

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) Heritage Species:

Direct impacts to Little Spectaclecase should be minimal due to this project. Ensure appropriate erosion and sediment control measures are in place to prevent sediment from entering nearby waterways.

B) Lighting:

Most transportation corridor designers and municipalities are trending toward LED lighting. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. Scientific evidence suggests that artificial light at night has negative and deadly effects on many organisms including amphibians, birds, mammals, insects and plants (<https://www.darksky.org/light-pollution/wildlife/>). A June 2016 American Medical Association (AMA) report, "Human and Environmental Effects of Light Emitting Diode Community Lighting," concluded that "white LED street lighting patterns may contribute to the risk of chronic disease in the populations of cities in which they have been installed."

The International Dark-Sky Association has developed recommendations (<https://www.darksky.org/our-work/lighting/lighting-for-citizens/led-guide/>) for communities choosing LED lighting systems that will aid in the selection of lighting that is energy and cost efficient, yet ensures safety and security, protects wildlife, and promotes the goal of reducing light pollution:

- Always choose fully shielded fixtures that emit no light upward.
- Use "warm-white" or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) to minimize harmful blue light emission.
- Look for products with adaptive controls like dimmers, timers, and motion sensors.
- Consider dimming or turning off lights during non-peak overnight hours.
- Avoid the temptation to over-light because of the higher luminous efficiency of LEDs.
- Only light the exact space and in the amount required for particular tasks.

C) Pavement Rehabilitation:

Pavement rehabilitation projects typically do not have a significant impact on fish, wildlife, and botanical resources as long as best management practices (BMPs) are in place to limit the migration of Polycyclic aromatic hydrocarbons (PAHs) into local waterways. PAHs are a byproduct of asphalt and coal tar based sealants and negatively impact aquatic systems. The use of sealants that are free of petroleum and coal tar based products is encouraged whenever possible. Contaminated road runoff can significantly impact the aquatic environment through increased turbidity and release of sediment into the stream which can be harmful to fish and other aquatic organisms, their eggs, and their food supply. Where possible, road runoff should be directed to riprap turnouts and sediment filtration prior to entering a stream to reduce impacts to aquatic species. We recommend the use of pollutant trapping technology such as storm drain inserts to reduce the runoff of roadside pollutants.

D) Drainage and Stormwater Management:

The Division of Fish and Wildlife recommends considering a more sustainable approach to stormwater management. The traditional model of stormwater management aims to drain runoff as quickly as possible with the help of channels and pipes, which increases peak flows and costs of stormwater management. This type of solution only transfers drainage problems from one section of a basin to another. A more sustainable approach should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, etc.) and recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.). The following links give a good overview of traditional and sustainable stormwater management systems and their pros and cons for consideration during the design of the proposed project: <https://www.epa.gov/greeningepa/epa-facility-stormwater-management>; <https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities>

E) Duck Creek Stream Crossing:

The submittal indicates that the roundabout will be shifted to the east to avoid impacts to the existing structure carrying SR 128 over Duck Creek. Following are general guidelines for any work that might be proposed at the existing structure location if plans change over time.

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 OHWM. Bank lines must be maintained or restored within structures to allow for wildlife passage above the ordinary high water mark. 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 a number of 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/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>, <https://www.fs.usda.gov/ccrc/tool/fishxing-fish-passage-learning-systems>.

F) Bank 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. 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.

G) Tree Removal Outside a Regulated Floodway:

The Division of Fish and Wildlife recommends avoiding removing trees along a roadway to the greatest extent possible and replacing trees that must be removed. Street trees are important to fish and wildlife resources in urban and rural areas. Indiana's street trees also provide millions of dollars of tangible benefits to Indiana communities by their presence in the urban environment. Their shade and beauty contribute to the quality of life. They provide significant increases in real estate values, create attractive settings for commercial businesses, and improve community neighborhood appeal. Trees decrease energy consumption by providing shade and acting as windbreaks. They reduce water treatment costs and impede soil erosion by slowing the runoff of stormwater. Trees also cool the air temperature, cleanse pollutants from the air, and produce oxygen while absorbing carbon dioxide. Trees are an integral component of the urban environment. Proactively managing and maintaining a street tree population will ultimately maximize the benefits afforded by their aesthetic and ecological functions. The following links give a good overview of the benefits of a street tree program and how to select the right species to avoid the negative impacts of non-native invasive species such as the common and popular Bradford pear: <https://www.in.gov/dnr/forestry/forestry-publications-and-presentations/> (scroll down to the Community & Urban Forestry section).

H) Tree Removal Within a Regulated Floodway:

The Division of Fish and Wildlife recommends a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at: <https://www.in.gov/nrc/files/IB-17.pdf>.

Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in a rural area typically do not require mitigation or additional plantings beyond seeding and stabilizing disturbed areas, though there are exceptions for high quality habitat sites. Impacts under 0.10 acre in an urban area should be mitigated by replacing trees that are 10" diameter-at-breast height (dbh) or greater by planting five trees, 1" to 2" in dbh, for each tree which is removed that is 10" dbh or greater. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to forested wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed.

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 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 cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
6. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
7. Do not use broken concrete as riprap.
8. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
9. Minimize the movement of resuspended bottom sediment from the immediate project area.
10. 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.
11. 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.
12. 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.
13. Plant five trees, 1 inch to 2 inches in diameter-at-breast height, for each tree which is removed that is 10 inches or greater in diameter-at-breast height.

Contact Staff:

Our agency appreciates this opportunity to be of service. Please contact me at mbuffington@dnr.in.gov or (317) 233-4666 if we can be of further assistance.

Matt Buffington
Matt Buffington
Environmental Unit Supervisor
Division of Fish and Wildlife

Date: August 9, 2023

Chad Kelly

From: Lewandowski, Tyler <TLewandowski@indot.IN.gov>
Sent: Tuesday, July 11, 2023 6:32 AM
To: Jessica Stern
Subject: RE: Early Coordination Letter - INDOT Project, Des. No. 2003081, Intersection Improvement, Hamilton, Madison, and Tipton Counties, Indiana [21-1155.03]

Good morning,

After review, no tall structure permit is required for the project if all equipment being used is under 200 feet in height. Please let our office know if you have any further questions.

Thank you,

Tyler Lewandowski
 Project Manager
 INDOT Office of Aviation
 (317) 495-4875
tlewandowski@indot.in.gov
www.aviation.indot.in.gov



From: Jessica Stern <JStern@kaskaskiaeng.com>
Sent: Monday, July 10, 2023 4:31 PM
To: Jessica Stern <JStern@kaskaskiaeng.com>
Cc: Molly Barletta <MBarletta@kaskaskiaeng.com>; Heustis, Tom <tom.heustis@kimley-horn.com>; Williams, Kate <Kate.Williams@kimley-horn.com>; Curtis, William <William.Curtis@mbakerintl.com>; Szewczak, Kimberly <KSzewczak@indot.IN.gov>
Subject: Early Coordination Letter - INDOT Project, Des. No. 2003081, Intersection Improvement, Hamilton, Madison, and Tipton Counties, Indiana [21-1155.03]

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

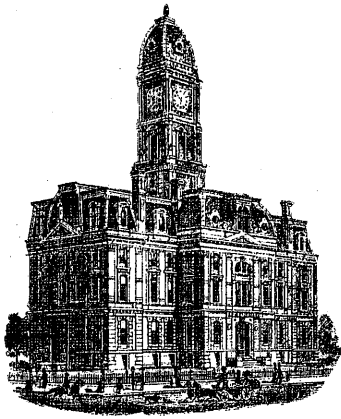
Dear Interested Party,

Please find attached an early coordination letter and supporting exhibits for the above referenced project.

Thank you,
 Jessica Stern



Jessica Stern (she/her)



Kenton C. Ward, CFM
Surveyor of Hamilton County
 Phone (317) 776-8495
 Fax (317) 776-9628

Suite 188
One Hamilton County Square
Noblesville, Indiana 46060-2230

July 13, 2023

Kaskaskia Engineering Group, LLC
 Jessica Stern
 208 East Main Street, Suite 100
 Belleville, IL 62220

RE: Intersection Improvement Project, S.R. 13 at S.R. 128 Des No. 2003081

I have received your Early Coordination letter dated July 10, 2023 regarding the above referenced project. I have the following comments regarding this project.

REGULATED DRAINS –

Please be aware that Duck Creek, located west of the intersection is a regulated drain and the Hamilton County section is under a maintenance program. It is noted that a storm water system will be included in the improvements. Any outlets into Duck Creek must be approved by the Hamilton County Surveyor's Office per IC 26-9-27-17. In addition, Hamilton County requires runoff from additional impervious surfaces be detained prior to release. The Hamilton County Stormwater Management Technical Standards Manual can be found at this link – www.hamiltoncounty.in.gov/documentcenter/view/1373/Hamilton-County-Stormwater-Manual-PDF.

FLOODPLAINS –

There are FEMA mapped floodway and floodplain associated with Duck Creek. Please be aware that Hamilton County has a prohibition against fill within the floodplain.

SECTION CORNERS –

There is one (1) section corner within the project limits. This section corner is one of the HARN corners established by the county. This is known as Corner Number 20060503 and a copy of the corner record is attached.

Please coordinate with Mr. Brian Rayl, P.S. in my office regarding this section corner.

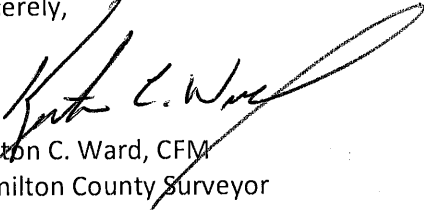
BENCH MARKS –

There is one (1) benchmark within the project limits. This benchmark is located in the northwest corner of the 296th Street Bridge over Duck Creek, Tipton County Bridge No. 93. This benchmark is known as TCBR 93 and a copy of the record is attached.

Please coordinate with Mr. Brian Rayl, P.S. in my office regarding this benchmark.

Please note that the Hamilton County GIS is available online at www.hamiltoncounty.in.gov. The online mapping may be of help to you as you develop this project.

Sincerely,



Kenton C. Ward, CFM
Hamilton County Surveyor

Cc: Brian Rayl, PS
John Campbell, PS
Tom Shepherd, Madison County Surveyor

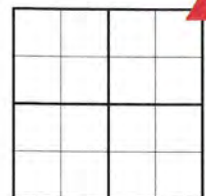
KCW/pll

HAMILTON COUNTY SURVEYOR'S OFFICE

CORNER RECORD



N
NTS



05 - 20N - 06E
SEC. - T - R

FIELD CREW:

Bob King, CST2

Scott Dykes

DATE: 5-18-2020

FB: 20-06 PG: 24-25

GEODETTIC CONTROL

Bob King, CST2

DATE: 5-18-2020

MONUMENT: **HARRISON FOUND AT SURFACE**

Ref.	Distance	Witness Monument Ties
1.	14.41'	Mag nail & washer found in bridge deck in front of guardrail.
2.	25.10'	Mag nail & washer found in SE corner of guardrail post.
3.	34.89'	Mag nail & washer found in NE corner of guardrail post.
4.	14.20'	Mag nail & washer found in bridge deck in front of guardrail.
5.	19.22'	Mag nail & washer found in bridge deck in front of guardrail.
6.	22.77'	Mag nail & washer found in bridge deck in front of guardrail.

SPC Indiana East 1301

NAD 83 US Survey ft.

N: 1810512.585

E: 273461.119

NAVD 88 (GEOID12A)

ELEV: 829.44

NOTE: The Orthometric Height was determined by RTK GPS observation & Geoid model GEOID 12A

HISTORY

4-4-1990 Bernsten monument set in PVC. 6-19-2000 Bernsten monument found in PVC 6" below surface. 7-6-2007 Aluminum monument found, 0.55' below surface. 2-7-2008 Bernsten monument found in PVC casting. 6-6-2011 Harrison set at surface.

DRAWN BY:

Todd Whisman, CST1

DATE: 6-9-2020

Sheet
1
of
1
Indiana Tie Card References:
IN02_T20NE06E05_08

Hamilton County Surveyor's Office
One Hamilton County Square, Suite 188 Noblesville, IN 46060
Surveyor@HamiltonCounty.IN.gov
317-776-8495

CORNER NUMBER

20060503

HAMILTON COUNTY SURVEYOR'S OFFICE

VERTICAL CONTROL

STATION NAME: **TCBR 93**

Type of Monument: Hamilton County Geodetic Control Disk

Organization:

Hamilton County Surveyor's Office

Section: 5 Township: 20 North Range: 6 East

Civil Township: White River

USGS Quad: FRANKTON

DESCRIPTIVE LOCATION:

4" Ø Brass Disk stamped Hamilton County Geodetic Control. Set in concrete at the North edge of bridge deck over Duck Creek. Located +/- 212' West of centerline of S.R. 37, and +/- 14' North of centerline of 296th Street. Year Established 2011.

Current Field Verification

DATE: 6-10-2020

FIELD CREW: Steve Fesmire CST

Alex Jamieson

SPC Indiana East 1301

NAD 83 US Survey ft.

N: 1810525.246

E: 273347.734

NAVD 88 (GEOID12A)

ELEV: 826.72

Reported / Published

DATE: 5-18-2011

FIELD CREW: Lyle D. Branson

SPC Indiana East 1301

NAD 83

N:

E:

NAVD 88

ELEV: 826.85

NOTE:

The Orthometric Height was determined by GPS (RTK) observation & Geoid model GEOID 12A

NOTE: The Orthometric Height was established by Differential Leveling, Aerial Engineering Job B-32318-A / see attachments





FINAL DESCRIPTION AND ELEVATION OF BENCH MARKS

State Form 52785 (8-06)

Indiana Department of Transportation
Attention: Survey Operations Manager
Greenfield District
32 South Broadway Street
Greenfield, IN 46140
Telephone: (317) 467-3425

- INSTRUCTIONS:
1. Familiarize yourself with the requirements on the back side of this form.
 2. Complete all sections and make sure that all entries are either typed, or written legibly using black ink.
 3. Make a rubbing and/or a photograph of the bench mark.
 4. Submit all required materials (i.e. this form, photograph/rubbing and field notes) to the Survey Operations Manager within 30 days of establishing the elevation.

INDIANA DEPARTMENT OF TRANSPORTATION GREENFIELD DISTRICT

Bench Mark Name: Unknown

Elevation In Feet: 826.85
(International Feet)

Date Elevation Established: 05/18/2011

Contract Number: B-32318-A

Level Datum, Check One:

☐ NGVD 1929 ☒ NAVD 1988 ☐ Other _____

Elevation Established From Which Agency, Bench Mark Tablet Name: _____

☒ NGS ☐ USGS ☐ USC&GS ☐ Other _____

Method Of Establishing Elevation: ☐ GPS ☒ Differential Leveling

Does This Bench Mark Replace A Bench Mark? ☐ Yes ☒ No

If Yes, List The Previous Bench Mark Name: _____

Located In The NE Quadrant Of Section 5, Township _____, Range _____
(NW,NE,SW,SE) (1-36) (# N/S) (# E/W)

2nd Principal Meridian, White River, Hamilton
(1st Or 2nd) (Civil Township) (County)

Other Description As Necessary (Military Grants, Donation Lands, Etc.)

0 Miles South Of CR 600S On CR 800E
(North/South/East/West) (Major Cross Road) (Route)

Further Described As Follows:

At the corner of Tipton/Hamilton/Madison counties. Brass disc stamped "Hamilton County Geodetic Control" set flush in
concrete of bridge deck at the northwest corner 1' +/- east of the edge of the approach slab.

Final Notes by: Lyle Branson
(Printed Name)

Checked by: _____
(Printed Name)

Date: 06/03/2011 Signature: [Signature]
(Professional Signature)

Cc: Manager of Aerial Engineering
Final Construction Record



(Professional Seal; Surveyor/Engineer)

DESC	+	HI	-	ELEV
EXIST. BM				841.42
	10:29	851.71		
TP 1	552	852.41	482	846.89
TP 2	428	851.90	479	847.62
TP 3	456	851.66	480	847.10
TP 4	207	847.75	598	845.68
TP 5	0.37	838.58	9.54	838.21
TP 6	661	833.12	1207	826.51
TP 7	8.08	836.25	495	828.17
NEW BM @ DUCK CREEK	9.23	836.08	9.40	826.85
TP 7	496	833.14	7.90	828.18
TP 6	12.45	838.97	6.62	828.52
TP 5			0.75	838.22

MPC

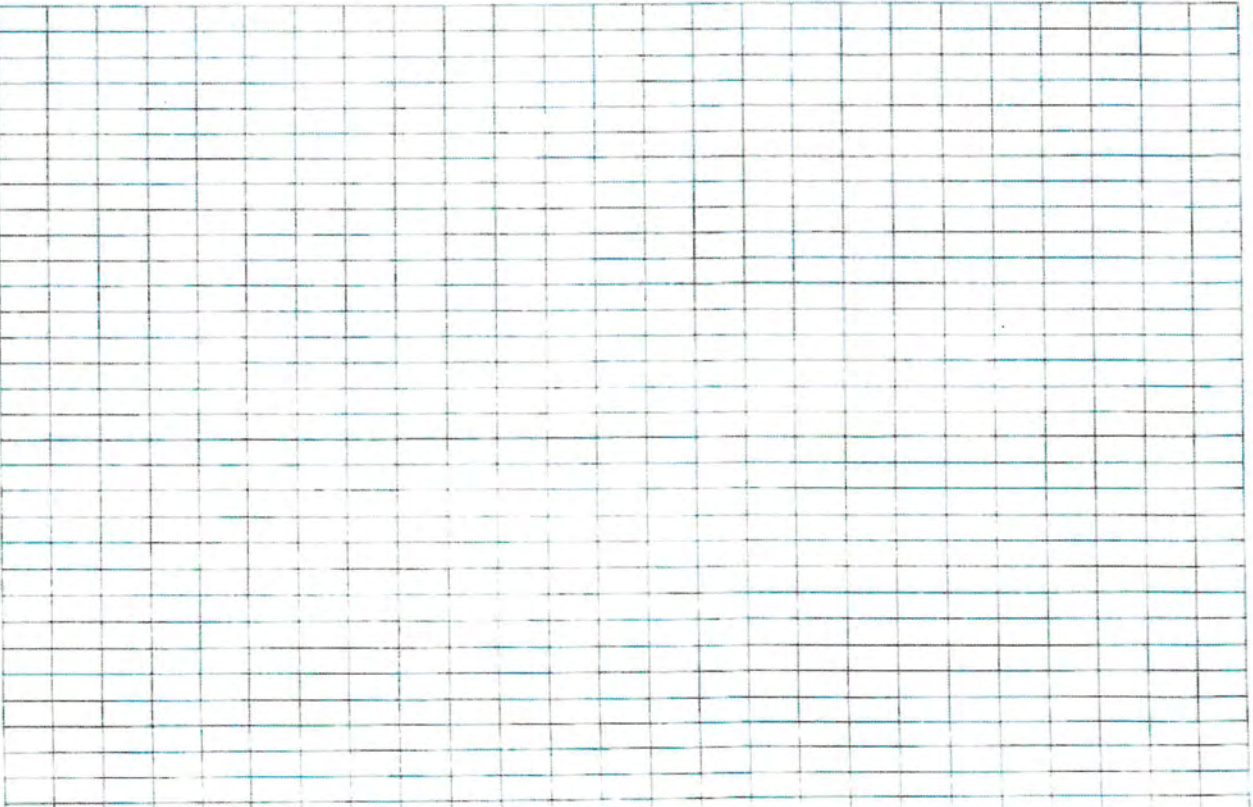
5/18/11

BRIDGE @ DUCK CREEK
MONUMENT BRANCH CREEK

EXISTING BM - BRONZE DISK END. @ SOUTH
END OF HEADWALL OF CULVERT
200'S. OF CR 900W EAST SIDE
SE 37. DISK STAMPED U.S.G.S. 1

NEW BM @ DUCK CREEK - BRONZE DISK SET FLUSH IN
OF BRIDGE DECK @ N.W. COR
1 1/4' E. OF EDGE OF APPROACH
Disk Stamped "HAMILTON COUN
GEODETIC CONTROL"

Desc.	+	H ₁	-	ELEV
ELEV. CONT.				838.22
TP4	9.45	847.67	1.98	845.69
TP3	4.15	851.84	4.73	847.11
TP2	5.77	852.88	5.25	847.63
TP1	4.46	852.09	5.21	846.84
EXIST. BM	4.71	851.59	10.18	841.41
			(-0.01)	(841.42)



The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

DATABASE = , PROGRAM = datasheet, VERSION = 7.87

1 National Geodetic Survey, Retrieval Date = JUNE 7, 2011

LA1344 *****

LA1344 DESIGNATION - U 194

LA1344 PID - LA1344

LA1344 STATE/COUNTY- IN/MADISON

LA1344 USGS QUAD - FRANKTON (1994)

LA1344

LA1344 *CURRENT SURVEY CONTROL

LA1344

LA1344* NAD 83(1986)- 40 13 58.03 (N) 085 51 25.56 (W) HD_HELD1

LA1344* NAVD 88 - 256.466 (meters) 841.42 (feet) ADJUSTED

LA1344

LA1344 GEOID HEIGHT- -34.26 (meters) GEOID09

LA1344 DYNAMIC HT - 256.329 (meters) 840.97 (feet) COMP

LA1344 MODELED GRAV- 980,086.5 (mgal) NAVD 88

LA1344

LA1344 VERT ORDER - SECOND CLASS 0

LA1344

LA1344.The horizontal coordinates were established by differentially corrected
LA1344.hand held GPS obs and have an estimated accuracy of +/- 3 meters.

LA1344

LA1344.The orthometric height was determined by differential leveling and
LA1344.adjusted in June 1991.

LA1344

LA1344.The geoid height was determined by GEOID09.

LA1344

LA1344.The dynamic height is computed by dividing the NAVD 88

LA1344.geopotential number by the normal gravity value computed on the

LA1344.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

LA1344.degrees latitude (g = 980.6199 gals.).

LA1344

LA1344.The modeled gravity was interpolated from observed gravity values.

LA1344

LA1344; North East Units Estimated Accuracy

LA1344;SPC IN E - 553,382.0 83,794.1 MT (+/- 3 meters HH1 GPS)

LA1344

LA1344 SUPERSEDED SURVEY CONTROL

LA1344

LA1344 NGVD 29 (??/??/92) 256.598 (m) 841.86 (f) ADJ UNCH 2 0

LA1344

LA1344.Superseded values are not recommended for survey control.

LA1344.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

LA1344.See file dsdata.txt to determine how the superseded data were derived.

LA1344

LA1344 U.S. NATIONAL GRID SPATIAL ADDRESS: 16TEK9722654221(NAD 83)

LA1344_MARKER: DB = BENCH MARK DISK

LA1344_SETTING: 30 = SET IN A LIGHT STRUCTURE

LA1344_SP SET: CULVERT

LA1344_STAMPING: U 194 1946

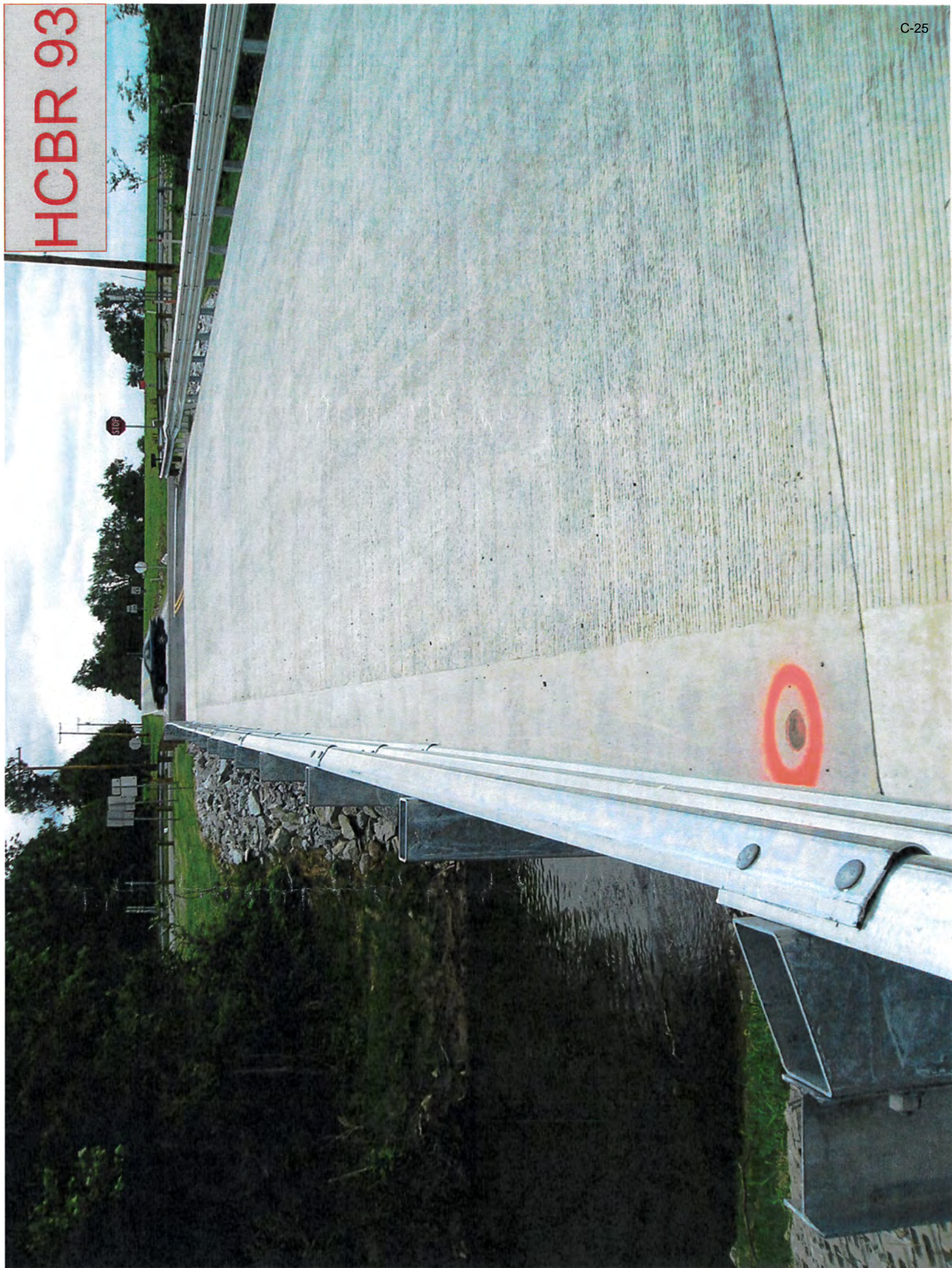
LA1344_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY

LA1344_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

LA1344+SATELLITE: SATELLITE OBSERVATIONS - May 22, 2006

HCBR 93

C-25



From: [Washburn, Eric A CIV USCG D8 \(USA\)](#)
To: [Jessica Stern](#)
Subject: RE: Early Coordination Letter - INDOT Project, Des. No. 2003081, Intersection Improvement, Hamilton, Madison, and Tipton Counties, Indiana [21-1155.03]
Date: Thursday, July 20, 2023 10:41:28 AM
Attachments: [image001.gif](#)

No role for us. Tks.

Respectfully,

Eric Washburn
 USCG D8 Bridge Supervisor, Western Rivers
 STL
 314-269-2378

From: Jessica Stern <JStern@kaskaskiaeng.com>
Sent: Monday, July 10, 2023 3:31 PM
To: Jessica Stern <JStern@kaskaskiaeng.com>
Cc: Molly Barletta <MBarletta@kaskaskiaeng.com>; Heustis, Tom <Tom.Heustis@kimley-horn.com>; Williams, Kate <Kate.Williams@kimley-horn.com>; Curtis, William <william.curtis@mbakerintl.com>; kszewczak@indot.in.gov
Subject: [Non-DoD Source] Early Coordination Letter - INDOT Project, Des. No. 2003081, Intersection Improvement, Hamilton, Madison, and Tipton Counties, Indiana [21-1155.03]

Dear Interested Party,

Please find attached an early coordination letter and supporting exhibits for the above referenced project.

Thank you,
 Jessica Stern



Jessica Stern (she/her)
Environmental Scientist
Certified: WBE/DBE/WOSB/EDWOSB
 217.213.3046 office
JStern@kaskaskiaeng.com



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:

10/31/2024 15:14:50 UTC

Project Code: 2024-0009245

Project Name: SR 13 and SR 128, Intersection Improvement, DES 2003081

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: 2024-0009245

Project Name: SR 13 and SR 128, Intersection Improvement, DES 2003081

Project Type: Road/Hwy - Maintenance/Modification

Project Description: This project is located at the intersection of SR 13 and SR 128 in Hamilton, Madison, and Tipton Counties, Indiana. The proposed project is anticipated to include replacing the existing two-way stop control with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants. The project also includes new curb and gutters, a stormwater system, including a stormwater detention pond, and lighting. The center of the RAB will shift approximately 100' to the east to avoid impacts to the historical bridge over Duck Creek located 100' west of the center of the current intersection. An existing small culvert, CLV-013-048-20.9 (CLV-43727), will be replaced as part of this project. CLV-43727 is comprised of 54 feet of single barrel, 36-inch Corrugated Metal Pipe (CMP), tied into 54 feet of 63-inch by 36-inch Reinforced Concrete Culvert Pipe (RCP). This existing structure will be replaced with 121 feet of single barrel, 48-inch RCP. There is suitable summer habitat within or adjacent to the project action area. Approximately 0.96 acre of trees will be cleared within 100 feet of the existing roadway in the northeast quadrant during the inactive season. The dominant species of trees to be removed include: black walnut (*Juglans nigra*), sugar maple (*Acer saccharum*), and eastern redbud (*Cercis canadensis*). INDOT personnel from the Greenfield District stated on March 27, 2023, that a review of the USFWS database did not indicate the presence of any endangered bat species in or within 0.5 miles of the project area. According to a culvert inspection by Kaskaskia Engineering Group, LLC staff on August 9, 2023, no evidence of bats was seen or heard under the structure. Permanent lighting changes are anticipated; temporary lighting changes are possible due to the potential for nighttime construction. Construction is anticipated to begin in Spring 2026.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.219123350000004,-85.86162867624522,14z>



Counties: Hamilton , Madison , and Tipton counties, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 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> 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	Endangered

BIRDS

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

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

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 (■)

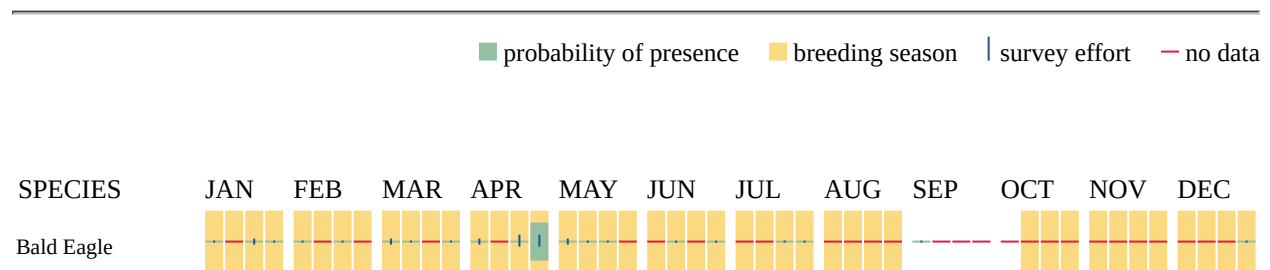
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

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.



Non-BCC
Vulnerable

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
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere

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 (|)

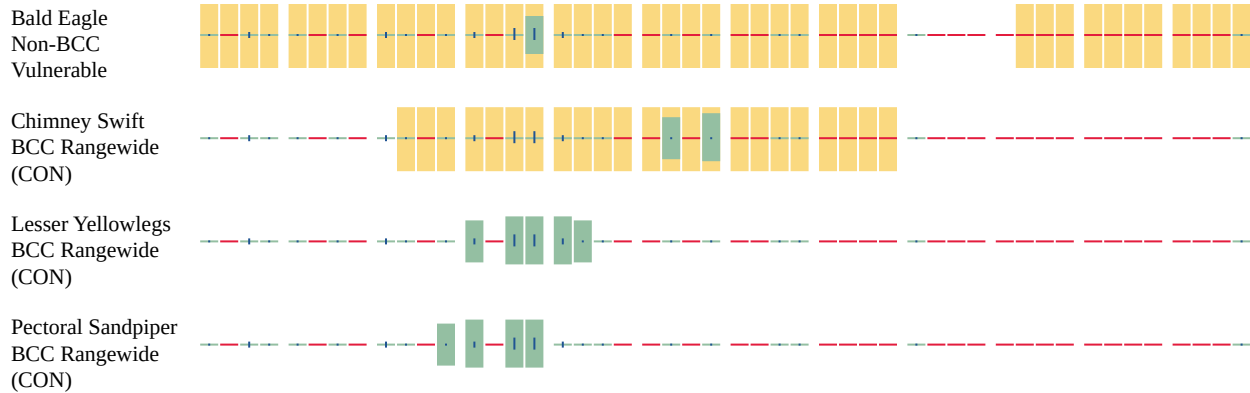
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

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

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



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-incident-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.

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A

RIVERINE

- R2UBH

IPAC USER CONTACT INFORMATION

Agency: Kaskaskia Engineering Group, LLC
Name: Virginia Flynn
Address: 208 E. Main St.
Address Line 2: Suite 100
City: Belleville
State: IL
Zip: 62220
Email: vflynn@kaskaskiaeng.com
Phone: 6182335877

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

You have indicated that your project falls under or receives funding through the following special project authorities:

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)



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:

10/31/2024 16:32:32 UTC

Project code: 2024-0009245

Project Name: SR 13 and SR 128, Intersection Improvement, DES 2003081

Subject: Concurrence verification letter for the 'SR 13 and SR 128, Intersection Improvement, DES 2003081' 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 October 31, 2024 to verify that the **SR 13 and SR 128, Intersection Improvement, DES 2003081** (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
- 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

SR 13 and SR 128, Intersection Improvement, DES 2003081

DESCRIPTION

This project is located at the intersection of SR 13 and SR 128 in Hamilton, Madison, and Tipton Counties, Indiana. The proposed project is anticipated to include replacing the existing two-way stop control with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants. The project also includes new curb and gutters, a stormwater system, including a stormwater detention pond, and lighting. The center of the RAB will shift approximately 100' to the east to avoid impacts to the historical bridge over Duck Creek located 100' west of the center of the current intersection. An existing small culvert, CLV-013-048-20.9 (CLV-43727), will be replaced as part of this project. CLV-43727 is comprised of 54 feet of single barrel, 36-inch Corrugated Metal Pipe (CMP), tied into 54 feet of 63-inch by 36-inch Reinforced Concrete Culvert Pipe (RCP). This existing structure will be replaced with 121 feet of single barrel, 48-inch RCP. There is suitable summer habitat within or adjacent to the project action area. Approximately 0.96 acre of trees will be cleared within 100 feet of the existing roadway in the northeast quadrant during the inactive season. The dominant species of trees to be removed include: black walnut (*Juglans nigra*), sugar maple (*Acer saccharum*), and eastern redbud (*Cercis canadensis*). INDOT personnel from the Greenfield District stated on March 27, 2023, that a review of the USFWS database did not indicate the presence of any endangered bat species in or within 0.5 miles of the project area. According to a culvert inspection by Kaskaskia Engineering Group, LLC staff on August 9, 2023, no evidence of bats was seen or heard under the structure. Permanent lighting changes are anticipated; temporary lighting changes are possible due to the potential for nighttime construction. Construction is anticipated to begin in Spring 2026.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.2191289,-85.86163335076387,14z>



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](#).

Yes

9. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?

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

Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

11. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} **within** the suitable habitat located within your project action area?

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

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

12. Does the project include activities **within documented Indiana bat habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

B) During the inactive season

15. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

16. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

17. Are *all* trees that are being removed clearly demarcated?

Yes

18. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

Yes

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

No

20. Does the project include slash pile burning?

No

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

Yes

22. 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

23. 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

- *Structure Bat Assessment Form 2003081.pdf* <https://ipac.ecosphere.fws.gov/project/BF3QNT0I7RBH3L7KS3B3NNLB54/projectDocuments/151948023>

24. 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

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

No

26. 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

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

Yes

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

Yes

29. Will the project install *any* new or replace any existing **permanent** lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities?

Yes

30. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting (other than the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities) will be installed or replaced?

Yes

31. 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?

Yes

32. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

33. Will *any* activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the inactive season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

34. 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

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

No

36. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.

37. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season

38. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

39. 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

40. **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

41. **Tree Removal AMM 1**

Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal^[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word "trees" as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS' current summer survey guidance for our latest definitions of suitable habitat.

Yes

42. **Tree Removal AMM 3**

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

43. **Tree Removal AMM 4**

Can the project avoid cutting down/removal of *all* (1) **documented**^[1] Indiana bat or NLEB roosts^[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

44. **Lighting AMM 2**

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society^[1] to rate the amount of light emitted in unwanted directions?

[1] Refer to [The BUG System—A New Way To Control Stray Light](#)

Yes

45. **Lighting AMM 2**

Will the **permanent** lighting used during removal of suitable habitat and/or the removal/trimming of trees within suitable habitat be designed to be as close to 0 for all three BUG ratings as possible, with a priority of "uplight" of 0 and "backlight" as low as practicable?

Yes

46. **Lighting AMM 1**

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

Yes

47. **Lighting AMM 2**

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society^[1] to rate the amount of light emitted in unwanted directions?

[1] Refer to [The BUG System—A New Way To Control Stray Light](#)

Yes

48. **Lighting AMM 2**

Will the **permanent** lighting (other than any lighting already indicated for tree clearing or bridge/structure removal, replacement or maintenance activities) be designed to be as close to 0 for all three BUG ratings as possible, with a priority of "uplight" of 0 and "backlight" as low as practicable?

Yes

PROJECT QUESTIONNAIRE

1. Please describe the proposed bridge work:

An existing small culvert, CLV-013-048-20.9 (CLV-43727), will be replaced as part of this project. CLV-43727 is comprised of 54 feet of single barrel, 36-inch Corrugated Metal Pipe (CMP), tied into 54 feet of 63-inch by 36-inch Reinforced Concrete Culvert Pipe (RCP). This existing structure will be replaced with 121 feet of single barrel, 48-inch RCP.

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

Spring 2026

3. Please enter the date of the bridge assessment:

08/09/2023

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

N/A

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

N/A

6. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.96

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

LIGHTING AMM 1

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

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

LIGHTING AMM 2

When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

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: Department of Transportation
Name: Ron Bales
Address: 32 South Broadway Street
City: Greenfield
State: IN
Zip: 46140
Email: rbales@indot.in.gov
Phone: 3175157908

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

You have indicated that your project falls under or receives funding through the following special project authorities:

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	08/09/2023	DOT Project Number	2003081	Route/Facility Carried	SR 13	County	Madison
Federal Structure ID	CLV 43727	Structure Coordinates (latitude and longitude)	40.2178, -85.8618	Structure Height (approximate)	36 in	Structure Length	108
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		<input type="checkbox"/> Metal	<input type="checkbox"/> None	<input type="checkbox"/> Concrete	
<input type="radio"/> Flat Slab/Box		<input type="radio"/> Steel I-beam		<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete	<input type="checkbox"/> Timber	
<input type="radio"/> Truss		<input type="radio"/> Covered		<input type="checkbox"/> Timber	<input type="checkbox"/> Steel	<input type="checkbox"/> Stone/Masonry	
<input type="radio"/> Parallel Box Beam		<input type="radio"/> Other:		<input type="checkbox"/> Open grid	<input type="checkbox"/> Timber	<input type="checkbox"/> Other:	
						Creosote Evidence	
						<input type="radio"/> Yes	<input type="radio"/> No
Culvert Type				Culvert Material		Notes:	
<input type="radio"/> Box				<input checked="" type="checkbox"/> Metal			
<input type="radio"/> Pipe/Round				<input checked="" type="checkbox"/> Concrete			
<input type="radio"/> Other:				<input type="checkbox"/> Plastic			
<input checked="" type="radio"/> Other: 54 feet of single barrel, 36-inch Corrugated Metal Pipe (CMP), tied into 54 feet of 63-inch by 36-inch Reinforced Concrete Culvert Pipe (RCP)				<input type="checkbox"/> Stone/Masonry			
				<input type="checkbox"/> Other:			
Crossings Traversed (check all that apply)				Surrounding Habitat (check all that apply)			
<input type="checkbox"/> Bare ground				<input checked="" type="checkbox"/> Agricultural			
<input checked="" type="checkbox"/> Rip-rap				<input type="checkbox"/> Commercial			
<input checked="" type="checkbox"/> Flowing water				<input type="checkbox"/> Residential-urban			
<input type="checkbox"/> Standing water				<input type="checkbox"/> Residential-rural			
<input type="checkbox"/> Seasonal water				<input checked="" type="checkbox"/> Woodland/forested			
<input checked="" type="checkbox"/> Open vegetation				<input type="checkbox"/> Grassland			
<input type="checkbox"/> Closed vegetation				<input type="checkbox"/> Ranching			
<input type="checkbox"/> Railroad				<input checked="" type="checkbox"/> Riparian/wetland			
<input type="checkbox"/> Road/trail - Type:				<input type="checkbox"/> Mixed use			
<input type="checkbox"/> Other:				<input type="checkbox"/> 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"/> Audible			
<input checked="" type="checkbox"/> Bridges/culverts: rough surfaces or imperfections in concrete		No evidence of Bats or Birds present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
<input type="checkbox"/> Other structures: soffits, rafters, attic areas				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input checked="" type="checkbox"/> Concrete surfaces (open roosting on concrete)		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
		No evidence of Bats or Birds present		<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input type="checkbox"/> Vertical surfaces on concrete I-beams		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input type="checkbox"/> Spaces between walls, ceiling joists		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input type="checkbox"/> All guiderails		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
<input type="checkbox"/> All expansion joints		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #		<input type="checkbox"/> dead #	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Photos	
				<input type="checkbox"/> Staining			
Name: Brigitte Moneymaker				Signature:			

APPENDIX D

Section 106 of the NHPA

800.11 (d)

SR 13 at SR 128 Intersection Improvement Project

Intersection of State Route 13 and State Route 128,
Pipe Creek (Madison County), Madison (Tipton County), and
White River (Hamilton County) Townships

Madison, Tipton, and Hamilton counties, Indiana

Des. No. 2003081

DHPA No. 30736

July 2024

Prepared For:

Kimley-Horn and Associates, Inc.

Indianapolis, Indiana

Prepared By:

Michael Baker International, Inc.

100 Airside Drive Moon Township, Pennsylvania 15108

Author: Katherine Molnar, MS

Contact: Timothy G. Zinn

tzinn@mbakerintl.com

412-269-4619

Michael Baker
I N T E R N A T I O N A L

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**FEDERAL HIGHWAY ADMINISTRATION'S
SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties) AND
SECTION 106 FINDINGS AND DETERMINATIONS
AREA OF POTENTIAL EFFECT
ELIGIBILITY DETERMINATIONS 106
EFFECT FINDING
SR 13 AT SR 128 INTERSECTION IMPROVEMENT PROJECT
DES. NO. 2003081**

**AREA OF POTENTIAL EFFECTS
(Pursuant to 36 CFR Section 800.4(a)(1))**

The area of potential effects (APE) is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of the undertaking..." (36 CFR 800.16[d]).

The above-ground resources APE complies with INDOT's directive regarding APEs for streetscape improvements and roundabout projects. Per the INDOT Cultural Resources Manual, the suggested APE for streetscape improvements, roundabouts, and trail projects includes adjacent properties and properties within the project viewshed (Part II, Chapter 5, Page 4). The resultant APE is one parcel deep on all sides surrounding the immediate project footprint, with consideration given to broadened areas as appropriate for potential auditory or visual impacts. The proposed APE generally follows parcel lines except where prudent to truncate or expand the survey area in consideration of potential visual impacts, thus resulting in an irregularly shaped polygon. It includes 63 acres (0.1 square mile) and is a mixture of agricultural and residential uses.

The archaeological APE for this project includes all areas with the potential for direct impact, including the project area, utility easement, existing right-of-way, and proposed right-of-way.

**ELIGIBILITY DETERMINATIONS
(Pursuant to 36 CFR 800.4(c)(2))**

There are no historic properties present within the APE.

EFFECT FINDING

INDOT, acting on FHWA's behalf, has determined a "No Historic Properties Affected" finding is appropriate for this undertaking. INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect.

SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties)

This undertaking will not convert property from any Section 4(f) historic property to a transportation use; the INDOT, acting on FHWA's behalf, has determined the appropriate Section 106 finding is "No Historic Properties Affected"; therefore no Section 4(f) evaluation is required.



Matthew S. Coon, for FHWA
Manager
INDOT Cultural Resources

July 18, 2024

Approved Date

**FEDERAL HIGHWAY ADMINISTRATION
DOCUMENTATION OF SECTION 106 FINDING OF
NO HISTORIC PROPERTIES AFFECTED
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR SECTION 800.4(D)(1)
SR 13 at SR 128 Intersection Improvement Project
Des. No. 2003081**

1. DESCRIPTION OF THE UNDERTAKING

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with the SR 13 at SR 128 Intersection Improvement Project (Des. No. 2003081). The undertaking is located along SR 13 and SR 128 (E 296th Street) in Madison County, Indiana. A small portion of the project lies within the adjacent counties of Tipton and Hamilton. The project is located at the intersection of Pipe Creek Township (Madison County), Madison Township (Tipton County), and White River Township (Hamilton County) and appears on the Frankton, IN, USGS quadrangle in Sections 4 and 5, Township 20N, Range 6E; and Sections 32 and 33, Township 21N, Range 6E.

Purpose and Need

The purpose of the project is to reduce the high number of severe crashes relative to traffic volume while maintaining good intersection mobility. Specifically, the high frequency of right-angle crashes at the intersection may be attributed to deficient sightlines, high speeds along SR 13, and a large risk exposure window for vehicles on the minor approach.

The identified need at this location stems from safety issues for motorists. According to the project's Engineering Assessment Report (INDOT, Greenfield District, September 25, 2020), the most significant crash pattern in a review of crash data from 2017-2019 was right-angle crashes (39 percent), followed by rear-end crashes (28 percent), run-off-the-road crashes (22 percent), and sideswipe crashes (11 percent). Almost 40 percent of crashes at this intersection resulted in injuries, with 33 percent being incapacitating. The ICF (Index of Crash Frequency) compares the crash rate of this intersection to other similar intersections throughout the state. An ICF of 0 indicates that an intersection is performing as expected. An ICF of 2 or higher may be considered a high crash location. The ICF for this intersection is 1.9.

Project Description/ Preferred Alternative

INDOT and the FHWA propose to proceed with the preferred alternative, which includes replacing the existing two-way stop control with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants. The preferred alternative includes new curb and gutters, a stormwater system, and lighting. The center of the RAB was shifted approximately 100 feet to the east of the existing intersection to avoid impacts to the bridge over Duck Creek.

The project will require the acquisition of approximately 3.26 acres of permanent right-of-way (ROW). Portions of the project area contain undisturbed soils.

Proposed excavation along the project corridor includes the removal of the existing roadway and roadbed to a depth of approximately 2.5 feet, a drainage system with pipes and structure depths ranging from 4 to 6 feet deep, and excavation to install lighting foundations at a depth of 8 feet.

Area of Potential Effects

The area of potential effects (APE) is the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of the undertaking...” (36 CFR 800.16[d]).

The above-ground resources APE complies with INDOT’s directive regarding APEs for streetscape improvements and roundabout projects. Per the INDOT Cultural Resources Manual, the suggested APE for streetscape improvements, roundabouts, and trail projects includes adjacent properties and properties within the project viewshed (Part II, Chapter 5, Page 4). The proposed APE is one parcel deep on all sides surrounding the immediate project footprint, with consideration given to broadened areas as appropriate for potential auditory or visual impacts. The proposed APE generally follows parcel lines except where prudent to truncate or expand the survey area in consideration of potential visual impacts, thus resulting in an irregularly shaped polygon. It includes 63 acres (0.1 square mile) and is a mixture of agricultural and residential uses.

The archaeological APE for this project includes all areas with the potential for direct impact, including the project area, utility easement, existing right-of-way, and proposed right-of-way. Please see Appendix A for a map illustrating the APE and Appendix C for project area photographs.

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

Consulting Party Input

An Early Coordination Letter (ECL) was sent to potential non-tribal consulting parties on April 27, 2023, and to potential tribal consulting parties on April 28, 2023. Identified consulting parties and copies of correspondence are located in Appendix B.

On May 1, 2023, in response to the ECL, Brittany Miller, Director of Indiana Landmark’s Eastern Regional Office, sent an email requesting to be included as a consulting party.

On May 1, 2023, Alex Brooks, Community Preservation Specialist for Indiana Landmarks, sent an email requesting to be added as a representative of Tipton and Hamilton counties, along with Mark Dollase.

On May 5, 2023, Diane Hunter, Tribal Historic Preservation Officer for the Miami Tribe of Oklahoma, sent a letter to INDOT CRO stating that the Tribe has “no objection” to the proposed project at this time.

On May 30, 2023, Carissa Speck, Historic Preservation Director for the Delaware Nation, responded to the ECL, stating that the Tribe should be alerted “should any human remains and/or any Native American archaeological resources inadvertently be uncovered.”

On May 30, 2023, Beth McCord, Deputy Indiana State Historic Preservation Officer, accepted consulting party status and affirmed the list of identified consulting parties was accurate.

On June 7, 2023, Erin Paden, Tribal Historic Preservation Specialist for the Shawnee Tribe, sent an email accepting consulting party status.

On June 16, 2023, Paul Barton, Tribal Historic Preservation Officer for the Eastern Shawnee Tribe of Oklahoma, sent a letter to INDOT CRO stating that the project poses “no adverse effect” to known sites of interest to the Eastern Shawnee Tribe.

On January 3, 2024, the Historic Property Short Report (HPSR) was transmitted to non-tribal consulting parties. On January 5, 2024, the HPSR was transmitted to tribal consulting parties.

On February 1, 2024, Beth McCord, Deputy Indiana State Historic Preservation Officer, sent a letter concurring with the findings of the HPSR.

On February 28, 2024, Lora Nuckolls, Tribal Historic Preservation Officer for the Eastern Shawnee Tribe of Oklahoma, sent a letter indicating that the project poses No Adverse Effect or endangerment to known sites and interest to the tribe.

On June 4, 2024, KayLee Blum (archaeologists for INDOT CRO) emailed tribal consulting parties alerting them that an archaeological short report (ASR) was ready for review and comment.

On July 7, 2024, Beth McCord, Deputy Indiana State Historic Preservation Officer, sent a letter concurring with the findings of the ASR.

Copies of all consulting party coordination letters are included in Appendix B.

Identification of Historic Properties

Project historians used historical maps and aerial photographs to determine the historic development of the project area/APE. In this way, historians were able to locate above-ground resources not previously surveyed that will be 50 years of age or older by the time of project letting. Cartographic resources used for this purpose include USGS topographic quadrangle maps and historic aerial photographs. Coupled with field work, the project historians identified four above-ground resources that are 50 years of age or older within the APE: a farm (8172 N SR 37, Elwood, IN) and three houses (9928 W SR 128, Elwood, IN; 29540 State Road 37, Atlanta, IN; and 29441 Duck Creek Avenue, Atlanta, IN). One previously recorded bridge (Tipton County Bridge Number 93) was since demolished.

After project historians identified the above-ground resources, they conducted research to determine whether any previously recorded or newly identified above-ground resources might merit a Notable or Outstanding rating in the Indiana Historic Sites and Structures Inventory (IHSSI). The farm resource was recommended Non-Contributing due to low historic integrity. The three houses were recommended Contributing but did not rise to the level of Notable or Outstanding.

A field survey, consisting of a vehicular and pedestrian examination of the APE was conducted May 8-11, 2023, to verify the condition of any previously recorded resources [there were none] and to identify and evaluate previously unrecorded resources within the APE that are at least 50 years of age by the time of project letting, meaning they were constructed in or before 1974. Documentation of each resource included, where appropriate, the completion of historic resource field forms, field notes, sketches, site plans, and digital photography.

The Historic Property Short Report (HPSR) was first distributed to consulting parties on January 3, 2024. The Indiana SHPO concurred with the findings of the HPSR in a letter dated February 1, 2024.

The Archaeology Short Report (ASR) was first distributed to consulting parties on June 4, 2024. The Indiana SHPO concurred with the findings of the ASR in a letter dated July 8, 2024.

Copies of the abstracts and summary/conclusion pages from the HPSR and ASR are included in Appendix D.

3. BASIS FOR FINDING

No historic properties are present within the APE.



Appendix A. Map

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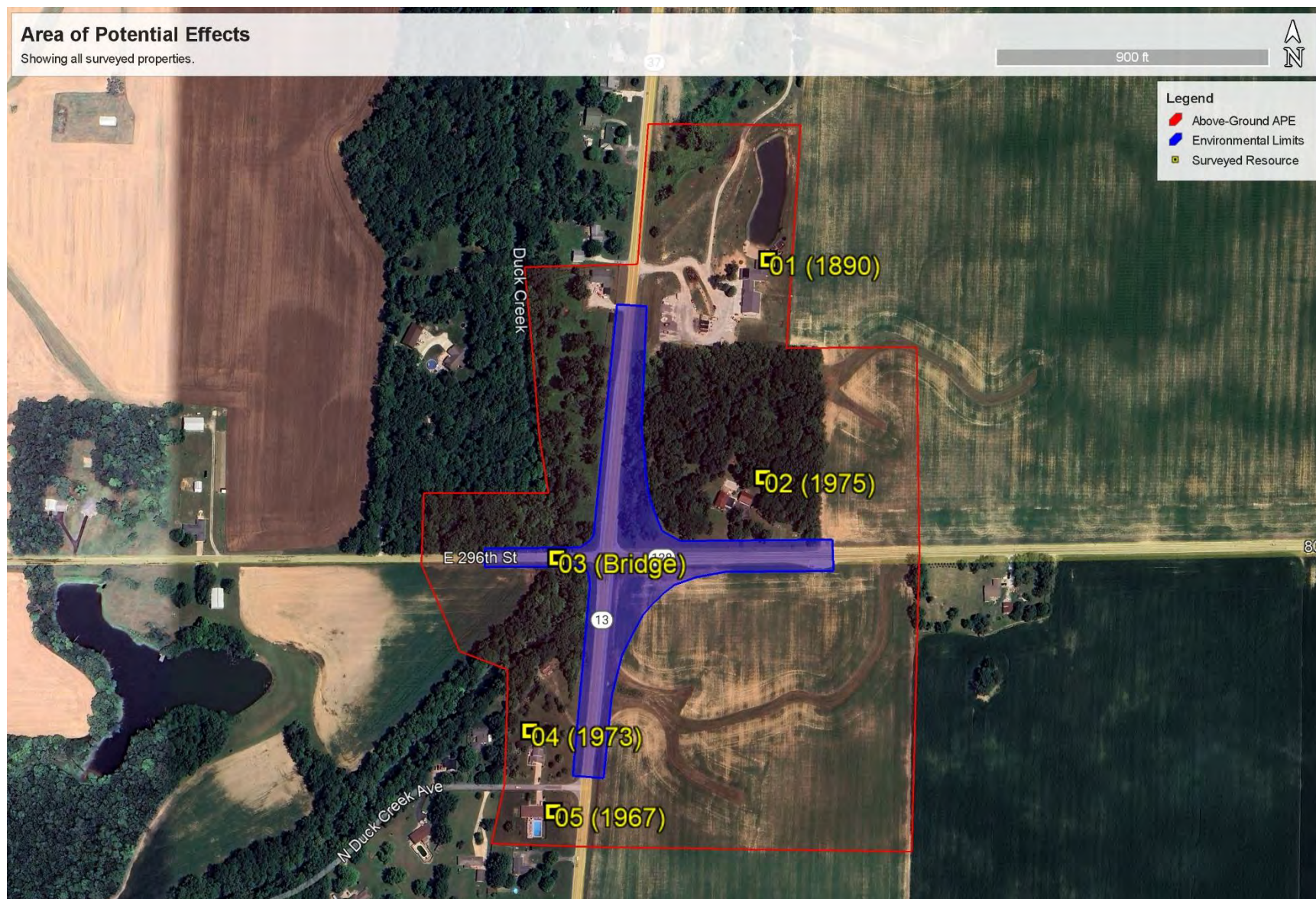


Figure 1. Detail map of the APE showing the locations of all surveyed resources (properties 50 years of age or older).

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Appendix B. Consulting Party Correspondence

Identified consulting parties included the following (entities who accepted consulting party status are highlighted in **bold** font):

- **Beth McCord, Director and Deputy State Historic Preservation Officer, Indiana Division of Historic Preservation and Archaeology (DHPA-SHPO)**
- Darlene Likens, Commissioner, Madison County
- John Richwine, Commissioner, Madison County
- Olivia Pratt, Commissioner, Madison County
- Tracey Powell, Commissioner, Tipton County
- Dennis Henderson, Commissioner, Tipton County
- Nancy Cline, Commissioner, Tipton County
- Mark Heirbrandt, Commissioner, Hamilton County
- Christine Altman, Commissioner, Hamilton County
- Steve Dillinger, Commissioner, Hamilton County
- Jerrold Bridges, Regional Director, Madison County Council of Governments (MCCOG)
- Dave Benefiel, ACIP, Principal Transportation Planner, Anderson MPO
- **Brittany Miller, Eastern Regional Office, Director, Indiana Landmarks**
- **Alex Brooks, Community Preservation Specialist, Indiana Landmarks**
- Stephen T. Jackson, Madison County Historian
- David Heighway, Hamilton County Historian
- Richard E. Kreegar, President, Madison County Historical Society
- Tipton County Historical Society
- Hamilton County Historical Society
- Scott Harless, Highway Superintendent, Madison County
- Bret Morris, Highway Superintendent, Tipton County
- Bradley Davis, Highway Director, Hamilton County
- Absentee Shawnee Tribe of Oklahoma
- **Delaware Nation of Oklahoma**
- Delaware Tribe of Indians
- **Eastern Shawnee Tribe of Oklahoma**
- Forest County Potawatomi Community
- **Miami Tribe of Oklahoma**
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- **Shawnee Tribe**

Correspondence 1. April 27, 2023

Molnar, Katherine J

From: Molnar, Katherine J
Sent: Thursday, April 27, 2023 3:23 PM
To: McCord, Beth K; Brittany Miller; heighwayd@earthlink.net; madisonCH5@sbcglobal.net; hamiltoncomuseum@att.net; sharless@madisoncounty.in.gov; bdavis@hamiltoncounty.in.gov; county.highway@hamiltoncounty.in.gov; dlikens@madisoncounty.in.gov; jrichwine@madisoncounty.in.gov; opratt@madisoncounty.in.gov; Mheirbrandt@Hamiltoncounty.in.gov; caltman@hamiltoncounty.in.gov; Sdillinger@hamiltoncounty.in.gov; jerry@heartlandmpo.org; Dave@heartlandmpo.org; madisoncountyhistorian@comcast.net; tpowell@tiptoncounty.in.gov; dhenderson@tiptoncounty.in.gov; ncline@tiptoncounty.in.gov; tchs@tds.net; bmorris@tiptoncounty.in.gov
Cc: Curtis, William; Zinn, Timothy; Bodor, Thomas; Heustis, Tom; Molly Barletta; Szewczak, Kimberly
Subject: FHWA Project: Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project, Madison, Hamilton, and Tipton counties, Indiana
Attachments: SR 13- SR 128 RAB_Des2003081_ECL_20230327.pdf
Categories: SUBMISSION DATE

Des. No.: 2003081

Project Description: SR 13 at SR 128 Intersection Improvement Project

Location: Madison, Hamilton, and Tipton counties, Indiana

Dear Consulting Party:

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with the SR 13 at SR 128 Intersection Improvement Project (Des. No. 2003081).

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The following agencies/individuals are being invited to become consulting parties:

- Beth McCord, Director and Deputy State Historic Preservation Officer, Indiana Division of Historic Preservation and Archaeology (DHPA-SHPO)
- Darlene Likens, Commissioner, Madison County
- John Richwine, Commissioner, Madison County
- Olivia Pratt, Commissioner, Madison County
- Tracey Powell, Commissioner, Tipton County
- Dennis Henderson, Commissioner, Tipton County
- Nancy Cline, Commissioner, Tipton County

- Mark Heirbrandt, Commissioner, Hamilton County
- Christine Altman, Commissioner, Hamilton County
- Steve Dillinger, Commissioner, Hamilton County
- Jerrold Bridges, Regional Director, Madison County Council of Governments (MCCOG)
- Dave Benefiel, ACIP, Principal Transportation Planner, Anderson MPO
- Brittany Miller, Eastern Regional Office, Director, Indiana Landmarks
- Stephen T. Jackson, Madison County Historian
- David Heighway, Hamilton County Historian
- Richard E. Kreegar, President, Madison County Historical Society
- Tipton County Historical Society
- Hamilton County Historical Society
- Scott Harless, Highway Superintendent, Madison County
- Bret Morris, Highway Superintendent, Tipton County
- Bradley Davis, Highway Director, Hamilton County
- Absentee Shawnee Tribe of Oklahoma
- Delaware Nation of Oklahoma
- Delaware Tribe of Indians
- Eastern Shawnee Tribe of Oklahoma
- Forest County Potawatomi Community
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Shawnee Tribe

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

Please review the attached letter, which is also located in IN SCOPE at <http://erms12c.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with your comments on any historic property impacts incurred as a result of this project so that an

environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from the receipt of this information to review and provide comment. If we do not receive a response from an invited consulting party within the time allotted, the project will proceed consistent with the proposed design. Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.

Tribal Contacts please respond to INDOT's Tribal Liaison, Matt Coon at mcoon@indot.in.gov (317-697-9752) with any responses pertaining to this project including to provide INDOT/Indiana FHWA additional information about Tribal resources/concerns and questions/comments regarding cultural resources. The FHWA point of contact is Kari Carmany-George at K.CarmanyGeorge@dot.gov (317-226-5629).

Thank you in advance for your input,

Katie

Katherine J Molnar | Architectural Historian
Rapid City, SD | [O] 602-294-2250 | [M] 970-482-8094
katherine.molnar@mbakerintl.com | www.mbakertnl.com f t @ in

Michael Baker
INTERNATIONAL | *We Make a Difference*

Correspondence 2. April 28, 2023

Molnar, Katherine J

From: Branigin, Susan <SBranigin@indot.IN.gov>
Sent: Friday, April 28, 2023 6:45 AM
To: snease@astribe.com; cspeck@delawarenation-nsn.gov; lheady@delawaretribe.org; sbachor@delawaretribe.org; thpo@estoo.net; benjamin.rhodd@fcp-nsn.gov; THPO; Matthew.Bussler@pokagonband-nsn.gov; Section106
Cc: Carmany-George, Karstin (FHWA); Coon, Matthew; Branigin, Susan; Molnar, Katherine J; Zinn, Timothy
Subject: EXTERNAL: FHWA Project: Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project, Madison, Hamilton, and Tipton counties, Indiana
Attachments: SR 13- SR 128 RAB_Des2003081_ECL_20230327.pdf
Categories: SUBMISSION DATE

Des. No.: 2003081

Project Description: SR 13 at SR 128 Intersection Improvement Project

Location: Madison, Hamilton, and Tipton counties, Indiana

Dear Consulting Parties:

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with the SR 13 at SR 128 Intersection Improvement Project (Des. No. 2003081).

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The following agencies/individuals are being invited to become consulting parties:

- Beth McCord, Director and Deputy State Historic Preservation Officer, Indiana Division of Historic Preservation and Archaeology (DHPA-SHPO)
- Darlene Likens, Commissioner, Madison County
- John Richwine, Commissioner, Madison County
- Olivia Pratt, Commissioner, Madison County
- Tracey Powell, Commissioner, Tipton County
- Dennis Henderson, Commissioner, Tipton County
- Nancy Cline, Commissioner, Tipton County
- Mark Heirbrandt, Commissioner, Hamilton County
- Christine Altman, Commissioner, Hamilton County
- Steve Dillinger, Commissioner, Hamilton County

1

- Jerrold Bridges, Regional Director, Madison County Council of Governments (MCCOG)
- Dave Benefiel, ACIP, Principal Transportation Planner, Anderson MPO
- Brittany Miller, Eastern Regional Office, Director, Indiana Landmarks
- Stephen T. Jackson, Madison County Historian
- David Heighway, Hamilton County Historian
- Richard E. Kreegar, President, Madison County Historical Society
- Tipton County Historical Society
- Hamilton County Historical Society
- Scott Harless, Highway Superintendent, Madison County
- Bret Morris, Highway Superintendent, Tipton County
- Bradley Davis, Highway Director, Hamilton County
- Absentee Shawnee Tribe of Oklahoma
- Delaware Nation of Oklahoma
- Delaware Tribe of Indians
- Eastern Shawnee Tribe of Oklahoma
- Forest County Potawatomi Community
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Shawnee Tribe

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

Please review the attached letter, which is also located in IN SCOPE at <http://erms12c.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with your comments on any historic property impacts incurred as a result of this project so that an environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from the receipt of this information to review and provide comment. If we do not receive a response from an invited consulting party within the time allotted, the project will proceed consistent with the proposed design. Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.

Tribal Contacts please respond to INDOT's Interim Tribal Liaison, Matt Coon at mcoon@indot.in.gov (317-697-9752) with any responses pertaining to this project including to provide INDOT/Indiana FHWA additional information about Tribal resources/concerns and questions/comments regarding cultural resources. The FHWA point of contact is Kari Carmany-George at K.CarmanyGeorge@dot.gov (317-226-5629).

Thank you in advance for your input,

Susan R. Branigin, MS

*Team Lead/Supervisor: History Unit
Cultural Resources Office (CRO)
Environmental Services Division
Indiana Department of Transportation
100 N. Senate Ave., Rm. N758-ES
Indianapolis IN 46204
Phone: 317.417.1622
Email: sbranigin@indot.in.gov
Work Hours: M-F 7:30 a.m.-3:30 p.m.*



****For the latest updates from INDOT's Cultural Resources Office, subscribe to the Environmental Services listserv: <https://www.in.gov/indot/3217.htm>**

****Link to the CRO-Public Web Map App can be found [here](#)**

Correspondence 3. May 1, 2023


From: Brittany Miller <bmill@indianalandmarks.org>
Sent: Monday, May 1, 2023 8:57 AM
To: Molnar, Katherine J; Carmany-George, Karstin (FHWA)
Cc: Alex Brooks; Mark Dollase; Haley Swindle
Subject: EXTERNAL: RE: FHWA Project: Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project, Madison, Hamilton, and Tipton counties, Indiana
Attachments: SR 13- SR 128 RAB_Des2003081_ECL_20230327.pdf
Categories: CP COMMENT

Hi Katherine,

Thank you for including Indiana Landmarks. I am including Alex Brooks and Mark Dollase in this email, as they represent Hamilton and Tipton Counties. I know you mentioned shifting the intersection to avoid a bridge, and they might be interested in the impact since it's in Tipton County.

Would you continue to include the Eastern Office as a consulting party, as we'd like to review the cultural resources report when it's available? Please send future communications to east@indianalandmarks.org. That is our preferred email for these notifications.

Best,


 Brittany Miller (she/her)
 Director, Eastern Regional Office


 P: 765-231-6429, 800-450-4524
 Cell 765-593-1218
indianalandmarks.org

Correspondence 4. May 1, 2023

From: Alex Brooks <abrooks@indianalandmarks.org>
Sent: Monday, May 1, 2023 2:54 PM
To: Molnar, Katherine J
Subject: EXTERNAL: FHWA Project; Des. No. 2003081

Categories: CP COMMENT

Katherine,

Since we at the Indiana Landmarks Central Regional Office represent Tipton and Hamilton counties, we (myself at this email address and my boss Mark Dollase at mdollase@indianalandmarks.org) would like to be a consulting party on FHWA Project: Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project.

Best,


 Alex Brooks
 Community Preservation Specialist
 Indiana Landmarks
 1201 Central Avenue
 Indianapolis, IN 46202
 Ph. 317-822-7908, 800-450-4534
 Fax: 317-639-6734
www.indianalandmarks.org

Indiana Landmarks revitalizes communities, strengthens connections to our diverse heritage, and saves meaningful places

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Correspondence 5. May 5, 2023



Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 ■ P.O. Box 1326, Miami, OK 74355
 Ph: (918) 541-1300 ■ Fax: (918) 542-7260
www.miamination.com



Via email: mcoon@indot.in.gov

May 5, 2023

Matt Coon, Tribal Liaison
 INDOT, Cultural Resources Office
 100 North Senate Avenue, N758-ES
 Indianapolis, Indiana 46204

Re: Des. No. 2003081, SR 13 at SR 128 Intersection Improvement, Madison, Hamilton, & Tipton Counties, Indiana – Comments of the Miami Tribe of Oklahoma

Dear Mr. Coon:

Aya, kweehsitoolaani– I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding Des. No. 2003081, SR 13 at SR 128 Intersection Improvement in Madison, Hamilton, & Tipton Counties, Indiana.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Indiana, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at THPO@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter
 Tribal Historic Preservation Officer

Correspondence 6. May 30, 2023



**Delaware Nation
Historic Preservation Department**

31064 State Highway 281
Anadarko, OK 73005
Phone (405) 247-2448

May 30, 2023

To Whom It May Concern:

The Delaware Nation Historic Preservation Department received correspondence regarding the following referenced project(s):

**Project: INDOT Des No 2003081, SR 13 at SR 128 Intersection Improvement,
Madison, Hamilton and Tipton Counties, IN**

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f), and implementing regulation 36 CFR 800, "Protection of Historic Properties," Delaware Nation accepts your invitation for consultation on this project.

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects. The Lenape people occupied the area indicated in your letter during and prior to European contact until their eventual removal to our present locations. According to our files, there are no known cultural or religious sites of interest to the Delaware Nation within or near the project location. If there are plans for a cultural resource survey, please provide a copy of the report upon completion.

Continue with the project as planned keeping in mind, should human remains and/or any Native American archaeological resources inadvertently be uncovered, all construction and ground disturbing activities should immediately be halted until the appropriate state agencies, as well as this office, are notified (within 24 hours), and a proper archaeological assessment can be made.

Please note that Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Community are the only Federally Recognized Delaware/Lenape entities in the United States and consultation for Lenape homelands must be made with only the designated staff of these three Nations (and/or other federally recognized tribal nations who may have overlapping areas of interest). We appreciate your cooperation in contacting the Delaware Nation Historic Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405-247-2448 ext. 1403.

Carissa Speck

Carissa Speck
Historic Preservation Director
Delaware Nation
405-247-2448 ext. 1403
cspeck@delawarenation-nsn.gov

Correspondence 7. May 30, 2023



Indiana Department
of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology · 402 W. Washington Street, W274 · Indianapolis, IN 46204-2739
Phone 317-232-1646 · Fax 317-232-0693 · dhpa@dnr.IN.gov



May 30, 2023

Molly Barletta
Environmental Scientist
Kaskaskia Engineering, Inc.
208 E. Main Street, Ste. 100
Belleville, Illinois 62220

Federal Agency: Indiana Department of Transportation ("INDOT"),
on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Early coordination for the SR 13 at SR 128 Intersection Improvement Project (Des. No.
2003081; DHPA No. 30736)

Dear Ms. Barletta:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has reviewed your April 27, 2023, review request submittal form, received by our office April 27, 2023, for the submission which enclosed INDOT's early coordination letter that was received on May 3, 2023; for this project in Hamilton County, Madison County, and Tipton County, Indiana.

We are not aware of any parties who should be invited to participate in the Section 106 consultation on this federal undertaking, beyond those whom INDOT already has invited. However, if right-of-way is likely to be taken from a potentially historic property, it might be advisable to invite the owner of that property as soon as possible. In your next regular correspondence on this project, please advise us as to which of the invited consulting parties has accepted the invitation.

We look forward to reviewing the proposed area of potential effects and the reports on investigations of above-ground cultural resources and archaeological resources that the early coordination letter indicated will be forthcoming.

The Indiana SHPO staff's archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Toni Lynn Giffin. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

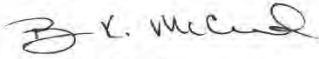
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cultural and recreational resources for the benefit of Indiana's citizens
through professional leadership, management and education.*

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Molly Barletta
May 30, 2023
Page 2

In all future correspondence about the SR 13 at SR 128 intersection improvement project in Hamilton, Madison, and Tipton Counties (Des. No. 2003081), please refer to DHPA No. 30736.

Very truly yours,



Beth K. McCord
Deputy State Historic Preservation Officer

BKM:TLG:WTT:wt

emc: Matt Coon, Ph.D., Indiana Department of Transportation
Susan Branigin, Indiana Department of Transportation
Toni Lynn Giffin, Indiana DNR-DHPA
Wade T. Tharp, Indiana DNR-DHPA
Molly Barletta, Kaskaskia Engineering
Katherine J. Molnar, Michael Baker International

Correspondence 8. June 7, 2023

From: Laserfiche Notification <donotreply@laserfiche.com>
Sent: Wednesday, June 7, 2023 4:11 PM
To: Branigin, Susan <SBranigin@indot.IN.gov>
Subject: Section 106 Consultation - INDOT Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project,

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

This email is in response to INDOT Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project,. The Shawnee Tribe's Tribal Historic Preservation Department concurs that no known historic properties will be negatively impacted by this project. However, there is still potential for the discovery of unknown resources. We would like to accept your invitation for consultation.

We have no issues or concerns at this time, but in the event archaeological materials are encountered during construction, use, or maintenance of this location, please re-notify us at that time as we would like to resume immediate consultation under such a circumstance.

If you have any questions, you may contact me via email at Section106@shawnee-tribe.com



Erin Paden
 TRIBAL HISTORIC PRESERVATION
 SPECIALIST
Office: (918) 542-2441, x140
Email: epaden@shawnee-tribe.com
 29 S Hwy 69A
 Miami, OK 74354
shawnee-tribe.com

Correspondence 9. June 16, 2023



**EASTERN SHAWNEE
CULTURAL PRESERVATION DEPARTMENT**
70500 East 128 Road, Wyandotte, OK 74370

June 16, 2023

INDOT - Indiana Department of Transportation
100 N. Senate Ave. IGCN642
Indianapolis, IN 46201

RE: Des No. 2003081, Madison, Hamilton, and Tipton County, Indiana

Dear Mr. Coon,

The Eastern Shawnee Tribe has received your letter regarding the above referenced project(s) within Madison, Hamilton, and Tipton County, Indiana. The Eastern Shawnee Tribe is committed to protecting sites important to Tribal Heritage, Culture and Religion. Furthermore, the Tribe is particularly concerned with historical sites that may contain but not limited to the burial(s) of human remains and associated funerary objects.

As described in your correspondence, and upon research of our database(s) and files, we find our people occupied these areas historically and/or prehistorically. However, the project proposes **NO Adverse Effect** or endangerment to known sites of interest to the Eastern Shawnee Tribe. Please continue project as planned. However, should this project inadvertently discover an archeological site or object(s) we request that you immediately contact the Eastern Shawnee Tribe, as well as the appropriate state agencies (within 24 hours). We also ask that all ground disturbing activity stop until the Tribe and State agencies are consulted. Please note that any future changes to this project will require additional consultation.

In accordance with the NHPA of 1966 (16 U.S.C. § 470-470w-6), federally funded, licensed, or permitted undertakings that are subject to the Section 106 review process must determine effects to significant historic properties. As clarified in Section 101(d)(6)(A-B), historic properties may have religious and/or cultural significance to Indian Tribes. Section 106 of NHPA requires Federal agencies to consider the effects of their actions on all significant historic properties (36 CFR Part 800) as does the National Environmental Policy Act of 1969 (43 U.S.C. § 4321-4347 and 40 CFR § 1501.7(a)). This letter evidences NHPA and NEPA historic properties compliance pertaining to consultation with this Tribe regarding the referenced proposed projects.

Thank you, for contacting the Eastern Shawnee Tribe, we appreciate your cooperation. Should you have any further questions or comments please contact our Office.

Sincerely,

Paul Barton, Tribal Historic Preservation Officer (THPO)
Eastern Shawnee Tribe of Oklahoma
(918) 666-5151 Ext:1833

Correspondence 10. January 3, 2024

From: Molnar, Katherine J
Sent: Wednesday, January 3, 2024 11:10 AM
To: McCord, Beth K; DHPA@dnr.IN.gov; Brittany Miller; abrooks@indianalandmarks.org; Mark Dollase; Eastern Regional Office
Cc: Curtis, William; Zinn, Timothy; Heustis, Tom; Molly Barletta; Szewczak, Kimberly
Subject: FHWA Project: Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project, Madison, Hamilton, and Tipton counties, Indiana
Attachments: SR 13-SR 128 RAB_Des2003081_RDL for HPSR_20240103.pdf
Categories: SUBMISSION DATE

Des. No.: 2003081

Project Description: SR 13 at SR 128 Intersection Improvement Project

Location: Madison, Hamilton, and Tipton counties, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with the SR 13 at SR 128 Intersection Improvement Project (Des. No. 2003081).

The Section 106 Early Coordination Letter for this project was originally distributed on April 27, 2023.

As part of Section 106 of the National Historic Preservation Act, a Historic Property Short Report has been prepared and is ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at <http://erms12c.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.

Tribal Contacts please respond to INDOT's Acting Tribal Liaison, Matt Coon mcoon@indot.in.gov; (317-697-9752) with any responses pertaining to this project including to provide INDOT/Indiana FHWA additional information about Tribal resources/concerns and questions/comments regarding cultural resources. The FHWA point of contact is Kari Carmany-George at K.CarmanyGeorge@dot.gov (317-226-5629).

Thank you in advance for your input,

Katie

Katherine J Molnar | Architectural Historian
 Rapid City, SD | [O] 602-294-2250 | [M] 970-482-8094
katherine.molnar@mbakerintl.com | www.mbakerintl.com f t @ in y

Correspondence 11. January 5, 2024

From: Branigin, Susan <SBranigin@indot.IN.gov>
Sent: Friday, January 5, 2024 11:19 AM
To: cspeck@delawarenation-nsn.gov; thpo@estoo.net; THPO; Section106
Cc: Carmany-George, Karstin (FHWA); Coon, Matthew; Branigin, Susan; Molnar, Katherine J; Zinn, Timothy
Subject: EXTERNAL: FHWA Project: Des. No. 2003081; SR 13 at SR 128 Intersection Improvement Project, Madison, Hamilton, and Tipton counties, Indiana
Attachments: SR 13-SR 128 RAB_Des2003081_RDL for HPSR_20240103.pdf
Categories: SUBMISSION DATE

EXTERNAL EMAIL

Des. No.: 2003081

Project Description: SR 13 at SR 128 Intersection Improvement Project

Location: Madison, Hamilton, and Tipton counties, Indiana

Dear Consulting Parties:

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with the SR 13 at SR 128 Intersection Improvement Project (Des. No. 2003081). The Section 106 Early Coordination Letter for this project was originally distributed on April 27, 2023.

As part of Section 106 of the National Historic Preservation Act, a Historic Property Short Report has been prepared and is ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at <http://erms12c.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.

Tribal Contacts please respond to INDOT's Acting Tribal Liaison, Matt Coon mcoon@indot.in.gov; (317-697-9752) with any responses pertaining to this project including to provide INDOT/Indiana FHWA additional information about Tribal resources/concerns and questions/comments regarding cultural resources. The FHWA point of contact is Kari Carmany-George at K.CarmanyGeorge@dot.gov (317-226-5629).

Thank you in advance for your input,

Susan R. Branigin, MS
History Unit Team Lead/Supervisor
Cultural Resources Office (CRO)
Indiana Department of Transportation
100 North Senate Ave., N758 —Environmental Services
Indianapolis, IN 46204
Cell: 317.417.1622
Email: sbranigin@indot.in.gov
[Find us on social media!](#)



***For the latest updates from INDOT's Cultural Resources Office, subscribe to the Environmental Services listserv: <https://www.in.gov/indot/3217.htm>

***Link to the CRO-Public Web Map App can be found [here](#)

Correspondence 12. February 1, 2024



Indiana Department
of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov



February 1, 2024

Molly Barletta
Environmental Scientist
Kaskaskia Engineering Inc.
208 E Main Street, Ste 100
Belleville, Illinois 62220

Federal Agency: Indiana Department of Transportation ("INDOT"),
on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Historic property short report (Molnar, 1/2024) for the SR 13 at SR 128 Intersection
Improvement Project (Des. No. 2003081; DHPA No. 30736)

Dear Ms. Barletta:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has reviewed your January 3, 2024, submission which enclosed the historic property short report ("HPSR"; Molnar, 1/2024), received by our office January 3, 2024, for this project proposed for locations in Pipe Creek Township, Madison County; in Madison Township, Tipton County; and in White River Township, Hamilton County, Indiana.

The area of potential effects ("APE") proposed in the HPSR appears to be of adequate size to encompass the geographic area in which direct and indirect effects of a project of this nature could occur.

For the purposes of the Section 106 review of this federal undertaking, we agree with the conclusions in the HPSR that there are no previously recorded National Register of Historic Places ("NRHP")-listed or -eligible resources located within the APE. Furthermore, we also agree with the conclusions in the HPSR of the other historic-aged resources documented during survey and that there are no resources listed or eligible for the NRIIP within the APE.

As your letter indicates, a report of archaeological investigations is forthcoming. We look forward to reviewing and commenting on that report.

The Indiana SHPO staff's archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Toni Lynn Giffin. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

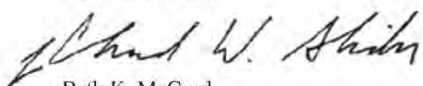
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Molly Barletta
February 1, 2024
Page 2

In all future correspondence about the SR 13 at SR 128 Intersection Improvement Project (Des. No. 2003081), which is proposed for locations in Pipe Creek Township, Madison County; in Madison Township, Tipton County; and in White River Township, Hamilton County, Indiana; please refer to DHPA No. 30736.

Very truly yours,



Beth K. McCord
Deputy State Historic Preservation Officer

BKM:TLG-WTT:wt

emc: Matt Coon, Ph.D., Indiana Department of Transportation
Susan Branigin, Indiana Department of Transportation
Molly Barletta, Kaskaskia Engineering, Inc.
Katherine J. Molnar, Michael Baker International
Toni Lynn Giffin, Indiana DNR-DHPA
Wade T. Tharp, Indiana DNR-DHPA

Correspondence 13. February 28, 2024



**EASTERN SHAWNEE
CULTURAL PRESERVATION DEPARTMENT**

70500 East 128 Road, Wyandotte, OK 74370

February 28, 2024

INDOT - Indiana Department of Transportation
100 N. Senate Ave. IGCN642
Indianapolis, IN 46201

RE: *Des No. 2003081, Madison, Hamilton, and Tipton County, Indiana*

Dear Mr. Coon,

The Eastern Shawnee Tribe has received your letter regarding the above referenced project(s) within Madison, Hamilton, and Tipton County, Indiana. The Eastern Shawnee Tribe is committed to protecting sites important to Tribal Heritage, Culture and Religion. Furthermore, the Tribe is particularly concerned with historical sites that may contain but not limited to the burial(s) of human remains and associated funerary objects.

As described in your correspondence, and upon research of our database(s) and files, we find our people occupied these areas historically and/or prehistorically. However, the project proposes **NO Adverse Effect** or endangerment to known sites of interest to the Eastern Shawnee Tribe. Please continue project as planned. However, should this project inadvertently discover an archeological site or object(s) we request that you immediately contact the Eastern Shawnee Tribe, as well as the appropriate state agencies (within 24 hours). We also ask that all ground disturbing activity stop until the Tribe and State agencies are consulted. Please note that any future changes to this project will require additional consultation.

In accordance with the NHPA of 1966 (16 U.S.C. § 470-470w-6), federally funded, licensed, or permitted undertakings that are subject to the Section 106 review process must determine effects to significant historic properties. As clarified in Section 101(d)(6)(A-B), historic properties may have religious and/or cultural significance to Indian Tribes. Section 106 of NHPA requires Federal agencies to consider the effects of their actions on all significant historic properties (36 CFR Part 800) as does the National Environmental Policy Act of 1969 (43 U.S.C. § 4321-4347 and 40 CFR § 1501.7(a)). This letter evidences NHPA and NEPA historic properties compliance pertaining to consultation with this Tribe regarding the referenced proposed projects.

Thank you, for contacting the Eastern Shawnee Tribe, we appreciate your cooperation. Should you have any further questions or comments please contact our Office.

Sincerely,

Lora Nuckolls, Tribal Historic Preservation Officer (THPO)
Eastern Shawnee Tribe of Oklahoma
(918) 238-5151 Ext:1840

Correspondence 14. June 4, 2024

From: Blum, Kaylee
To: thpo@estoo.net; thpo@miamination.com; bfletcher@peoriatribe.com; [Matthew Bussler](mailto:Matthew.Bussler@shawnee-tribe.com); Section106@shawnee-tribe.com; cspeck@delawarenation-nsn.gov; sbachor@delawaretribe.org; [Martina Thomas](mailto:Martina.Thomas@delawaretribe.org)
Cc: [Coon, Matthew](mailto:Coon,Matthew@indot.gov); [Blum, Kaylee](mailto:Blum,Kaylee@indot.gov); [Molnar, Katherine J](mailto:Molnar,Katherine@indot.gov); [Bodor, Thomas](mailto:Bodor,Thomas@indot.gov)
Subject: EXTERNAL: Notification for FHWA Project: Des. No. 2003081, SR 13 at SR 128 Intersection Improvement, Hamilton County, Indiana
Date: Tuesday, June 4, 2024 12:34:12 PM
Attachments: [image004.png](#)
[image008.png](#)

EXTERNAL EMAIL

Notification for FHWA Project: Des. No. 2003081, SR 13 at SR 128 Intersection Improvement, Hamilton County, Indiana

Des. No.: 2003081

Project Description: SR 13 at SR 128 Intersection Improvement

Location: Hamilton County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with the SR 13 at SR 128 Intersection Improvement Project (INDOT Des. No. 2003081). The Section 106 Early Coordination Letter for this project was originally distributed in a letter on April 28, 2023.

As part of Section 106 of the National Historic Preservation Act, an Archaeology report has been prepared and is ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at <https://erms12c.indot.in.gov/Section106Documents> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days. Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment.

Tribal Contacts please respond to INDOT's Acting Tribal Liaison, Matt Coon mcoon@indot.in.gov (317-697-9752) with any responses pertaining to this project including to provide INDOT/Indiana FHWA additional information about Tribal resources/concerns and questions/comments regarding cultural resources. The FHWA point of contact is Kari Carmany-George at K.CarmanyGeorge@dot.gov (317-226-5629).

Thank you,

Kaylee A. Blum, M.S.

Archaeologist

Indiana Department of Transportation, Cultural Resources Office

100 North Senate Ave., N758 — Environmental Services

Indianapolis, IN 46204

Office: (317) 439-3337

Email: kblum@indot.in.gov



Correspondence 15. July 8, 2024



Indiana Department
of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov



July 8, 2024

Thomas Bodor
Department Manager, Archaeology
Michael Baker International, Inc.
100 Airside Drive
Airside Business Park
Moon Township, Pennsylvania 15108

Federal Agency: Indiana Department of Transportation ("INDOT"),
on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Phase Ia archaeological field reconnaissance survey report (Robinson et al., 05/24/2024) for the
State Road 13 at State Road 128 Intersection Improvement Project (Des. No. 2003081; DHPA
No. 30736)

Dear Mr. Bodor:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has reviewed your submission, which consisted of the Phase Ia archaeological field reconnaissance survey report (Robinson et al., 05/24/2024). It was received by our office June 6, 2024, for the above-referenced project, which is proposed for locations in Pipe Creek Township, Madison County; in Madison Township, Tipton County; and in White River Township, Hamilton County; Indiana.

Please be reminded that all materials submitted to our office for environmental review purposes must be accompanied by a completed Review Request Submittal Form <<https://forms.in.gov/Download.aspx?id=10733>>. Additionally, all archaeological reports and archaeological site survey/resurvey record forms submitted to our office for environmental review purposes must have been entered into the Indiana DNR-DHPA SHAARD system database at the time of submission.

In terms of archaeological resources, based on the submitted information and the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP") within the proposed project area. We concur with the opinions of the archaeologist, as expressed in the Phase Ia archaeological field reconnaissance survey report (Robinson et al., 05/24/2024), that archaeological site 12-M-00880 (which was identified during archaeological investigations) does not appear to be eligible for inclusion in the NRHP, and that no further archaeological investigations appear necessary at the proposed project area.

Thank you for uploading the Phase Ia archaeological field reconnaissance survey report (Robinson et al., 05/24/2024) to the Indiana DNR-DHPA SHAARD system database; the report has been assigned the identifier *AR-48-00407*. Additionally, thank you for uploading the archaeological site survey record forms for archaeological site 12-M-00880. The archaeological report and the archaeological site survey record form have been reviewed and approved.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and Indiana Code 14-21-1-29) requires that the discovery be

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cultural and recreational resources for the benefit of Indiana's citizens
through professional leadership, management and education.*

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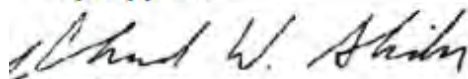
Thomas Bodor
 July 8, 2024
 Page 2

reported to the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and Indiana Code 14-21-1-29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. Part 800.

The Indiana SHPO staff's archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Toni Lynn Giffin. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

In all future correspondence about the State Road 13 at State Road 128 Intersection Improvement Project (Des. No. 2003081), which is proposed for locations in Pipe Creek Township, Madison County; in Madison Township, Tipton County; and in White River Township, Hamilton County, Indiana; please refer to DHPA No. 30736.

Very truly yours,



Beth K. McCord
 Deputy State Historic Preservation Officer

BKM:WTT:wt

enc: Matt Coon, Ph.D., Indiana Department of Transportation
 Susan Branigin, Indiana Department of Transportation
 Molly Barletta, Kaskaskia Engineering, Inc.
 Katherine J. Molnar, Michael Baker International
 Thomas Bodor, Michael Baker International, Inc.
 Toni Lynn Giffin, Indiana DNR-DHPA
 Wade T. Tharp, Indiana DNR-DHPA

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Appendix C. Project Area Photographs

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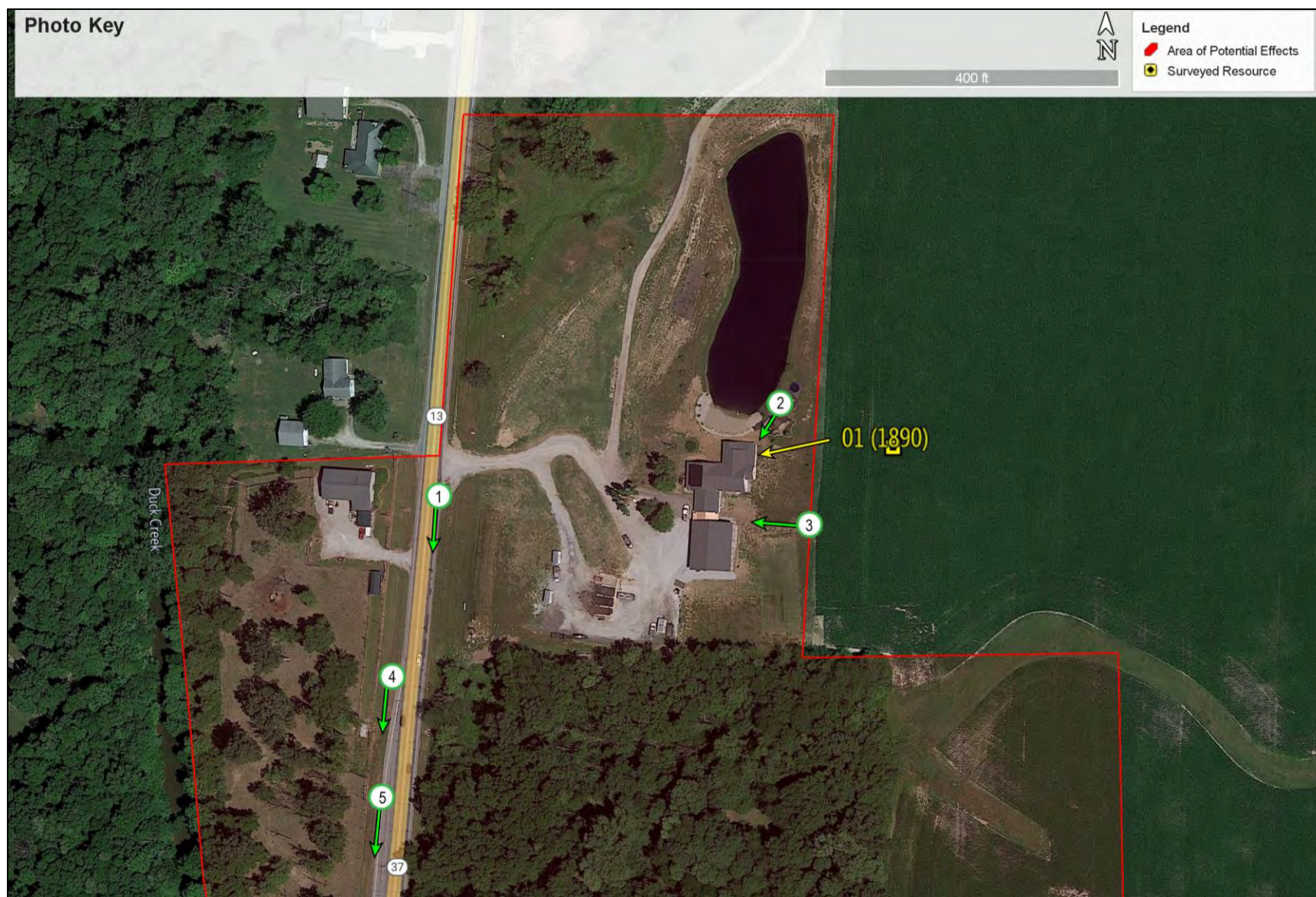


Figure 2. Photo key on an aerial background.



Figure 3. Photo key on an aerial background.



Photo 1. Streetscape along SR 13 from a location approximately 650 feet north of the project intersection, facing south.



Photo 2. MB-01, Farmhouse (IHSSI: 095-223-15033) located at 8172 N SR 37, showing the east (rear) and north (side) façades, facing southwest.



Photo 3. MB-01, Farmhouse (IHSSI: 095-223-15033) located at 8172 N SR 37, showing the east (rear) façade, facing west.



Photo 4. Streetscape along SR 13 from a location approximately 500 feet north of the project intersection, facing south.



Photo 5. Streetscape along SR 13 from a location approximately 450 feet north of the project intersection, facing south.



Photo 6. Streetscape along SR 13 from a location approximately 350 feet north of the project intersection, facing north.



Photo 7. Streetscape along SR 13, from a location approximately 350 feet north of the project intersection, facing south.



Photo 8. Streetscape along SR 13 from a location approximately 50 feet north of the project intersection, facing south.



Photo 9. MB-03, view of the replacement bridge carrying SR 128 over Duck Creek showing north elevation, facing southeast.



Photo 10. MB-03, view of the replacement bridge carrying SR 128 over Duck Creek showing south elevation, facing northeast.



Photo 11. Streetscape along SR 13 from a location approximately 50 feet south of the project intersection, facing north.



Photo 12. Streetscape along SR 13 from a location approximately 75 feet south of the project intersection, facing north.



Photo 13. Streetscape along SR 13 from the project intersection, facing south.



Photo 14. Streetscape along SR 128 from a location approximately 100 feet east of the project intersection, facing west.



Photo 15. MB-02, McDonald House, 9928 W SR 128, showing the southwest (front) and southeast (side) façades, facing north.



Photo 16. MB-02, McDonald House, 9928 W SR 128, showing the front lawn, facing south.



Photo 17. MB-04, Schriver House, 29540 State Road 37, showing the southwest (front) and southeast (side) façades, facing north.



Photo 18. MB-05, Orr House, 29441 Duck Creek Avenue, showing the north (front) and west (side) façades, facing southeast.

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Appendix D. Report Abstracts

Historic Property Short Report

SR 13 at SR 128 Intersection Improvement Project

Intersection of State Route 13 and State Route 128,
Pipe Creek (Madison County), Madison (Tipton County), and
White River (Hamilton County) Townships

Madison, Tipton, and Hamilton counties, Indiana

Des. No. 2003081

DHPA No. 30736

January 2024

Prepared For:
Kimley-Horn and Associates, Inc.
Indianapolis, Indiana

Prepared By:
Michael Baker International, Inc.
100 Airside Drive Moon Township, Pennsylvania 15108

Principal Investigator: Katherine Molnar, MS

Contact: Timothy G. Zinn, MA
Tzinn@mbakerintl.com
412-269-4619



ABSTRACT

This report documents the identification and evaluation efforts for properties included in the area of potential effects (APE) for the SR 13 at SR 128 Intersection Improvement Project in Madison, Hamilton, and Tipton counties, Indiana (Des. No. 2003081). Above-ground resources located within the project APE were identified and evaluated in accordance with Section 106, National Historic Preservation Act (NHPA) of 1966, as amended, and the regulations implementing Section 106 (36 CFR Part 800).

As a result of the NHPA, as amended, and CFR Part 800, federal agencies are required to take into account the impact of federal undertakings on historic properties in the area of the undertaking. Historic properties include buildings, structures, sites, objects, and/or districts that are eligible for or listed in the National Register of Historic Places (NRHP). As this project is receiving funding from the Federal Highway Administration (FHWA), it is subject to a Section 106 review.

The APE contains no properties listed in the NRHP.

The APE contains no properties that are recommended eligible for listing in the NRHP.

5.0 Conclusions

The APE contains no properties listed in the NRHP.

As a result of identification and evaluation efforts for this project, no properties are recommended eligible for listing in the NRHP.

****Please note that the report in its entirety is available for review in IN SCOPE at <http://erms12c.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN SCOPE).**

**PHASE IA ARCHAEOLOGICAL RECONNAISSANCE
FOR THE
SR 13 at SR 128 INTERSECTION IMPROVEMENT PROJECT,
MADISON, TIPTON,
AND HAMILTON COUNTIES, INDIANA**

INDOT Des No. 2003081

Prepared for:

Federal Highway Administration
and
Indiana Department of Transportation

Prepared by:

Ryan Robinson
Thomas Bodor
Martin Fuess

Principal Investigator:



Thomas W. Bodor, MA, RPA

Michael Baker International, Inc.
100 Airside Drive
Moon Township, PA 15108

May 24, 2024

ABSTRACT

This report presents the results of the Phase Ia archaeological reconnaissance for the SR 13 at SR 128 Intersection Improvement Project in Madison, Hamilton, and Tipton counties, Indiana (Des. No. 2003081). The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA) proposes the undertaking located along SR 13 and SR 128 (E 296th Street) in Madison County, Indiana, at the intersection of Pipe Creek (Madison County), Madison (Tipton County), and White River (Hamilton County) Townships, on the *Frankton, IN*, USGS quadrangle, in Sections 4 and 5, Township 20N, Range 6E; and Sections 32 and 33, Township 21N, Range 6E. The project area can be viewed online at <https://arcg.is/jqueP> (the Des. No. is the most efficient search term once in the CRO - Public Web Map App).

The purpose of the project is to reduce the high number of severe crashes relative to traffic volume, while maintaining good intersection mobility. Specifically, the high frequency of right-angle crashes at the intersection may be attributed to suboptimal sightlines, high speeds along SR 13, and a large risk exposure window for vehicles on the minor approach. INDOT and the FHWA intend to proceed with the preferred alternative, which includes replacing the existing two-way stop control with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants. The preferred alternative includes new curb and gutters, a stormwater system, and lighting. The center of the RAB was shifted approximately 100 feet to the east of the existing intersection to avoid impacts to the bridge over Duck Creek.

The project will require the acquisition of approximately 3.26 acres of permanent right-of-way (ROW), which constitutes the archaeological survey area. Proposed excavation along the project corridor includes the removal of the existing roadway and roadbed to a depth of approximately 2.5 feet; a drainage system with pipes and structure depths ranging from 4 to 6 feet deep; and excavation to install lighting foundations at a depth of 8 feet.

While there are no previously identified archaeological sites within a one-mile (1.6 km) radius of the project area, the environmental setting suggests a moderate to high potential for encountering pre-Contact archaeological sites.

The field investigations, which were conducted on June 1 through June 4, 2023, consisted of pedestrian reconnaissance, surface collection and the excavation of shovel test probes.

Phase Ia survey resulted in the identification of one archaeological site, 12M0880, consisting of a single, isolated, pre-Contact lithic flake. The site is recommended as not eligible for inclusion in the National Register of Historic Places (NRHP).

CONCLUSIONS AND RECOMMENDATIONS

Summary

Michael Baker completed a Phase Ia archaeological reconnaissance for proposed improvements to the SR 13 intersection with SR 128 and E 296th St. in Hamilton, Madison, and Tipton Counties, Indiana on behalf of the INDOT and FHWA. The study area for the proposed undertaking measures 2.9 ha (7.1 ac) and consists of permanent and temporary ROW. Field investigations were conducted between June 1-4, 2023, and consisted of pedestrian reconnaissance, surface survey, and subsurface sampling through excavation of 31 STPs.

One precontact archaeological site, 12M0880, was identified within the northeast quadrant of the SR 13 and SR 128 intersection. The site consists of a single lithic flake recovered from within 10 cm of the ground surface in plowzone context from STP NE 17. Radial STPs excavated at five and 10 meters to the north, south, and east were all negative for archaeological materials. A cut slope along the SR 13 right-of-way within five meters west of the positive STP prevented the excavation of radial STPs to the west of NE 17. No other archaeological materials were identified through subsurface sampling or other methods within the survey area.

Recommendations

Phase Ia archaeological reconnaissance resulted in the identification of one archaeological site within the survey area. Site 12M0880 consists of a single lithic flake recovered from plowzone context. Neither the artifact nor the site occupation is attributable to a specific cultural group or temporal affiliation. It is the

opinion of Michael Baker that 12M0880 lacks information potential and, therefore, is unlikely to yield information important to the interpretation of Indiana prehistory. Michael Baker recommends that 12M0880 is not eligible for the NRHP. No additional investigations are recommended at 12M0880. In addition, based on the results of the Phase Ia reconnaissance, Michael Baker recommends that the study area is unlikely to contain archaeological resources that are eligible for the NRHP and that no additional archaeological investigations are warranted within the study area based on the current design.

Should any human remains, burial objects, or features be uncovered during construction, work must immediately cease in the location of the discovery and INDOT-CRO and INDR, DHPA notified immediately.

****Please note that the report in its entirety is available for review in IN SCOPE at <http://erms12c.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN SCOPE).**



Indiana Department
of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology · 402 W. Washington Street, W274 · Indianapolis, IN 46204-2739
Phone 317-232-1646 · Fax 317-232-0693 · dhpa@dnr.IN.gov ·

August 19, 2024

Katherine Molnar
Architectural Historian
Michael Baker International, Inc.
3815 River Crossing Parkway, Suite 20
Indianapolis, Indiana 46240

Federal Agency: Indiana Department of Transportation (“INDOT”),
on behalf of Federal Highway Administration, Indiana Division (“FHWA”)

Re: Indiana Department of Transportation’s finding of “no historic properties affected,” on behalf of
the Federal Highway Administration, for the State Road 13 at SR 128 Intersection Improvement
Project (Des. No. 2003081; DHPA No. 30736)

Dear Ms. Molnar:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the “Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana,” the staff of the Indiana State Historic Preservation Officer (“Indiana SHPO”) has reviewed your July 23, 2024, submission, which enclosed INDOT’s finding and supporting documentation, received by our office July 23, 2024, for this project, which is proposed for locations at Pipe Creek Township, in Madison County; and at Madison Township, in Tipton County; and at White River Township, in Hamilton County; Indiana.

As we previously stated, the area of potential effects (“APE”) proposed in the HPSR appears to be of adequate size to encompass the geographic area in which direct and indirect effects of a project of this nature could occur. For the purposes of the Section 106 review of this federal undertaking, we agreed with the conclusions in the HPSR that there are no previously recorded National Register of Historic Places (“NRHP”)-listed or -eligible resources located within the APE. Furthermore, we also agreed with the conclusions in the HPSR of the other historic-aged resources documented during survey and that there are no resources listed or eligible for the NRHP within the APE.

In terms of archaeological resources, as previously indicated, based on the submitted information and the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places (“NRHP”) within the proposed project area. We concur with the opinions of the archaeologist, as expressed in the Phase Ia archaeological field reconnaissance survey report (Robinson et al., 05/24/2024), that archaeological site 12-M-00880 (which was identified during archaeological investigations) does not appear to be eligible for inclusion in the NRHP, and that no further archaeological investigations appear necessary at the proposed project area.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and Indiana Code 14-21-1-29) requires that the discovery be reported to the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and Indiana Code 14-21-1-29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. Part 800.

Katherine Molnar
August 19, 2024
Page 2

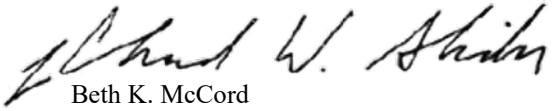
Accordingly, we concur with INDOT's July 18, 2024, Section 106 finding of "No Historic Properties Affected" on behalf of FHWA for this federal undertaking.

The Indiana SHPO staff's archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Toni Lynn Giffin. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

In all future correspondence about the State Road 13 at SR 128 Intersection Improvement Project (Des. No. 2003081)

State Road 13 at State Road 128 Intersection Improvement Project (Des. No. 2003081), which is proposed for locations at Pipe Creek Township, in Madison County; and at Madison Township, in Tipton County; and at White River Township, in Hamilton County; Indiana; please refer to DHPA No. 30736.

Very truly yours,



Beth K. McCord
Deputy State Historic Preservation Officer

BKM:TLG:WTT:wt

emc: Matt Coon, Ph.D., Indiana Department of Transportation
Susan Branigin, Indiana Department of Transportation
Molly Barletta, Kaskaskia Engineering, Inc.
Katherine J. Molnar, Michael Baker International
Thomas Bodor, Michael Baker International, Inc.
Toni Lynn Giffin, Indiana DNR-DHPA
Wade T. Tharp, Indiana DNR-DHPA



PO Box 630485 Cincinnati, OH 45263-0485

AFFIDAVIT OF PUBLICATION

DEFAULT

Michael Baker International
3815 River Crossing PKWY # 20
Indianapolis IN 46240-7756

STATE OF WISCONSIN, COUNTY OF BROWN

The Indianapolis Star, a daily newspaper published in the city of Indianapolis, Marion County, State of Indiana, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

08/01/2024

and that the fees charged are legal.
Sworn to and subscribed before on 08/01/2024

Legal Clerk

Nancy Heyrman
Notary, State of WI, County of Brown

5.19.27

My commission expires

Publication Cost: \$46.00

Tax Amount: \$0.00

Payment Cost: \$46.00

Order No: 10426582

Customer No: 1332829

PO #: Des. No. 2003081

of Copies:

2

THIS IS NOT AN INVOICE!*Please do not use this form for payment remittance.*

Public Notice
Des. No. 2003081

The Indiana Department of Transportation (INDOT), is planning to undertake a intersection improvement project funded in part by the Federal Highway Administration. The project is located along SR 13 and SR 128 in Madison County, Indiana.

Under the preferred alternative, the proposed project would involve replacing the existing two-way stop control with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants. The preferred alternative includes new curb and gutters, a stormwater system, and lighting. The project will require the acquisition of approximately 3.26 acres of permanent right-of-way (ROW). Proposed excavation along the project corridor includes the removal of the existing roadway and roadbed to a depth of approximately 2.5 feet, a drainage system with pipes and structure depths ranging from 4 to 6 feet deep, and excavation to install lighting foundations at a depth of 8 feet.

The proposed action does not impact properties listed in or eligible for the National Register of Historic Places. The INDOT, on behalf of the FHWA, has issued a "No Historic Properties Affected" finding for the project due to the fact that no historic properties are present within the Area of Potential Effects (APE). In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(4). Pursuant to 36 CFR 800.4(d)(1), the documentation specified in 36 CFR 800.11(d) is available for inspection in the office of Michael Baker International, Inc. Additionally, this documentation can be viewed electronically by accessing INDOT's Section 106 document posting website <http://erms12c.indot.in.gov/Section106Documents>. This documentation serves as the basis for the "No Historic Properties Affected" finding. The views of the public on this effect finding are being sought. Please reply with any comments to Katherine Molnar, Michael Baker International, Inc., 3815 River Crossing Parkway, Suite 20, Indianapolis, IN 46240, or at Katherine.molnar@mbakerintl.com. no later than August 31, 2024.

In accordance with the "Americans with Disabilities Act", if you have a disability for which INDOT needs to provide accessibility to the document(s) such as interpreters or readers, please contact Kim Szewczak, 765-745-8291, kszewczak@indot.in.gov. (INI - 8/1/24 - 10426582)

NANCY HEYRMAN
Notary Public
State of Wisconsin

APPENDIX E

Red Flag Investigation and Hazardous Materials



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: June 8, 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: Jessica Stern
Kaskaskia Engineering Group, LLC
301 North Neil Street
Suite 400
Champaign, IL
jstern@kaskaskiaeng.com

Re: RED FLAG INVESTIGATION
DES # 2003081, State Project
Intersection Improvement, Roundabout
SR 13 and SR 128
Hamilton, Madison, and Tipton Counties, Indiana

PROJECT DESCRIPTION

The proposed state project is located at the intersection of SR 13 and SR 128, in the Indiana Department of Transportation (INDOT) Greenfield District. The proposed project includes replacing the existing two-way stop control with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants. The project includes new curb and gutters, a stormwater system, and lighting. The center of the RAB was shifted approximately 100 feet to the east to avoid impacts to the bridge over Duck Creek; this bridge is included in the project area, but no work to the bridge is expected.

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) _____

Proposed right of way: Temporary ☐ # Acres _____ Permanent ☒ # Acres 3.26, Not Applicable ☐

Type and proposed depth of excavation: Removal of existing roadway and excavation of roadbed to 2.5 feet below ground surface (ft-bgs) will be required for the construction of the RAB; installation of a drainage system, with pipes and structure depths ranging from 4 to 6 ft-bgs; excavation to install lighting foundations will be 8 ft-bgs.

Maintenance of traffic (MOT): Maintenance of traffic will be phased and include lane shifts, lane closures, and a detour.

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	N/A
Airports ¹	1	Pipelines	1
Cemeteries	1	Railroads	N/A
Hospitals	N/A	Trails	1
Schools	N/A	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:

Airports: Although not located within the 0.5 mile search radius, one (1) public-use airport, Elwood Airport, is located within 3.8 miles (20,000 feet) of the project area. Elwood Airport is located 2.68 miles northeast of the project area; however, upon further inspection, the airport is no longer in operation. No impact is expected.

Cemeteries: One (1) cemetery is located within the 0.5 mile search radius. Mount Pleasant Cemetery is located 0.34 mile northwest of the project area. No impact is expected.

Pipelines: One (1) pipeline segment is located within the 0.5 mile search radius. The pipeline segment is located 0.41 mile southeast of the project area. No impact is expected.

Trails: One (1) potential trail segment is located within the 0.5 mile search radius. The potential trail segment is located within the project area. Coordination with Hamilton County Planning Commission will occur.

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	8
Canal Structures – Historic	N/A	Lakes	N/A
NPS NRI Listed	N/A	Floodplain - DFIRM	6
NWI-Lines	11	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	2	Sinkhole Areas	N/A
Rivers and Streams	5	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: Eleven (11) NWI line segments are located within the 0.5 mile search radius. Three (3) NWI line segments are 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.

IDEM 303d Listed Streams and Lakes (Impaired): Two (2) IDEM 303d Listed Streams are located within the 0.5 mile search radius. Duck Creek is located within the project area. Duck Creek is listed as impaired for *E. coli*.

- Duck Creek is listed 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: Five (5) river and stream segments are located within the 0.5 mile search radius. One (1) stream segment, Duck Creek, 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: Eight (8) wetland polygons are located within the 0.5 mile search radius. Two (2) wetland polygons are 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.

Floodplain-DFIRM: Six (6) floodplain polygons are located within the 0.5 mile search radius. The project area is located within one of the floodplain polygons. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

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	4	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation:

Petroleum Wells: Four (4) petroleum wells are located within the 0.5 mile search radius. The nearest petroleum well is located 0.12 mile southeast of the project area. No impact is expected.

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	1	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	N/A
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:

State Cleanup Sites: One (1) state cleanup site is located within the 0.5 mile search radius. Former Marathon Station #3491, IN St. Hwy 37 and IN St. Hwy 13, Agency Interest (AI) ID# 45569, is located approximately 0.25 mile north of the project area. A DNR Record of Water Well for abandonment of groundwater monitoring wells was submitted on November 14, 2014. An Environmental Restrictive Covenant was placed on the property on September 19, 2014. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Hamilton, Madison, and Tipton County listings of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities are provided at https://www.in.gov/dnr/nature-preserves/files/np_hamilton.pdf; https://www.in.gov/dnr/nature-preserves/files/np_madison.pdf; https://www.in.gov/dnr/nature-preserves/files/np_tipton.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did indicate the presence of ETR species within the 0.5 mile search radius. Coordination with IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic coordination 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:

Trails: One (1) trail segment is located within the project area. Coordination with Hamilton County Planning Commission will occur.

WATER RESOURCES:

Duck Creek is listed 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.

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:

- Three (3) NWI line segments are located within the project area.
- One (1) stream, Duck Creek, flows through the project area.
- Two (2) NWI wetland polygons are located within the project area.
- The project area is located within a floodplain (coordination only).

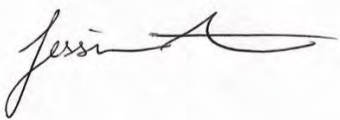
MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with 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: **Darlane Davis** Digitally signed by Darlane Davis
Date: 2023.06.08 10:53:33 -04'00' (Signature)

Prepared by:



Jessica Stern
Environmental Scientist
Kaskaskia Engineering Group, 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

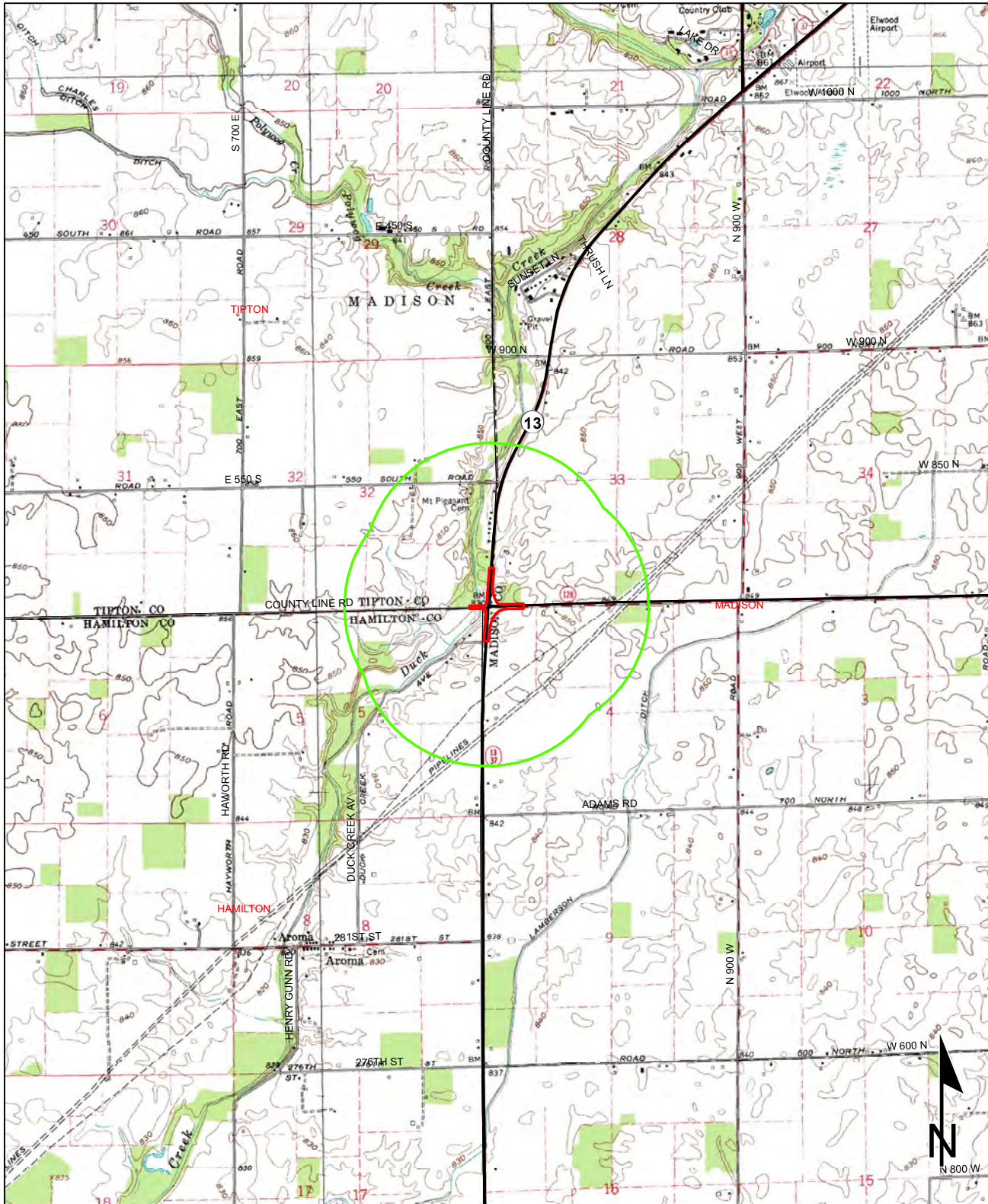
WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location SR 13 and SR 128

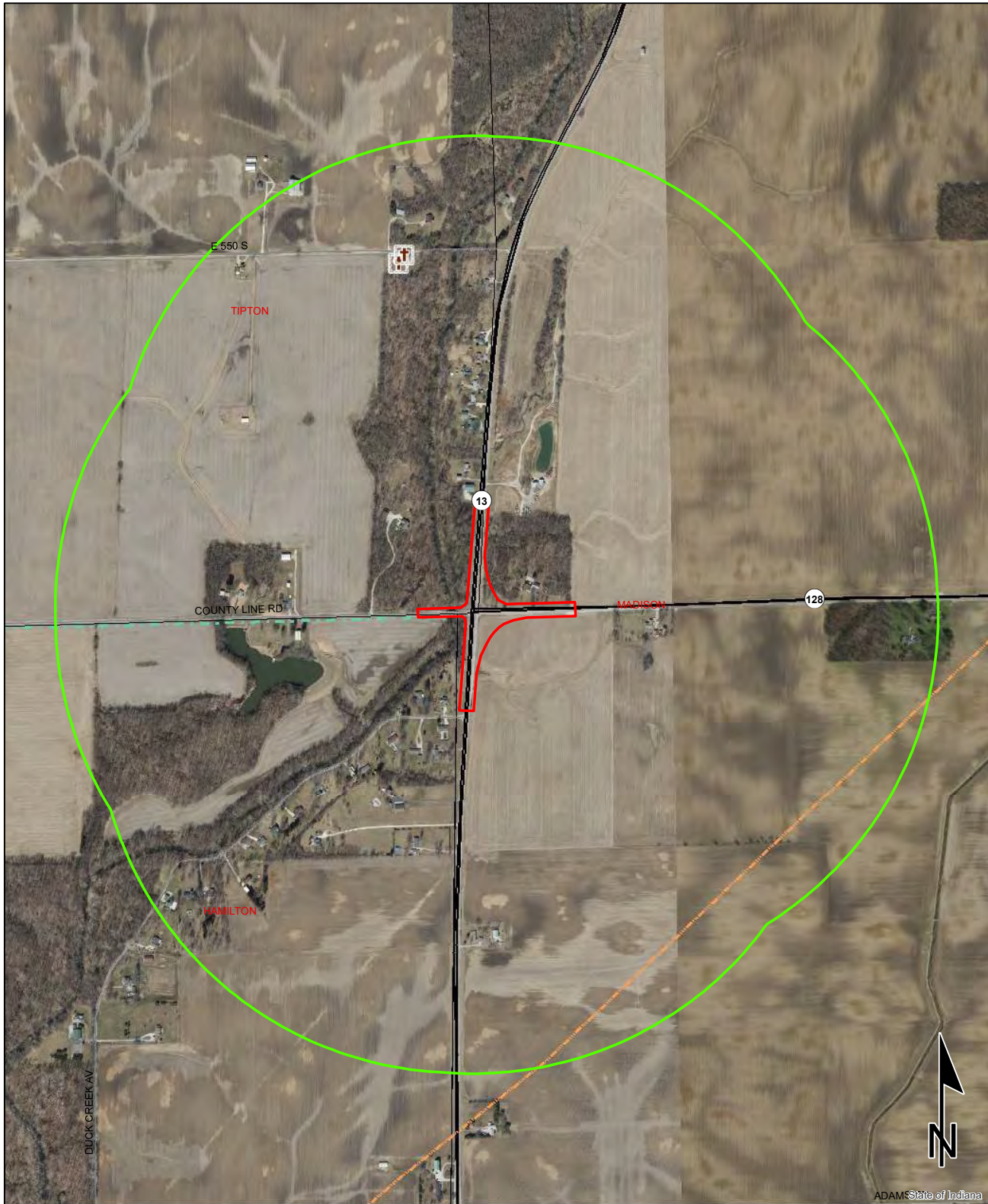
Des. No. 2003081, Intersection Improvement, Roundabout
Hamilton, Madison, and Tipton Counties, Indiana



Sources: 0.5 0.25 0 0.5 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.

**FRANKTON QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)**

Red Flag Investigation - Infrastructure
SR 13 and SR 128
Des. No. 2003081, Intersection Improvement, Roundabout
Hamilton, Madison, and Tipton Counties, Indiana

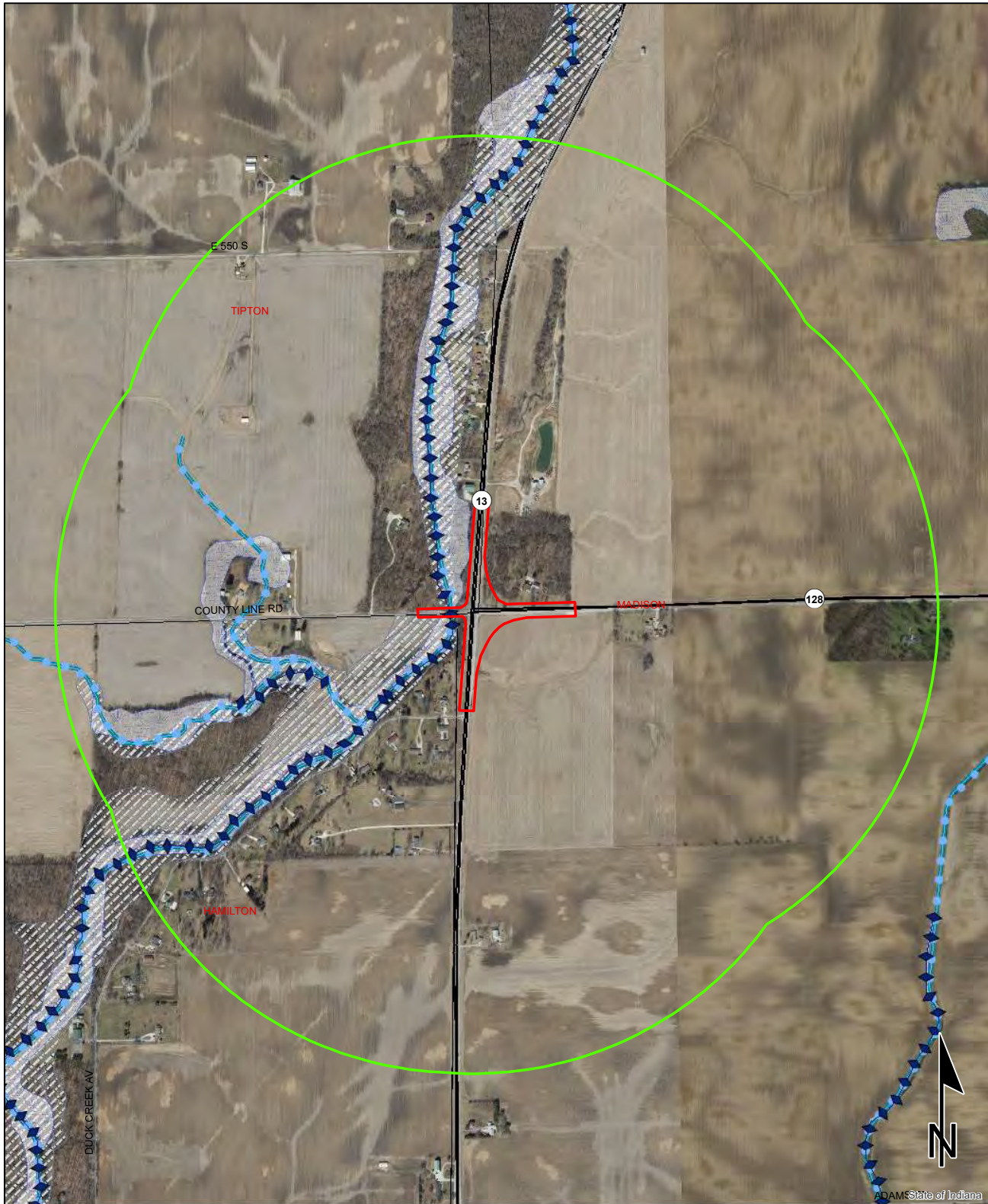


Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

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

	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
SR 13 and SR 128
Des. No. 2003081, Intersection Improvement, Roundabout
Hamilton, Madison, and Tipton Counties, Indiana



Sources:

Non Orthophotography

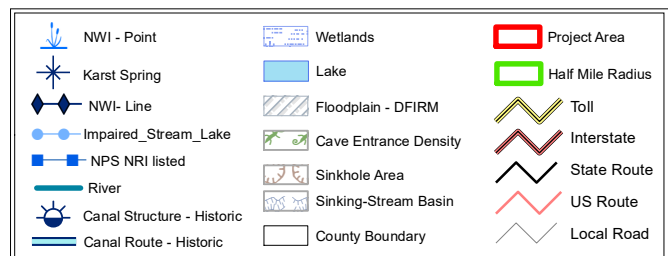
Data - Obtained from the State of Indiana Geographical Information Office Library

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

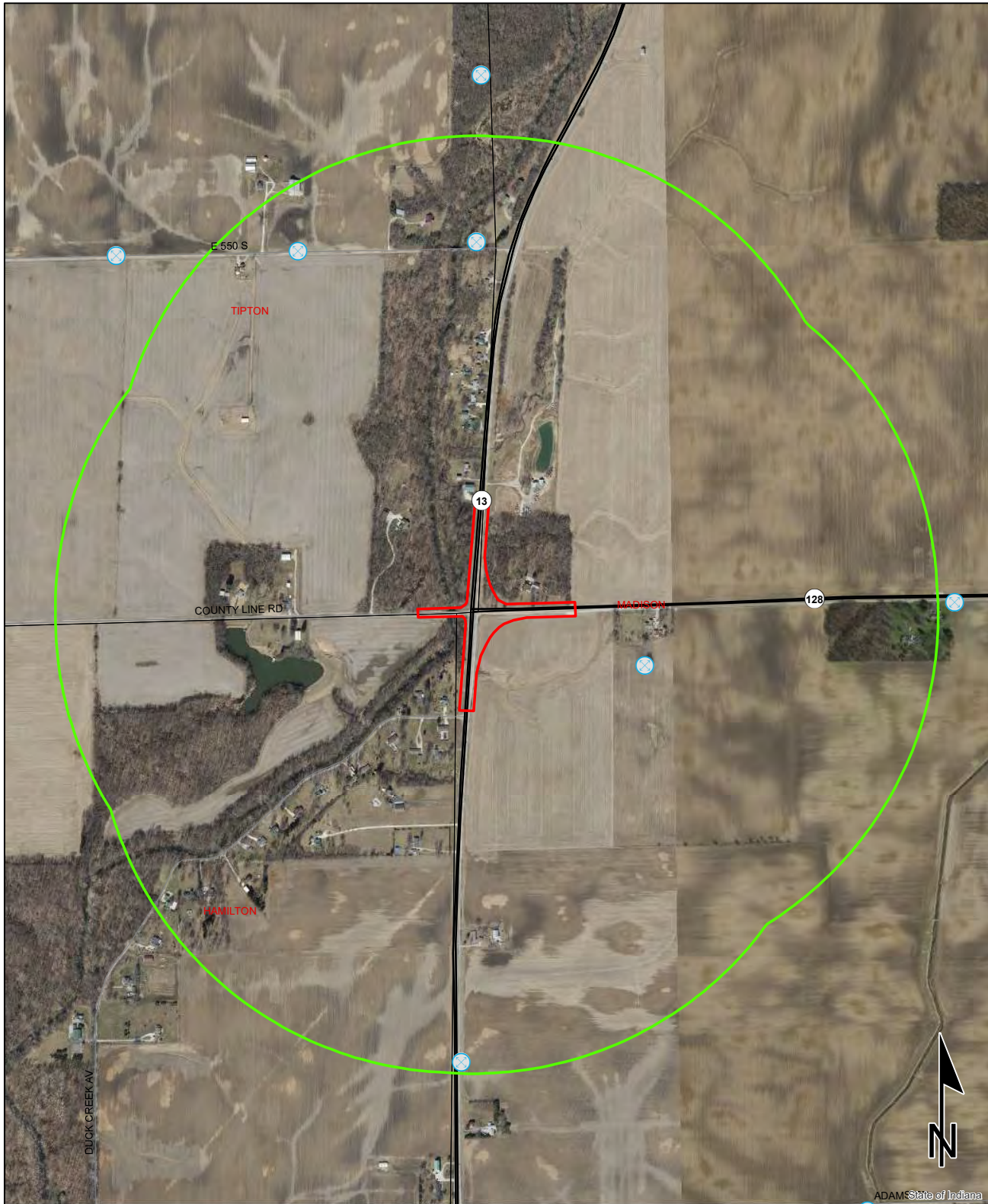
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

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

0.15 0.075 0 0.15
Miles

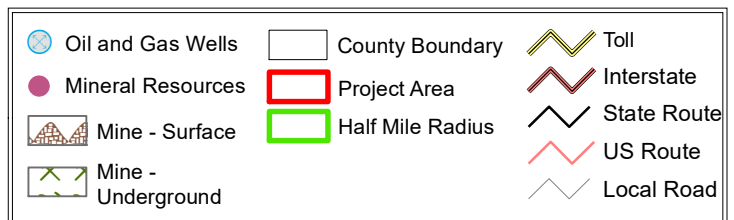


Red Flag Investigation - Mining and Mineral Exploration
SR 13 and SR 128
Des. No. 2003081, Intersection Improvement, Roundabout
Hamilton, Madison, and Tipton Counties, Indiana

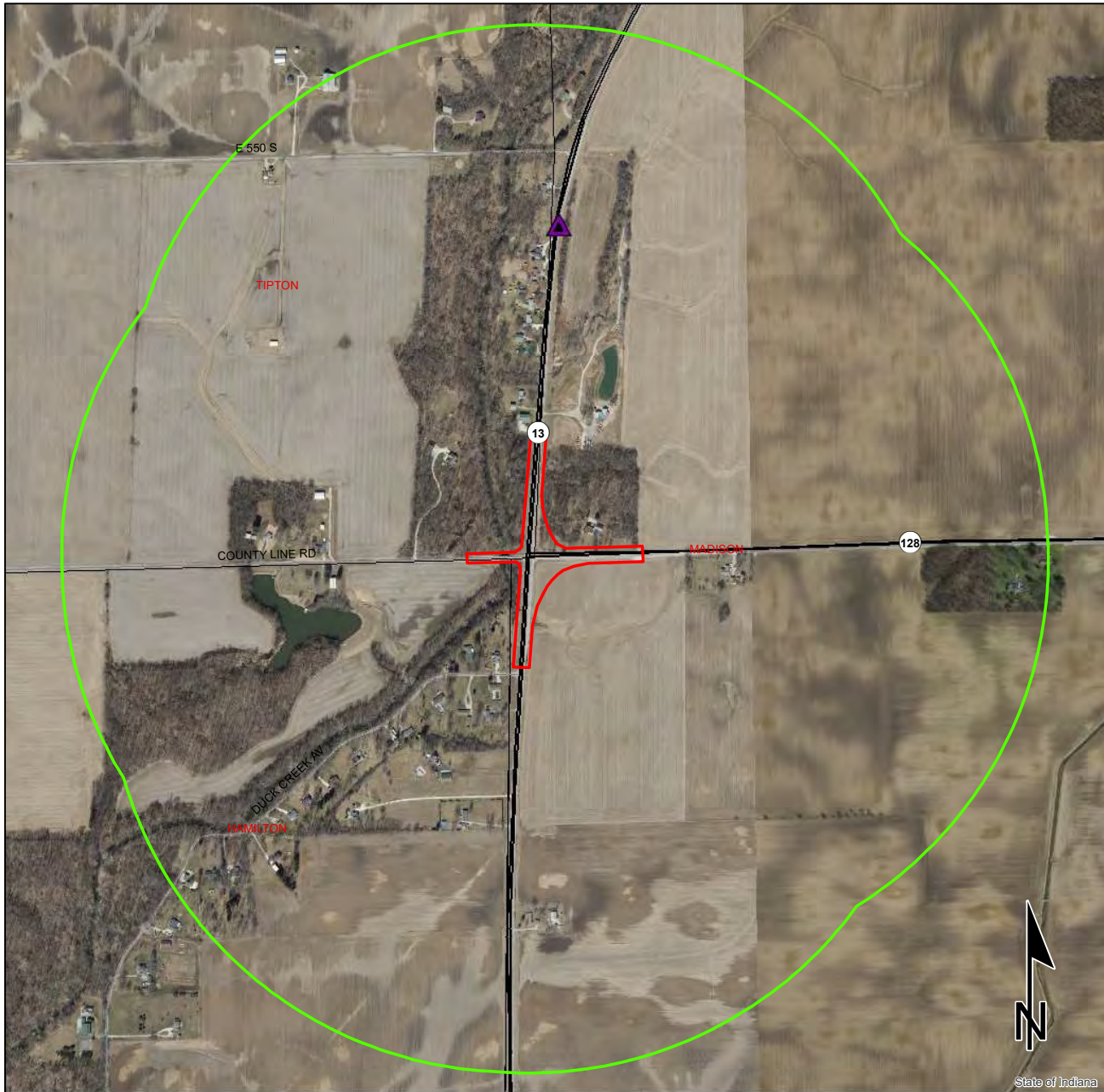


Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

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



Red Flag Investigation - Hazardous Material Concerns
SR 13 and SR 128
Des. No. 2003081, Intersection Improvement, Roundabout
Hamilton, Madison, and Tipton Counties, Indiana



	Brownfield		RCRA Generator/TSD		Institutional Controls
	RCRA Corrective Action Sites		Restricted Waste Site		County Boundary
	Confined Feeding Operation		Septage Waste Site		Project Area
	Notice_Of_Contamination		Solid Waste Landfill		Half Mile Radius
	Construction/Demolition Site		State Cleanup Site		Toll
	Infectious/Medical Waste Site		Superfund		Interstate
	Leaking Underground Storage Tank		Tire Waste Site		State Route
	Manufactured Gas Plant		Underground Storage Tank		US Route
	NPDES Facilities		Voluntary Remediation Program		Local Road
	NPDES Pipe Locations		Waste Transfer Station		
	Open Dump Waste Site				

0.15 0.075 0 0.15
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

WATERS OF THE U.S. DETERMINATION REPORT
SR 13 and SR 128 Intersection
Hamilton, Madison, and Tipton Counties, Indiana
Intersection Improvement Project
INDOT DES. NO. 2003081

Asset ID: Str. #80-00093B/NBI #8000092
 Prepared by: Brigitte Moneymaker
 Contact Information: bmoneymaker@kaskaskiaeng.com, 618-233-5877
 Kaskaskia Engineering Group, LLC
 Completed Date: November 20, 2023

1.0 PROJECT INFORMATION

Date of Field Reconnaissance:
 May 10, 2023 and August 9, 2023

Photo directional map
and photo log omitted
to avoid duplication.

Project Location:
 Frankton, Indiana Quadrangle
 Section 4, Township 20 North, Range 6 East
 Section 5, Township 20 North, Range 6 East
 Section 32, Township 21 North, Range 6 East
 Section 33, Township 21 North, Range 6 East
 Coordinates: 40.21892, -85.86193
 Hamilton, Madison, and Tipton Counties, Indiana

Project Description:

The proposed state project (Des. No. 2003081) is located at the intersection of SR 13 and SR 128, in Hamilton, Madison, and Tipton counties in the Indiana Department of Transportation (INDOT) Greenfield District (Figure 1). The proposed project includes replacing the existing two-way stop control with a single-lane roundabout (RAB). The RAB will include raised concrete islands, a center truck apron, and outside truck aprons in the northwest and southwest quadrants. The project includes new curb and gutters, a stormwater system, and lighting. The center of the RAB was shifted approximately 100 feet to the east to avoid impacts to the bridge over Duck Creek. The following structure is located in the project area, but no work to the bridge is expected.

Table 1 – Structure Summary Table

Asset ID	Latitude	Longitude	Type	Condition	Route Carried	Length (ft)
Str. #80-00093B/ NBI #8000092	40.21895	-85.86247	Concrete Cast-in- Place	Excellent	SR 128	40

2.0 OFFICE EVALUATION

Results:

USGS Mapping

The United States Geological Survey (USGS) Frankton, Indiana 7.5-minute topographic quadrangle map indicates a perennial stream associated with Duck Creek within the investigated area (Figures 2 and 3).

NWI Mapping

The United States Fish and Wildlife Service National Wetlands Inventory (NWI) map was reviewed for the presence of potential wetlands in, or adjacent to, the investigated area (Figure 4). There were two NWI features mapped within the investigated area. One Palustrine NWI Wetland is located in the northwest quadrant and the southwest quadrant, directly adjacent to SR 128 on the north and south sides. One Riverine NWI wetland crosses from the northwest quadrant, under SR 128, and continues to the southwest quadrant. Both NWI wetland features are associated with Duck Creek. There are no other mapped NWI features within the investigated area.

Table 2 - NWI Wetlands Within/Adjacent the Investigated Area

Wetland Type	Cowardin Classification Code	Location
Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded	PFO1A	Northwest quadrant and southwest quadrant
Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	R2UBH	Northwest quadrant and southwest quadrant

Source: USFWS NWI, 2023

Mapped Soil Units

According to the National Resource Conservation Service Web Soil Survey (NRCS WSS) geographic database for Clark County, Indiana, the investigated area contains six soil map units (Figure 5, Table 3).

Table 3 – Soil Units within the Investigated Area

Soil Unit Symbol	Soil Unit	Hydric Rating	Hydric Status
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	2	Predominantly Non-Hydric
FsC2	Fox silt loam, till substratum, 6 to 12 percent slopes, moderately eroded	0	Non-Hydric
MnB2	Miami silt loam, 2 to 6 percent slopes, eroded	6	Predominantly Non-Hydric
OcB2	Ockley silt loam, 2 to 6 percent slopes, eroded	5	Predominantly Non-Hydric
Sh	Sloan silt loam, sandy substratum, occasionally flooded	100	Hydric
ThrA	Treaty silty clay loam, 0 to 1 percent slopes	95	Predominantly Hydric

Source: NRCS Web Soil Survey, 2023

Hydrology

According to the USGS National Hydrography Dataset (NHD), there are three NHD flowlines within the investigated area (Figure 6). One Artificial Path NHD flowline associated with Duck Creek flows through the investigated area from north to south under SR 128. One Stream/River NHD flowline flows within the investigated area from east to west under SR 13 and is associated with Unnamed Tributary (UNT) 1 & 2 to Duck Creek. One drainageway flowline flows within the investigated area from southeast to northwest under SR 13 south of SR 128 and is associated with another UNT 3 to Duck Creek. According to the Indiana Department of Natural Resource (IDNR) Indiana Floodplain Informational Portal (INFIP 2.0), the investigated area is located with the Duck Creek and the Big Duck Creek floodplain (Figure 7.1 & 7.2). This project does not lie within the karst region of Indiana.

3.0 FIELD RECONNAISSANCE

Results:

Bats and Birds:

There was no evidence of the presence of bats or birds found during the site visit.

Wildlife Evidence and Concerns:

There was no evidence of wildlife found during the visit.

Streams:

Four streams were identified within the investigated area.

Duck Creek

Duck Creek would likely be classified as a perennial stream because it was observed to have a consistent base flow and is mapped as perennial on the USGS topographic map (Figures 1 and 2). Hydrologic conditions were normal based on the previous three months of rainfall data (USACE APT v 1.0.20). The channel flows from north to south under SR 128. According to USGS StreamStats, Duck Creek has an upstream drainage of 61.93 square miles (Figure 9). It is within the USGS 12-digit Hydrological Unit Lamberson Ditch-Duck Creek (HUC12 051202010505). The upstream drainage consists of forested tracts, agricultural fields, and a small number of rural residences.

The observed ordinary high water mark (Coordinates: 40.21831, -85.86260) was approximately 30-feet wide and 5-feet deep. It was measured 204-feet downstream of SR 128, outside the influence of the bridge (Str. #80-00093B/NBI #8000092) and was characterized by the destruction of terrestrial vegetation along the stream bank.

The substrate within the channel was comprised of pebbles, sand, and gravel. There was no riprap present on the banks or at the location of the observed OHWM. There were no riffles or pools present in the channel and in-stream cover from overhanging vegetation was approximately 50%. Duck Creek has a defined bed and bank with severe undercutting and erosion on the east bank, downstream of SR 128. The west bank was approximately 8-feet high, and the east bank was 30-feet high, both measured from the elevation of the stream. Duck Creek appears to have been straightened and channelized for draining the surrounding landscape, including nearby rural residences and row crop fields.

There were no plant species present within the stream channel. The dominant plant species on the stream banks were Japanese Honeysuckle (*Lonicera japonica*, FACU), Canada Goldenrod (*Solidago canadensis*,

FACU), and Reed Canary Grass (*Phalaris arundinacea*, FACW). Based on a qualitative assessment, this resource is of poor quality within this reach due to its morphology and an E. coli impairment, according to Indiana's 303(d) list.

The water was flowing from north to south during the site visit. Duck Creek flows approximately 6.65 miles southwest into West Fork White River, which then flows 153.43 miles southwest into Wabash River, and an additional 44.83 miles southwest into the Ohio River. The West Fork of the White River is a section 10 navigable river throughout both Madison and Hamilton counties, Duck Creek would likely be considered a Waters of the US.

UNT1 to Duck Creek

UNT1 to Duck Creek would likely be considered an ephemeral stream because it was observed to have a bed and bank but, seems to originate a short distance upstream from flow off a business parking area slope. There was no water or flow present during normal hydrological conditions. According to USGS StreamStats, UNT1 to Duck Creek has a combined upstream drainage with UNT 2 to Duck Creek of 0.36 square miles (Figure 9.2). It is within the USGS 12-digit Hydrological Unit Lamberson Ditch-Duck Creek (HUC12 051202010505). The upstream drainage consists of a forested tract and a row crop agricultural field.

The observed ordinary high water mark (Coordinates: 40.22054, -85.86151) was observed to be 2.16-feet wide 0.25-feet deep. It was measured 36-feet upstream of SR 13, outside the influence of the corrugated metal pipe, a residential metal fence prevented measuring any further upstream. The OWHM was characterized by the presence of matted down, bent, or absent vegetation.

The substrate within the channel was silt and detritus. There was no riprap present on the banks or at the location of the observed OWHM. There were no riffles or pools present in the channel and the in-stream cover from the overhanging vegetation was approximately 70 percent. UNT1 to Duck Creek had a defined bed and bank, and both the north and south banks were approximately 3-feet high measured from the streambed.

The dominant plant species within the channel included Spotted Touch-me-not (*Impatiens capensis*, FACW). The dominant species on the banks were Virginia Creeper (*Parthenocissus quinquefolia*, UPL), Japanese Honeysuckle (FACU), and Reed Canary Grass (FACW). Based on a qualitative assessment, this resource is of poor quality within this reach due to its morphology and substrate.

UNT1 to Duck Creek flows 30-feet southwest into UNT2 to Duck Creek, which then flows 351 feet northwest into Duck Creek. Duck Creek flows approximately 6.65 miles southwest into West Fork of the White River, which then flows 153.43 miles southwest into Wabash River, and an additional 44.83 miles southwest into the Ohio River. The West Fork of the White River is a section 10 navigable river throughout both Madison and Hamilton counties, UNT1 to Duck Creek would likely be considered a Waters of the US.

UNT2 to Duck Creek

UNT2 to Duck Creek would likely be considered an intermittent stream because it was observed to have a bed and bank but there was no water or flow present during normal hydrological conditions. According to USGS StreamStats, UNT2 to Duck Creek has a combined upstream drainage with UNT 1 to Duck Creek of 0.36 square miles (Figure 9.2). It is within the USGS 12-digit Hydrological Unit Lamberson Ditch-Duck Creek (HUC12 051202010505). The upstream drainage consists of a forested tract and a row crop agricultural field.

The observed ordinary high water mark (Coordinates: 40.22048, -85.86151) was observed to be 3-feet wide 0.42-feet deep. It was measured 36-feet upstream of SR 13, outside the influence of the corrugated metal pipe, a residential metal fence prevented measuring any further upstream. The OWHM was characterized by the presence of matted down, bent, or absent vegetation.

The substrate within the channel was silt and detritus. There was no riprap present on the banks or at the location of the observed OWHM. There were no riffles or pools present in the channel and the in-stream cover from the overhanging vegetation was approximately 65 percent. UNT2 to Duck Creek had a defined bed and bank, and both the north and south banks were approximately 3-feet high measured from the streambed. The dominant plant species within the channel included Spotted Touch-me-not (FACW). The dominant species on the banks were Virginia Creeper (UPL), Japanese Honeysuckle (FACU), and Reed Canary Grass (FACW). Based on a qualitative assessment, this resource is of poor quality within this reach due to its morphology and substrate.

UNT2 to Duck Creek flows 351 feet northwest into Duck Creek. Duck Creek flows approximately 6.65 miles southwest into West Fork of the White River, which then flows 153.43 miles southwest into Wabash River, and an additional 44.83 miles southwest into the Ohio River. The West Fork of the White River is a section 10 navigable river throughout both Madison and Hamilton counties, UNT1 to Duck Creek would likely be considered a Waters of the US.

UNT3 to Duck Creek

UNT3 to Duck Creek would likely be considered an intermittent stream because it was observed to be holding water but had no flow during normal hydrological conditions. According to USGS StreamStats, Duck Creek has an upstream drainage of 0.06 square miles (Figure 9.3). It is within the USGS 12-digit Hydrological Unit Lamberson Ditch-Duck Creek (HUC12 051202010505). The upstream drainage consists of a row crop agricultural field.

The observed ordinary high water mark (Coordinates: 40.21774, -85.86171) was approximately 6.25-feet wide and 5.40-feet deep. It was measured 60-feet upstream of SR 13, outside the influence of the stone culvert and was characterized by the presence of matted down, bent, or absent vegetation along the stream bank.

The substrate within the channel was comprised of silt and boulders. There was no riprap present on the banks or at the location of the observed OWHM. There were no riffles or pools present in the channel and in-stream cover from overhanging vegetation was approximately 95%. UNT3 to Duck Creek has a defined bed and bank, and both the north and south banks were approximately 3.5-feet high measured from the elevation of the stream. UNT3 to Duck Creek appears to have been straightened and channelized for draining the surrounding agricultural landscape.

The dominant plant species within the channel included hybridized cattail (*Typha X Glauca*, OBL), Late Goldenrod (*Solidago gigantea*, FACW), and Reed Canary Grass (FACW). The dominant plant species on the stream banks were Cutleaf Teasel (*Dipsacus laciniatus*, UPL), Canada Goldenrod (*Solidago canadensis*, FACU) and Common Milkweed (*Asclepias syriaca*, FACU). Based on a qualitative assessment, this resource is of poor quality within this reach due to its morphology and an E. coli impairment, according to Indiana's 303(d) list.

UNT3 to Duck Creek flows 298 feet northwest into Duck Creek. Duck Creek flows approximately 6.65 miles southwest into West Fork of the White River, which then flows 153.43 miles southwest into Wabash River, and an additional 44.83 miles southwest into the Ohio River. The West Fork of the White River is a section 10 navigable river throughout both Madison and Hamilton counties, UNT3 to Duck Creek would likely be considered a Waters of the US.

Table 4 - Stream Summary Table

ID	Latitude	Longitude	USGS Blue-Line (Y/N)	Stream Type	Riffles/ Pools (Y/N)	Substrate	OHWL Width (ft)	OHWL Depth (feet)	Stream Relative Quality	Estimated Amount of Aquatic Resources within Investigated Area (acres / linear foot)	Photo #s	Likely Water of the U.S.?
Duck Creek	40.21831	-85.86260	Y	Perennial	Y	Sand, Pebbles, Gravel	30	5	Poor	0.205 ac/ 298.88 lf	11, 12, 13, 15, 16	Yes
UNT1 to Duck Creek	40.22054	-85.86151	N	Ephemeral	N	Silt, Detritus	2.16	0.25	Poor	0.002 ac/42.54 lf	55, 56	Yes
UNT2 to Duck Creek	40.22048	-85.86151	N	Intermittent	N	Silt, Detritus	3	0.42	Poor	0.008 ac/126 lf	52, 53, 54, 57, 58	Yes
UNT3 to Duck Creek	40.21774	-85.86171	N	Intermittent	N	Silt, Boulders	6.25	5.40	Poor	0.035 ac/247.24 lf	39, 40, 41, 42, 44	Yes

Wetlands:

Three wetlands were identified within the investigated area in the northeast quadrant (Figure 8).

Wetland 1

Based on the Classification of Wetlands and Deepwater Habitats of the United States Wetland 1 is a 0.02 acre palustrine emergent wetland (PEM) (Cowardin et al. 1979). Wetland 1 is located north of SR 128 and east of SR 13 in the roadside ditch between the road and the deciduous forest. The quality of the wetland

is poor due to disturbance, habitat quality, and vegetation cover. It functions as roadside drainage retention.

The data point Wetland Point 1 (WP1) was taken in the roadside ditch north of UNT1 and 2 to Duck Creek. The vegetation at this location was dominated by Reed Canary Grass (FACW) and foxtail barley (*Hordeum jubatum*, FAC) which passed the dominance test and prevalence index for hydrophytic vegetation. The sampled area is in a concave ditch between SR 13 and a forest tract, which meets one secondary wetland hydrology indicator, geomorphic position (D2). This location also passed the FAC neutral test (D5), another secondary hydrology indicator, and met the necessary threshold for wetland hydrology. According to a review of the USDA web soil survey, the mapped soil at this data point is Miami silt loam, (MnB2) which is categorized as a predominately non-hydric soil with a hydric rating of 6%. The soil profile was observed to meet the hydric soil indicator for Depleted Matrix (F3), indicating this sampled area contains hydric soil suitable for a wetland. After meeting all three wetland indicators, this location was determined to be a wetland.

The data point Upland Point 1 (UPL1) was taken outside of the ditch on the upland portion of the northeast quadrant. The sampled location had no wetland hydrology indicators present. The vegetation at this location was dominated by Canada thistle (*Cirsium arvense*, FACU) and reed canary grass (FACW). Although there was hydrophytic vegetation present, it was not observed in enough abundance to pass the wetland indicator for vegetation. The mapped soil at this data point is Miami silt loam, (MnB2) which is categorized as a predominately non-hydric soil with a hydric rating of 6%, but the observed soil profile at this sampled location was determined to be non-hydric. Since none of the wetland indicators were observed, this location was determined to not be a wetland.

Wetland 1 is likely jurisdictional due to its connection to Duck Creek.

Wetland 2

Based on the Classification of Wetlands and Deepwater Habitats of the United States Wetland 2 is a 0.12 acre PEM (Cowardin et al. 1979). Wetland 2 is located in the northeast quadrant of the intersection of SR 124 and SR 13 and continues north along the east side of SR 13 in the roadside ditch between the road and the deciduous forest. The quality of the wetland is poor due to disturbance, habitat quality, and vegetation cover. It functions as roadside drainage retention.

The data point Wetland Point 2 (WP2) was taken in the northeast quadrant of the SR 13 and SR 128 intersection. The vegetation at this location was dominated by Meadow Foxtail (*Alopecurus pratensis* FACW), Foxtail Barley (FAC) and Curly Dock (*Rumex crispus*, FAC), which passed the dominance test and prevalence index for hydrophytic vegetation. The sampled area is located in a concave ditch between SR 13, SR 128, and a forested tract, which meets one secondary wetland hydrology indicator, geomorphic position (D2). This location also passes the FAC neutral test (D5), another secondary hydrology indicator, which meets the threshold for wetland hydrology. According to a review of the USDA web soil survey, the mapped soil at this data point is Ockley silt loam (OcB2) which is categorized as a predominately non-hydric soil with a hydric rating of 5%. The soil profile was observed to meet the hydric soil indicator for Redox Dark Surface (F6), indicating this sampled area contains hydric soil suitable for a wetland. After meeting all three wetland indicators, this location was determined to be a wetland.

The data point Wetland Point 2a (WP2a) was taken in the northeast quadrant, south of UNT1 and UNT 2 to Duck Creek. This point was taken to confirm the extent of the delineation for Wetland 2. The vegetation at this location was dominated by Meadow Foxtail (FACW), and Reed Canary Grass (FACW), which passed

the dominance test and prevalent index for hydrophytic vegetation. The sampled area is in a concave ditch between SR 13 and a forest tract, which meets one secondary wetland hydrology indicator, geomorphic position (D2). This location also passes the FAC neutral test (D5), another secondary hydrology indicator, which meets the threshold for wetland hydrology. According to a review of the USDA web soil survey, the mapped soil at this data point is Ockley silt loam (OcB2) which is categorized as a predominately non-hydric soil with a hydric rating of 5%. The soil profile was observed to meet the hydric soil indicator for Redox Dark Surface (F6) indicating this sampled area contains hydric soil suitable for a wetland. After meeting all three wetland indicators, this location was determined to be a wetland and a continuation of Wetland 2 as sampled by WP2.

The data point Upland Point 2 (UPL2) was taken outside of the ditch on the upland portion of the northeast quadrant. The sampled location had no hydrology wetland indicators present. The vegetation at this location was dominated by Common ragweed (*Ambrosia artemisiifolia*, FACU) Canada Goldenrod (FACU), bush honeysuckle (*Lonicera mackii*, NL), and Tree-of-heaven (*Ailanthus altissima*, FACU). There was no dominant hydrophytic vegetation present. The mapped soil at this data point is also Ockley silt loam (OcB2) which is categorized as a predominately non-hydric soil with a hydric rating of 5%, but the observed soil profile at this sampled location was determined to be non-hydric. Since none of the wetland indicators were observed, this sampled location was determined to not be a wetland.

Wetland 2 is likely jurisdictional due to its connection to Duck Creek.

Wetland 3

Based on the Classification of Wetlands and Deepwater Habitats of the United States Wetland is a 0.03 acre PEM (Cowardin et al. 1979). Wetland 3 is located in the southeast quadrant of the intersection of SR 124 and SR 13 and continues north along the east side of SR 13 in the roadside ditch between the road and the row crop field. The quality of the wetland is poor due to disturbance, habitat quality, and vegetation cover. It functions as roadside drainage retention.

The data point Wetland 3 was taken in the roadside ditch north of UNT 3 to Duck Creek along the east side of SR 13. The vegetation was dominated by Meadow Foxtail (FACW) and Curly Dock (FAC) which passed the Dominance Test and Prevalence Index for hydrophytic vegetation. There were two secondary hydrology indicators met at this location, Geomorphic Position (D2) and the FAC-Neutral Test (D5). According to a review of the USDA web soil survey, the mapped soil at this data point is Ockley silt loam (OcB2) which is categorized as a predominately non-hydric soil with a hydric rating of 5%. Although the observed soil profile lacked any hydric indicators, this specific location's morphology has been modified through human activity that has led to this area's hydrology becoming more conducive to wetland hydrology. Therefore, this location was determined to meet the soil indicator for problematic hydric soil. The combination of all these indicators determined that this area was a recently developed wetland. The mapped delineation was determined by a combination of topography and the transition from Wetland 3 into RSD 6, a gravel ditch, in the southeast quadrant of the intersection. The change to non-hydric soil at Upland 3 established the boundary, and then further investigation closer to RSD 6 confirmed that both vegetation and hydrology were lost in this area. In the other direction, RSD 5 appeared to be the southern

boundary for Wetland 3, and this was supported with the observed change in drainage towards UNT 3 to Duck Creek at this location and the lack of wetland vegetation.

Wetland 3 is likely jurisdictional due to its connection to Duck Creek.

Upland 3

The data point Upland 3 was taken in the southeast quadrant of SR 128 and SR 13 between Roadside (RSD) 6 and RSD 7. The vegetation was dominated by Meadow Foxtail (FACW) which passed the Rapid Test, the Dominance Test, and the Prevalence Index for hydrophytic vegetation. There were two secondary hydrology indicators met at this location, Geomorphic Position (D2) and the FAC-Neutral Test (D5). According to a review of the USDA web soil survey, the mapped soil at this data point is Ockley silt loam (Ocb2) which is categorized as a predominately non-hydric soil with a hydric rating of 5%. The observed soil profile did not meet any indicators for hydric soil. Since only two of the three necessary wetland indicators were observed, this sampled location was determined to not be a wetland.

No additional data points were taken in any other quadrants. The northwest quadrant consisted of forested tracts and a privately owned field behind a wire fence. There was no evidence of wetland hydrology or vegetation in this location. The southwest quadrant consisted of a row crop field and a forested buffer, where there was some wetland vegetation present along SR 128, but it was not in sufficient quantities to pass the hydrophytic vegetation indicator. There was also no evidence of wetland hydrology. The northeast and quadrant also consisted of one rural residence with a mowed grass lawn that extended all the way to SR 128 and SR 13 intersection. There was no vegetation or hydrology indicators found in these locations.

Table 5 – Wetland Data Point Summary Table

ID	Latitude	Longitude	Classification	Relative Quality	Estimated Amount of Aquatic Resources in Review Area (acres)	Photo Numbers	Likely Water of the U.S.?
Wetland 1	40.22079	-85.86159	PEM	Poor	0.02	51, 59, 60,	Yes*
Wetland 2	40.21909	-85.86175	PEM	Poor	0.12	21, 22, 23, 25	Yes*
Wetland 3	40.21809	-85.86187	PEM	Poor	0.03	28, 29, 30	Yes*

*INDOT acknowledges that the wetland would likely not meet the definition of a Waters of the US, however, INDOT is requesting that the USACE take jurisdiction of the wetland."

Table 6 – Wetland Data Point Summary Table

ID	Latitude	Longitude	Vegetation	Soils	Hydrology	Upland/ Wetland/ Non- Wetland	Photos
Wetland Point 1 (WP1)	40.22078	-85.86159	Yes	Yes	Yes	Wetland	60
Upland Point 1 (UP1)	40.22082	-85.86163	No	No	No	Upland	62
Wetland Point 2 (WP2)	40.21909	-85.86175	Yes	Yes	Yes	Wetland	20
Wetland Point 2a (WP2a)	40.22044	-85.86164	Yes	Yes	Yes	Wetland	23
Upland Point 2 (UP2)	40.21905	-85.86164	No	No	No	Upland	24
Wetland 3 (WP3)	40.21809	-85.86187	Yes	Yes	Yes	Wetland	31
Upland 3 (UP3)	40.21881	-85.86181	Yes	No	Yes	Upland	29

Roadside Ditch:

There were seven roadside ditches (RSD) located within the investigated area (Table 7). All seven RSDs did not have a defined OWHM, did not carry a relatively permanent flow of water, and they were all determined to be excavated wholly in and draining only uplands. RSDs 1-7 are likely not jurisdictional, and their locations are highlighted in Figure 8.

Table 7 – Roadside Ditch Summary Table

ID	Latitude	Longitude	Location	Flow Direction	Description	Length in investigated area (ft)	Photo #s
RSD 1	40.220717	-85.861853	NW Quadrant	S	Grassy swale	237.43	48, 49

ID	Latitude	Longitude	Location	Flow Direction	Description	Length in investigated area (ft)	Photo #s
RSD 1	40.220717	-85.861853	NW Quadrant	S	Grassy swale	237.43	48, 49
RSD 2	40.217644	-85.862172	SW Quadrant	N	Grassy swale	207.26	37
RSD 3	40.217202	-85.862231	SW Quadrant	N	Grassy swale	121.65	32, 36
RSD 4	40.217185	-85.862027	SE Quadrant	N	Grassy swale	249.36	33, 35, 38
RSD 5	40.217997	-85.861898	SE Quadrant	S	Vegetated ditch	80.38	28, 43
RSD 6	40.218899	-85.861472	SE Quadrant	W	Gravel ditch	574.83	18, 26, 27
RSD 7	40.219013	-85.861414	NE Quadrant	W	Grassy swale	333.26	19

4.0 CONCLUSIONS

Field observations revealed one likely perennial jurisdictional stream (Duck Creek) that has the potential to be impacted by the proposed project. Additionally, two intermittent streams, one ephemeral stream, and three emergent wetlands (Wetlands 1-3) were also found to be likely jurisdictional due to their connections to Duck Creek and have the potential to be impacted by the proposed project. Every effort should be taken to avoid and minimize impacts to these wetland and waterways. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgment based on the guidelines set forth by the USACE.

5.0 ACKNOWLEDGEMENT

This waters determination report 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.

Respectfully,

Kaskaskia Engineering Group, LLC



Brigitte Moneyemaker

Date: 11/9/2023

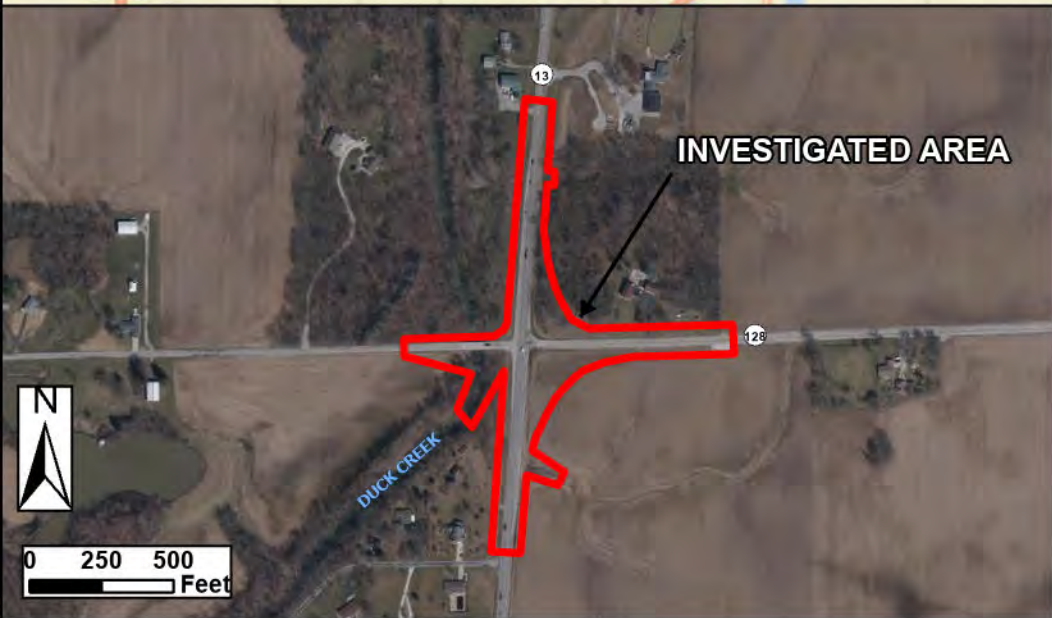



Figure 1
 Site Location Map
 SR 13 and SR 128
 Intersection Improvement
 Hamilton, Madison, and Tipton Counties, Indiana
 Des. No. 2003081

 Investigated Area

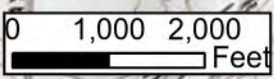
Map Source: Esri and IndianaMAP, 2023



Figure 2
USGS Topographic Frankton Quadrangle
Large Scale Map 1:10,000
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison, and Tipton Counties, Indiana
Des. No. 2003081

 Investigated Area





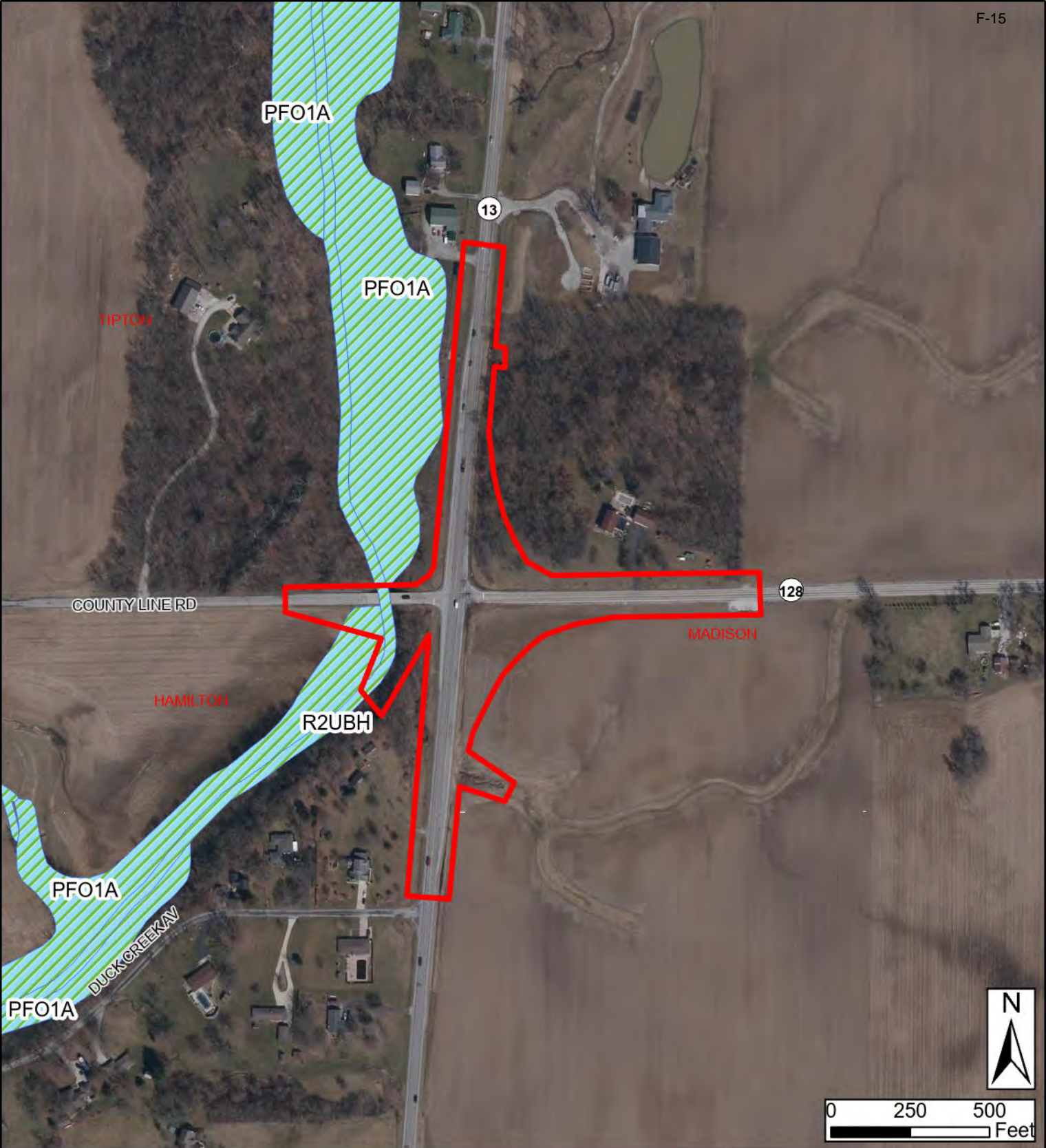


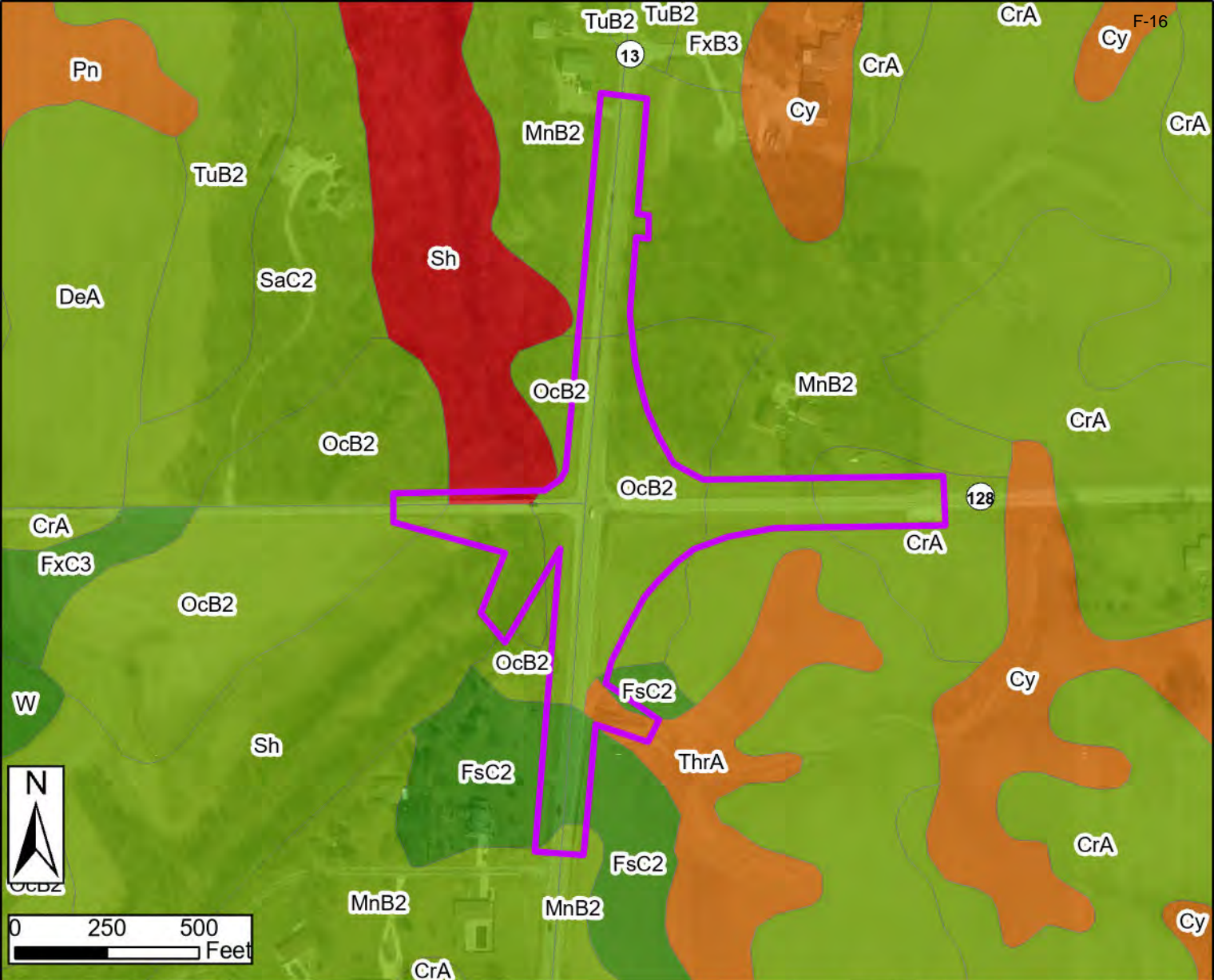


Figure 4
USFWS National Wetland Inventory Map
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison, and Tipton Counties, Indiana
Des. No. 2003081

-  Investigated Area
-  NWI Wetlands





Soil Unit Symbol	Soil Unit	Hydric Rating	Hydric Status
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	2	Predominantly Non-Hydric
FsC2	Fox silt loam, till substratum, 6 to 12 percent slopes, moderately eroded	0	Non-Hydric
MnB2	Miami silt loam, 2 to 6 percent slopes, eroded	6	Predominantly Non-Hydric
OcB2	Ockley silt loam, 2 to 6 percent slopes, eroded	5	Predominantly Non-Hydric
Sh	Sloan silt loam, sandy substratum, occasionally flooded	100	Hydric
ThrA	Treaty silty clay loam, 0 to 1 percent slopes	95	Predominantly Hydric

Figure 5
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison,
and Tipton Counties, Indiana
Des. No. 2003081

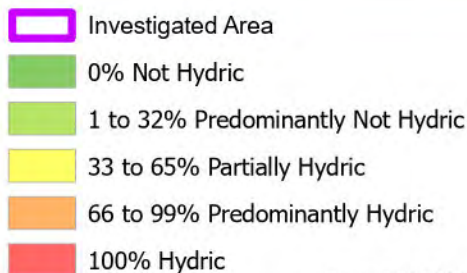
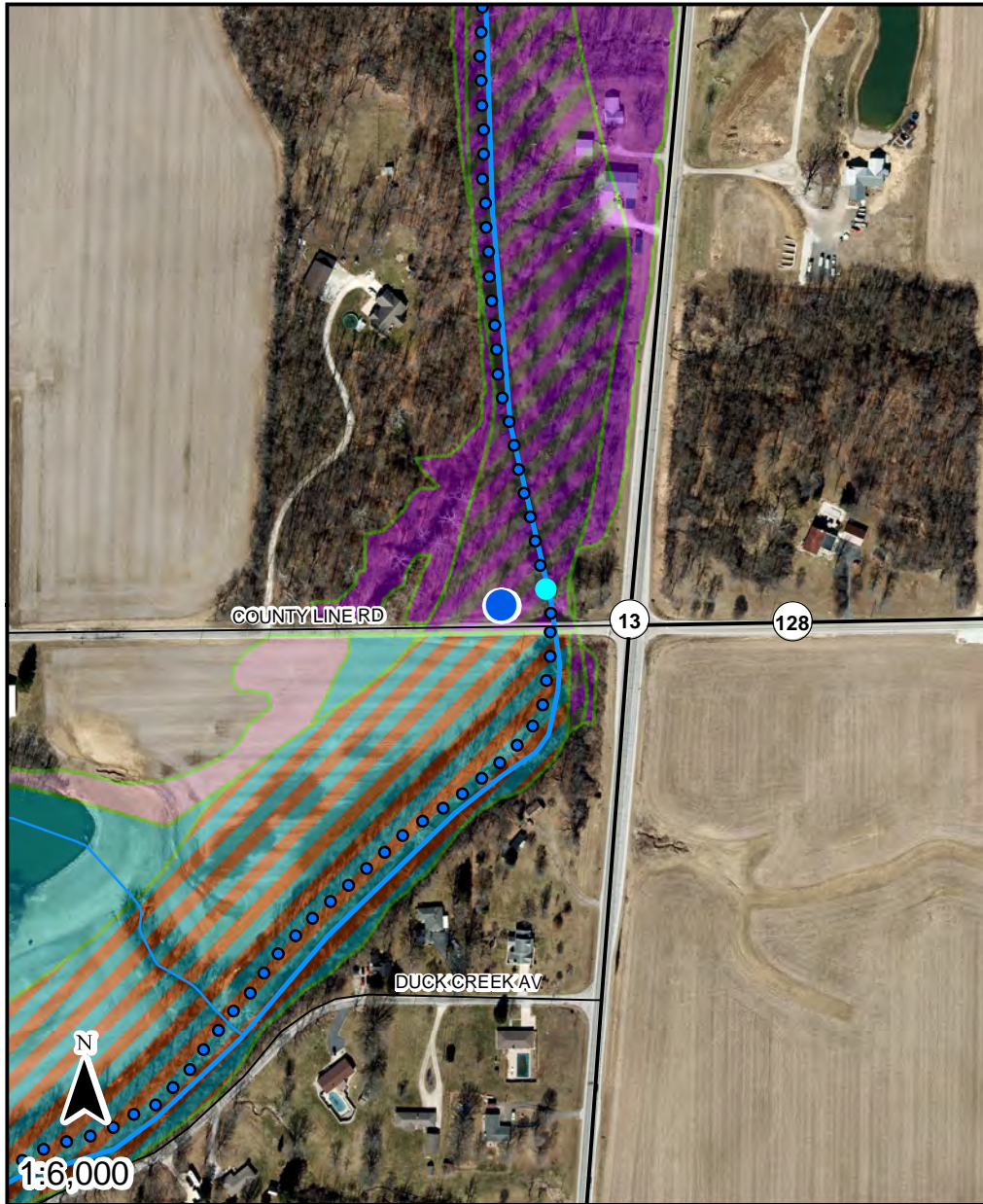




Figure 6
USGS National Hydrography Data Map
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison, and Tipton Counties, Indiana
Des. No. 2003081

- Investigated Area
- Artificial Path
- Connector
- Drainageway
- Stream/River





● Point of Interest

● Base Flood Elevation Point

Flood Elevation Points

● STUDIED STREAM

Rivers and Streams at least 1 square mile

Drainage Area (sq. miles)

— 1 - 10

— 10 - 100

▨ FEMA Zone AE Floodway; FEMA Administrative Floodway

▨ DNR Approximate Floodway

▨ FEMA Zone AE

▨ DNR Approximate Fringe

▨ Additional Floodplain Area; DNR .2 Percent Flood Hazard

Point of Interest Coordinates
(WGS84)

Long: **-85.8628742379**

Lat: **40.2190738882**

The information provided below is based on the point of interest shown in the map above.

County: **Tipton**

Approximate Ground Elevation: **822.2 feet (NAVD88)**

Stream Name:

Base Flood Elevation: **824.0 feet (NAVD88)**

Big Duck Creek

Drainage Area: **Not available**

Best Available Flood Hazard Zone: **DNR Approximate Floodway**

National Flood Hazard Zone: **Not Mapped**

Is a Flood Control Act permit from the DNR needed for this location? **yes**

Is a local floodplain permit needed for this location? **yes-**

Floodplain Administrator: **Steve Niblick, Floodplain Administrator**

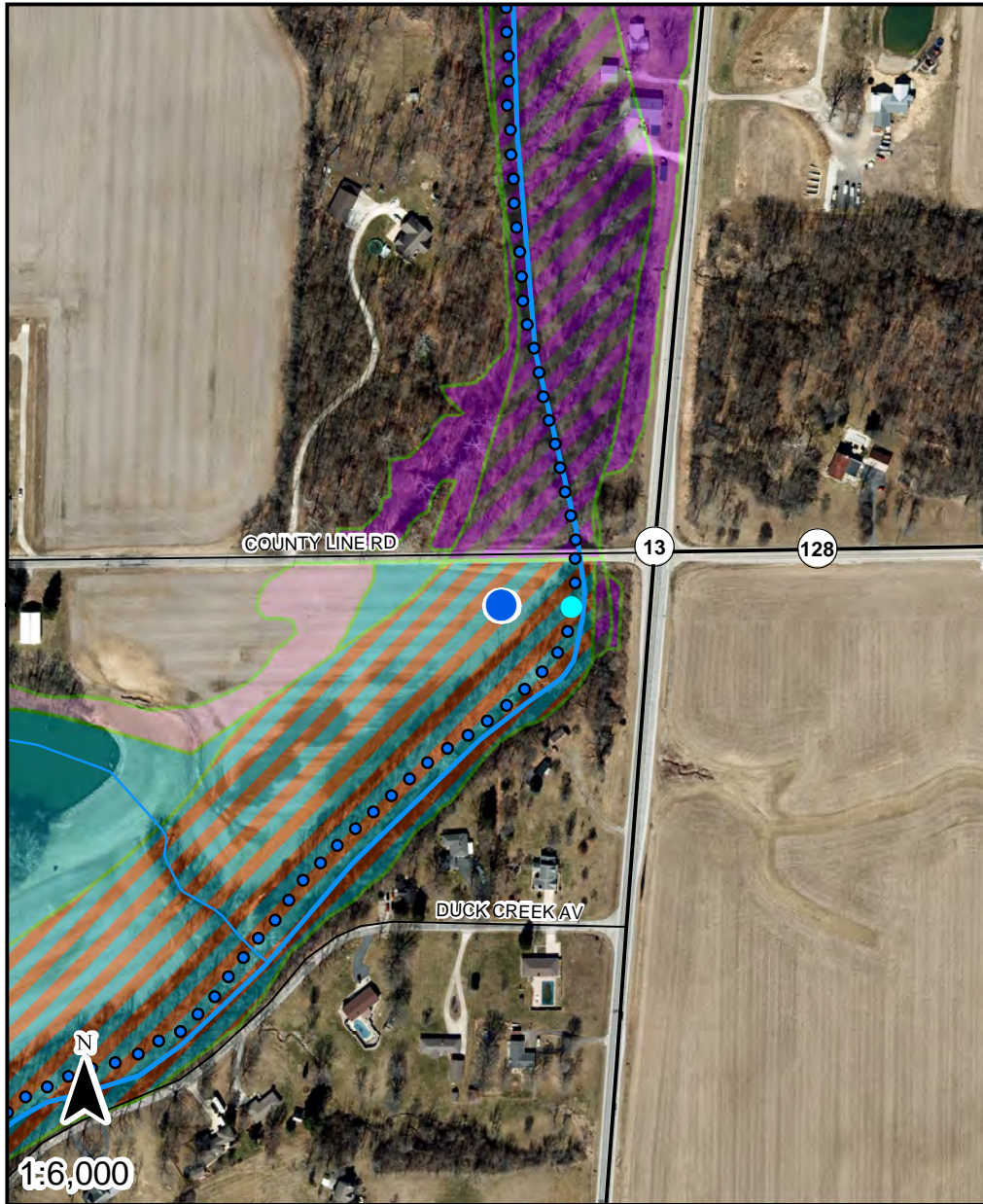
Community Jurisdiction: **Tipton County, County proper**

Phone: **(765) 675-6063**

Email: **sniblick@tiptoncounty.in.gov**

US Army Corps of Engineers District: **Louisville**

Date Generated: 7/24/2023



● Point of Interest

● Base Flood Elevation Point

Flood Elevation Points

● STUDIED STREAM

Rivers and Streams at least 1 square mile

Drainage Area (sq. miles)

— 1 - 10

— 10 - 100

▨ FEMA Zone AE Floodway; FEMA
Administrative Floodway

▨ DNR Approximate Floodway

■ FEMA Zone AE

■ DNR Approximate Fringe

■ Additional Floodplain Area; DNR .2
Percent Flood Hazard

Point of Interest Coordinates
(WGS84)

Long: **-85.8630566281**

Lat: **40.2186642701**

The information provided below is based on the point of interest shown in the map above.

County: **Hamilton**

Approximate Ground Elevation: **819.7 feet (NAVD88)**

Stream Name:
Duck Creek

Base Flood Elevation: **822.8 feet (NAVD88)**

Drainage Area: **Not available**

Best Available Flood Hazard Zone: **FEMA Zone AE Floodway**

National Flood Hazard Zone: **FEMA Zone AE Floodway**

Is a Flood Control Act permit from the DNR needed for this location? **yes**

Is a local floodplain permit needed for this location? **yes-**

Floodplain Administrator: **CJ Taylor, Plan Commission Director**

Community Jurisdiction: **Hamilton County, ETJ**

Phone: **(317) 776-8490**

Email: **CJ.Taylor@hamiltoncounty.in.gov**

US Army Corps of Engineers District: **Louisville**

Date Generated: 7/24/2023

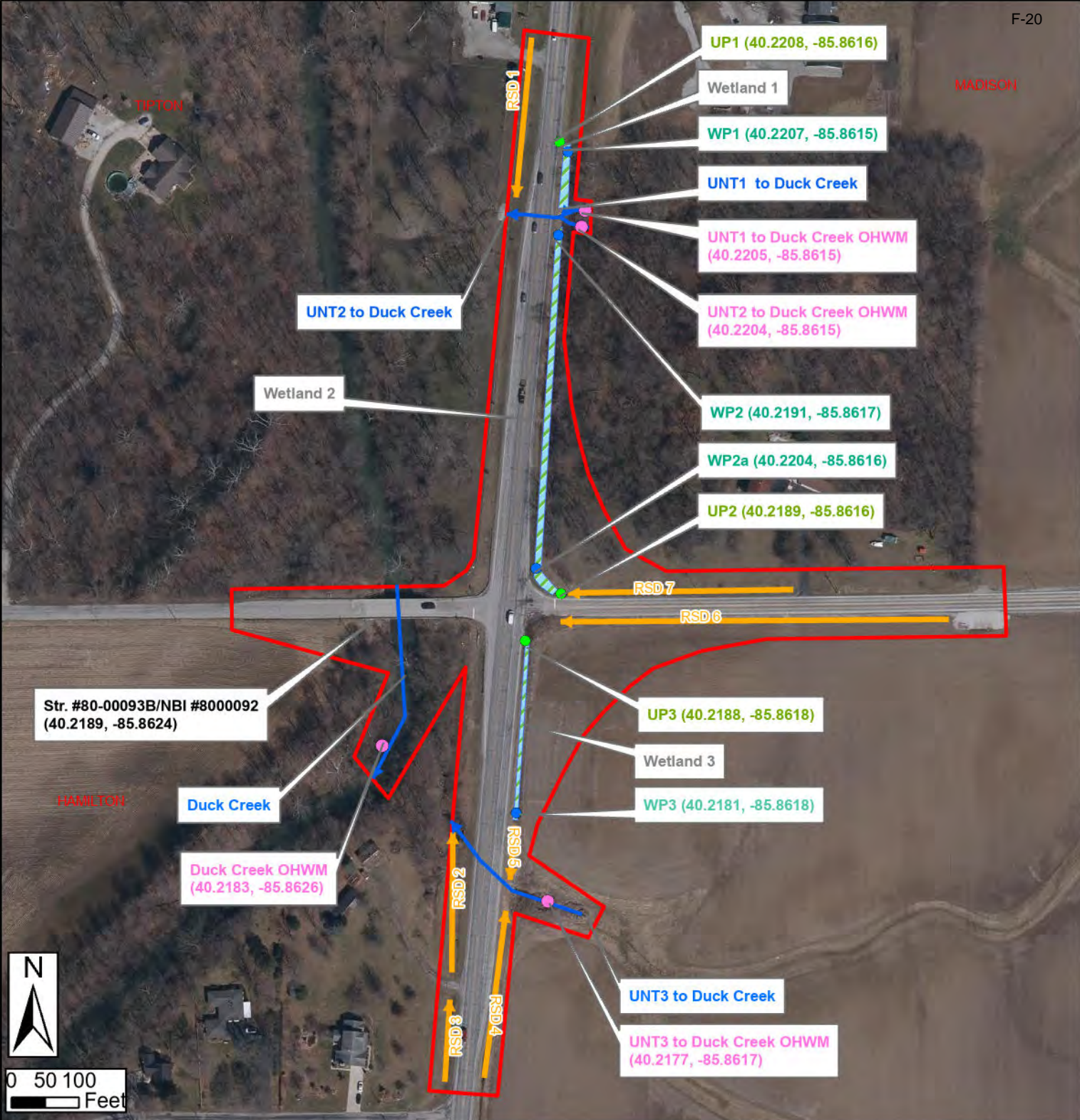


Figure 8 Water Resources
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison,
and Tipton Counties, Indiana
Des. No. 2003081

- Investigated Area
- Wetland
- Ordinary High Water Mark
- Wetland Point
- Upland Point
- Non-Wetland Point
- Ditch
- Stream



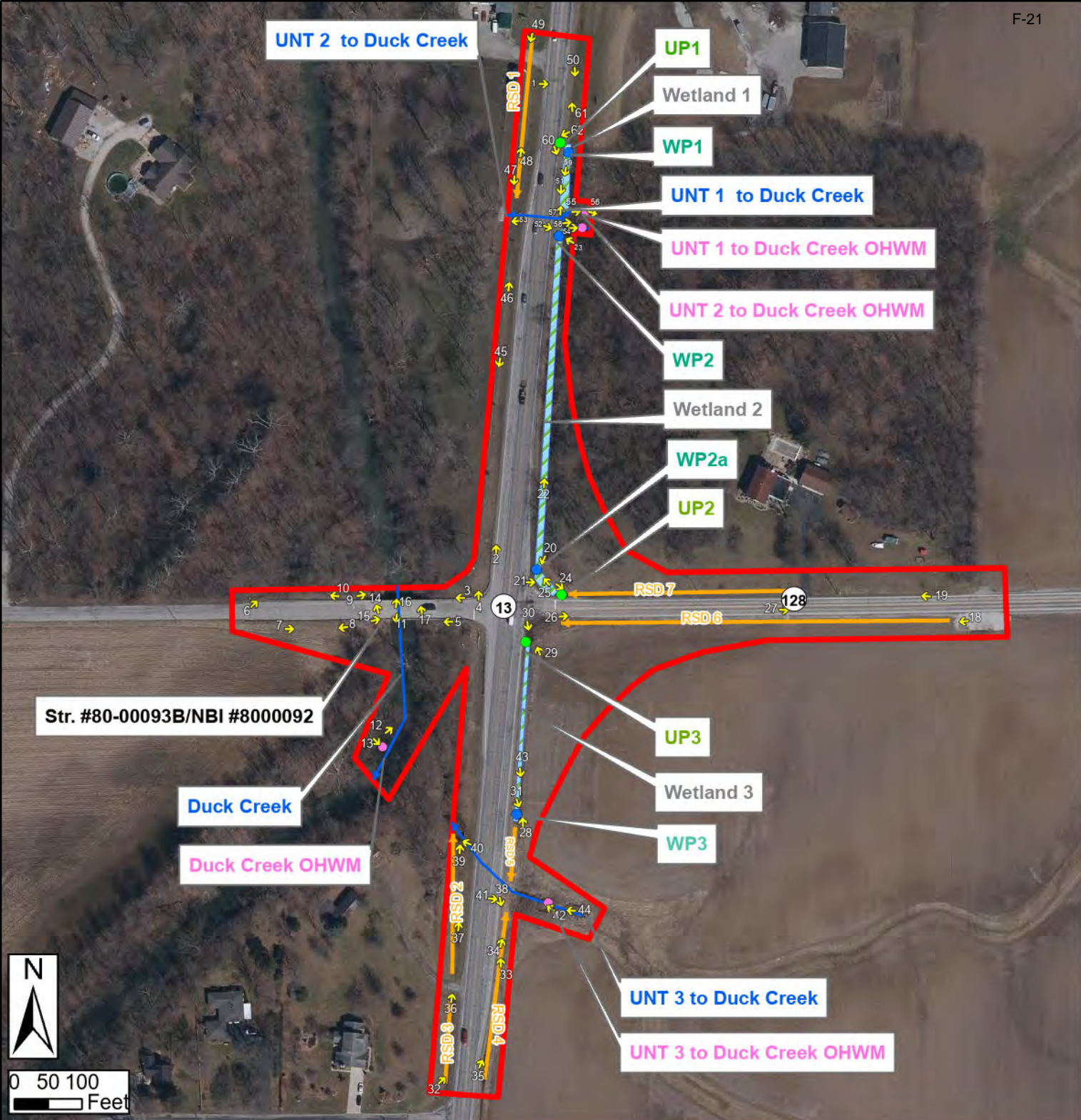
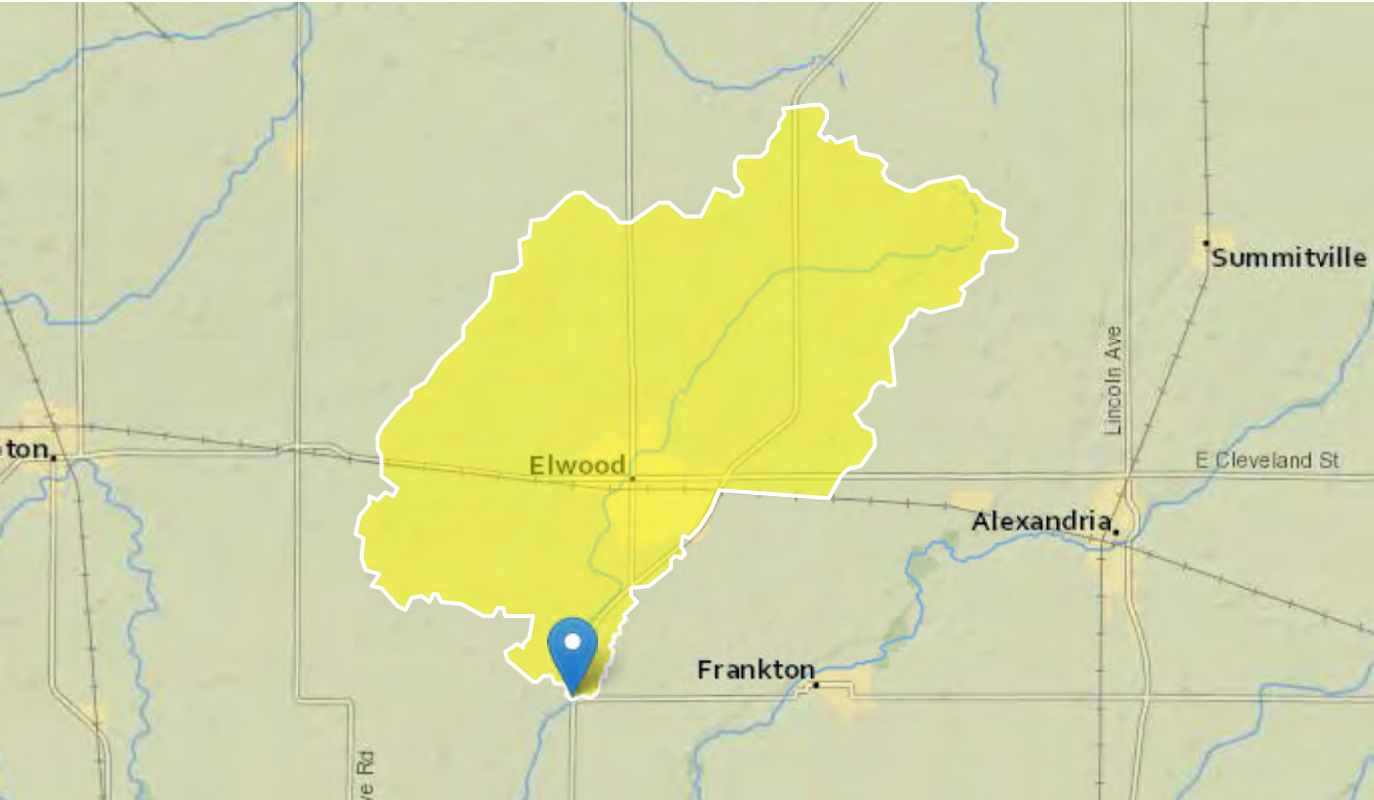


Figure 10 Photo Map
SR 13 and SR 128
Intersection Improvement
Hamilton, Madison,
and Tipton Counties, Indiana
Des. No. 2003081

- Investigated Area
- Wetland
- Ordinary High Water Mark
- Wetland Point
- Upland Point
- Ditch
- Stream
- ↑ Photo Direction

Figure 9. Duck Creek StreamStats Report

Region ID: IN
Workspace ID: IN20230724193306713000
Clicked Point (Latitude, Longitude): 40.21896, -85.86270
Time: 2023-07-24 14:33:59 -0500



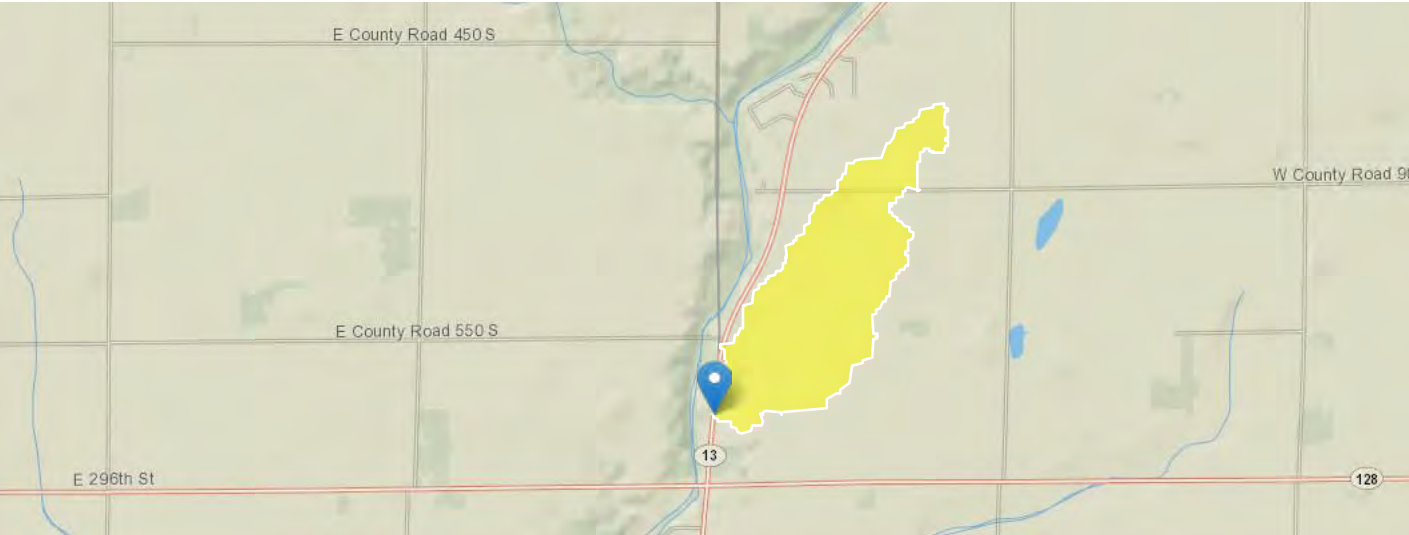
+ Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BFREGNO	BFREGNO	1566	dimensionless
BSLDEM10M	Mean basin slope computed from 10 m DEM	0.92	percent
CONTDA	Area that contributes flow to a point on a stream	61.93	square miles

Figure 9.2 UNT 1 and UNT 2 to Duck Creek StreamStats Report

Region ID: IN
Workspace ID: IN20230911171004905000
Clicked Point (Latitude, Longitude): 40.22239, -85.86150
Time: 2023-09-11 12:11:17 -0500



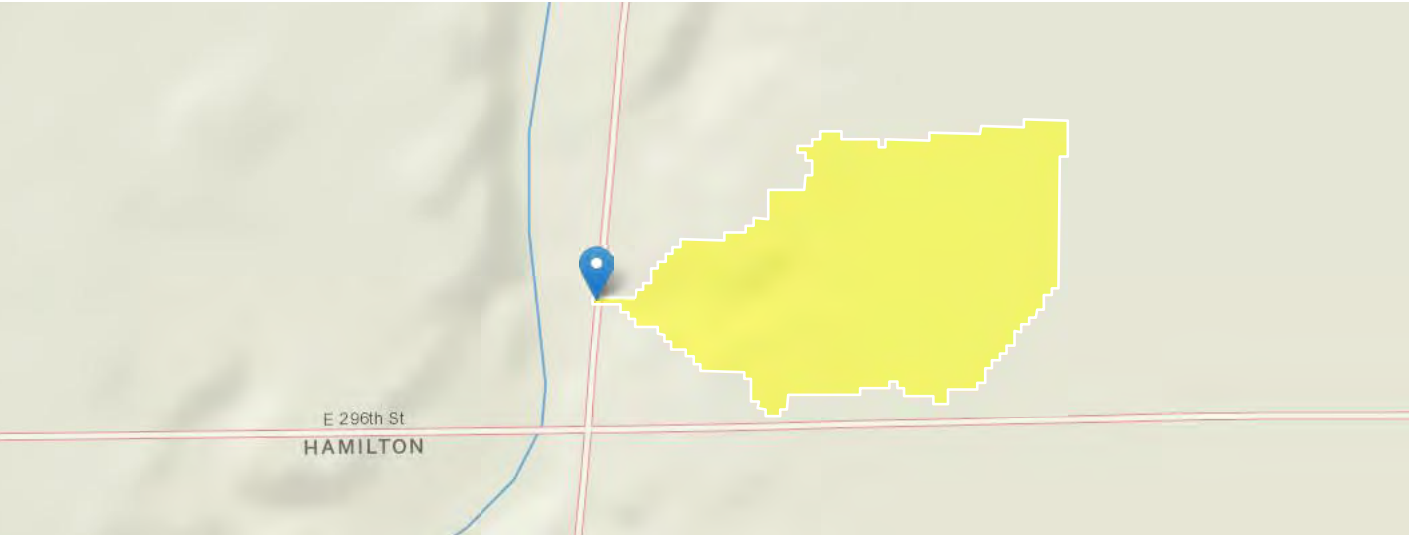
+ Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BFREGNO	BFREGNO	1566	dimensionless
BSLDEM10M	Mean basin slope computed from 10 m DEM	1.4	percent
CONTDA	Area that contributes flow to a point on a stream	0.366	square miles
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	25.5	feet per mi
DRNAREA	Area that drains to a point on a stream	0.366	square miles
DUREG	Flow-Duration Hydrologic Region code	1891	dimensionless
HIGHREG	HIGHREG	1008	dimensionless
INSINKHOLE	Percent Sinkhole drainage area per basin from Indiana Geological Survey.	0	percent
INSINKING	Percent Sinking stream drainage area from Indiana Geological Survey.	0	percent
K1INDNR	Average hydraulic conductivity (ft/d) for the top 70 ft of unconsolidated deposits from InDNR well database.	19	ft per day
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	21	ft per day
LAT_CENT	Latitude of Basin Centroid	40.228632	decimal degrees
LAT_OUT	Latitude of Basin Outlet	40.222414	degrees
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	0.8	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	1.74	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	0.12	percent
LOWREG	Low Flow Region Number	1729	dimensionless
PERMBXTHK	An index of the permeability of surficial Quaternary sediments (including fraction exposed bedrock) multiplied by their thickness. See SIR 2014-5177 page 3 for details.	135.8	dimensionless
PRDEC FEB00	Basin average mean precipitation for December to February from PRISM 1971-2000	2.42	inches

Figure 9.3 UNT 3 to Duck Creek StreamStats Report

Region ID: IN
Workspace ID: IN20230911170346751000
Clicked Point (Latitude, Longitude): 40.22054, -85.86176
Time: 2023-09-11 12:05:00 -0500



+ Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BFREGNO	BFREGNO	1566	dimensionless
BSLDEM10M	Mean basin slope computed from 10 m DEM	1.5	percent
CONTDA	Area that contributes flow to a point on a stream	0.062	square miles
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	52.8	feet per mi
DRNAREA	Area that drains to a point on a stream	0.062	square miles
DURREG	Flow-Duration Hydrologic Region code	1891	dimensionless
HIGHREG	HIGHREG	1008	dimensionless
INSINKHOLE	Percent Sinkhole drainage area per basin from Indiana Geological Survey.	0	percent
INSINKING	Percent Sinking stream drainage area from Indiana Geological Survey.	0	percent
K1INDNR	Average hydraulic conductivity (ft/d) for the top 70 ft of unconsolidated deposits from InDNR well database.	19	ft per day
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	27	ft per day
LAT_CENT	Latitude of Basin Centroid	40.220924	decimal degrees
LAT_OUT	Latitude of Basin Outlet	40.220525	degrees
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	6.7	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	1.12	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	0.0518	percent
LOWREG	Low Flow Region Number	1729	dimensionless
PERMBXTHK	An index of the permeability of surficial Quaternary sediments (including fraction exposed bedrock) multiplied by their thickness. See SIR 2014-5177 page 3 for details.	150	dimensionless
PRDEC FEB00	Basin average mean precipitation for December to February from PRISM 1971-2000	2.42	inches

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21-1155.03 2003081 SR 13 & SR 128 RAB City/County: Madison County, IN Sampling Date: 2023-08-09
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: WP1
 Investigator(s): Brigitte Moneymaker and April Arroyo-Monroe Section, Township, Range: S-33, T-21 N, R-6 E
 Landform (hillslope, terrace, etc.): ditch Local relief (concave, convex, none): concave
 Slope (%): 0 Lat: 40.22078 Long: -85.86159 Datum: WGS 84
 Soil Map Unit Name: Miami silt loam, MnB2 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>50</u> (A) <u>110</u> (B) Prevalence Index = B/A = <u>2.2</u>
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: _____) 1. <u>Phalaris arundinacea</u> <u>40</u> <u>Y</u> <u>FACW</u> 2. <u>Hordeum jubatum</u> <u>10</u> <u>N</u> <u>FAC</u> 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ = Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
Photo #60				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	100					Clay Loam	
6-12	10YR 4/1	50	7.5YR 5/8	40	C	M	Clay Loam	
6-12	10YR 3/1	10						
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 2 cm Muck (A10)	<input checked="" type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Type: _____ Depth (inches): _____	

Remarks:

We could not dig past 12 inches anywhere within the suspected wetland boundary due to compacted soil and rocks/gravel in the profile.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21-1155.03 2003081 SR 13 & SR 128 RAB City/County: Madison County, IN Sampling Date: 2023-08-09
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: UP1
 Investigator(s): Brigitte Moneyemaker and April Arroyo-Monroe Section, Township, Range: S-33, T-21 N, R-6 E
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex
 Slope (%): 3 Lat: 40.22082 Long: -85.86163 Datum: WGS 84
 Soil Map Unit Name: Miami silt loam, (MnB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>40</u> x 4 = <u>160</u> UPL species <u>80</u> x 5 = <u>250</u> Column Totals: <u> </u> (A) <u>250</u> (B) Prevalence Index = B/A = <u>3.125</u>
Sapling/Shrub Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover				
Herb Stratum (Plot size: <u> </u>) 1. <u>Cirsium arvense</u> <u>30</u> <u>Y</u> <u>FACU</u> 2. <u>Phalaris arundinacea</u> <u>30</u> <u>Y</u> <u>FACW</u> 3. <u>Toxicodendron radicans</u> <u>10</u> <u>N</u> <u>FAC</u> 4. <u>Ambrosia artemisiifolia</u> <u>10</u> <u>N</u> <u>FACU</u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> <u>80</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
Photo 62				

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21-1155.03 2003081 SR 13 & SR 128 RAB City/County: Madison County, IN Sampling Date: 2023-08-09
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: WP2
 Investigator(s): Brigitte Moneymaker and April Arroyo-Monroe Section, Township, Range: S-33, T-21 N, R-6 E
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave
 Slope (%): 0% Lat: 40.21909 Long: -85.86175 Datum: WGS 84
 Soil Map Unit Name: Ockley Silt Loam (OcB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>40</u> (A) <u>100</u> (B) Prevalence Index = B/A = <u>2.5</u>
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5 ft r</u>)				
1. <u>Alopecurus pratensis</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Hordeum jubatum</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
3. <u>Rumex crispus</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
Photo #20				

SOILSampling Point: WP2**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	2.5YR 8/1	20	7.5YR 5/8	19	C	M	Silty Clay	
0-8	2.5YR 3/2	60	2.5YR 3/6	1	C	M		
8-12	2.5YR 3/2	100	7.5YR 5/8				Silty Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____**Remarks:**

We could not dig past 12 inches anywhere within the suspected wetland boundary due to compacted soil and rocks/gravel in the profile

HYDROLOGY**Wetland Hydrology Indicators:**Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes _____ No ☒ Depth (inches): _____Water Table Present? Yes _____ No ☒ Depth (inches): _____Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21-1155.03 2003081 SR 13 & SR 128 RAB City/County: Madison County, IN Sampling Date: 2023-08-09
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: WP2a
 Investigator(s): Brigitte Moneymaker and April Arroyo Monroe Section, Township, Range: S-33, T-21 N, R-6 E
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave
 Slope (%): 0% Lat: 40.22044 Long: -85.86164 Datum: WGS 84
 Soil Map Unit Name: Miami Silt Loam (MnB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u>50</u> x 2 = <u>100</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>50</u> (A) <u>100</u> (B) Prevalence Index = B/A = <u>2</u>
Sapling/Shrub Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover				
Herb Stratum (Plot size: <u> </u>) 1. <u>Alopecurus pratensis</u> <u>30</u> <u>Y</u> <u>FACW</u> 2. <u>Phalaris arundinacea</u> <u>20</u> <u>Y</u> <u>FACW</u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> <u>50</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
Photo #23				

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21-1155.03 2003081 SR 13 & SR 128 RAB City/County: Madison County, IN Sampling Date: 2023-08-09
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: UP2
 Investigator(s): Brigitte Moneymaker and April Arroyo-Monroe Section, Township, Range: S-33, T-21 N, R-6 E
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex
 Slope (%): 5 Lat: 40.21905 Long: --85.86164 Datum: WGS 84
 Soil Map Unit Name: Ockley silt loam NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
1. <u>Ailanthus altissima</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>510</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.25</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>120</u> (A)	<u>510</u> (B)	Prevalence Index = B/A = <u>4.25</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>90</u>	x 4 = <u>360</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>120</u> (A)	<u>510</u> (B)																			
Prevalence Index = B/A = <u>4.25</u>																				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u> </u>)																				
1. <u>Ambrosia artemisiifolia</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Solidago canadensis</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>																	
3. <u>Lonicera mackii</u>	<u>30</u>	<u>Y</u>	<u>UPL</u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum (Plot size: <u>30 ft r</u>)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: (Include photo numbers here or on a separate sheet.) Photo #24																
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	

SOILSampling Point: UP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10Y 4/2	100					silty clay loam	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:

We could not dig past 12 inches anywhere near the suspected upland boundary due to compacted soil and rocks/gravel in the profile

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21-1155.03 2003081 SR 13 & SR 128 RAB City/County: Madison County, IN Sampling Date: 2023-08-09
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: WP3
 Investigator(s): Brigitte Moneymaker and April Arroyo-Monroe Section, Township, Range: S-33, T-21 N, R-6E
 Landform (hillslope, terrace, etc.): roadside ditch Local relief (concave, convex, none): concave
 Slope (%): 0 Lat: 40.21809 Long: -85.86187 Datum: WGS 84
 Soil Map Unit Name: Ockley silt loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>1</u></td> <td>x 3 = <u>3</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>81</u></td> <td>(A) <u>163</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.0</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>81</u>	(A) <u>163</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>80</u>	x 2 = <u>160</u>																	
FAC species <u>1</u>	x 3 = <u>3</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>81</u>	(A) <u>163</u> (B)																	
= Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
= Total Cover																		
Herb Stratum (Plot size: _____)																		
1. <u>Alopecurus pratensis</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Rumex crispus</u>	<u>1</u>	<u>N</u>	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
81% = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
= Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
Photo #29																		

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21-1155.03 2003081 SR 13 & SR 128 RAB City/County: Madison County, IN Sampling Date: 2023-08-09
 Applicant/Owner: Indiana Dept. of Transportation State: IN Sampling Point: UP3
 Investigator(s): Brigitte Moneymaker and April Arroyo-Monroe Section, Township, Range: S-33, T-21 N, R-6 E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 0 Lat: 40.21881 Long: -85.86181 Datum: WGS 84
 Soil Map Unit Name: Ockley silt loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u>80</u> x 2 = <u>160</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>80</u> (A) <u>160</u> (B) Prevalence Index = B/A = <u>2</u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Alopecurus pratensis</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
Photo #31				

SOILSampling Point: UP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 3/2	99	7.5YR 5/8	1	C	M	Silty Clay	
8-12	10YR 2/1	100					Silty clay	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Redox Depressions (F8)
	<input type="checkbox"/> Coast Prairie Redox (A16)
	<input type="checkbox"/> Dark Surface (S7)
	<input type="checkbox"/> Iron-Manganese Masses (F12)
	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Type: _____	
Depth (inches): _____	

Remarks:

We could not dig past 12 inches anywhere near the suspected wetland boundary due to compacted soil and rocks/gravel in the profile

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



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

March 6, 2024

Regulatory Division
 North Branch
 ID No. LRL-2024-102-dds

Mr. Aidan Geissler
 Indiana Department of Transportation
 100 North Senate Avenue, Room N642
 Indianapolis, IN 46204

Dear Mr. Geissler:

This is in regard to the wetland delineation dated February 27, 2024, and your electronic mail message of January 30, 2024, requesting an approved jurisdictional determination at the SR 13 and SR 128 intersection in Hamilton, Tipton, and Madison Counties, Indiana (Des. No. 2003081). The proposed project is located at Latitude 40.21892°N, Longitude 85.86193°W. A location map is enclosed.

The U.S. Army Corps of Engineers exercises regulatory authority under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) for certain activities in "waters of the United States (U.S.)." These waters include all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce.

Based on our review of the submitted information, we have determined that RSDs 1 through 7, Wetlands 1 through 3, and UNT 3 Duck Creek are not "waters of the U.S." and are not regulated under Section 404 of the Clean Water Act.

However, this determination does not relieve you of the responsibility to comply with applicable State law. We urge you to contact the Indiana Department of Environmental Management (IDEM), Office of Water Quality at wetlandsprogram@idem.in.gov to determine the applicability of State law to the excluded waters mentioned above.

This letter contains an approved jurisdictional determination (JD) for your site. If you object to this JD, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this JD you must submit a completed RFA form to the Lakes and Rivers Division Office at address listed on the enclosed NAP RFA form.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **May 5, 2024**. It is not necessary to submit an RFA form to the Division office if you do not object to the JD in this letter.

This jurisdictional determination is valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date. Our comments on this project are limited to only those effects which may fall within our area of jurisdiction and thus does not obviate the need to obtain other permits from state or local agencies. Lack of comments on other environmental aspects should not be construed as either concurrence or nonconcurrence with stated environmental effects.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center prior to starting work.

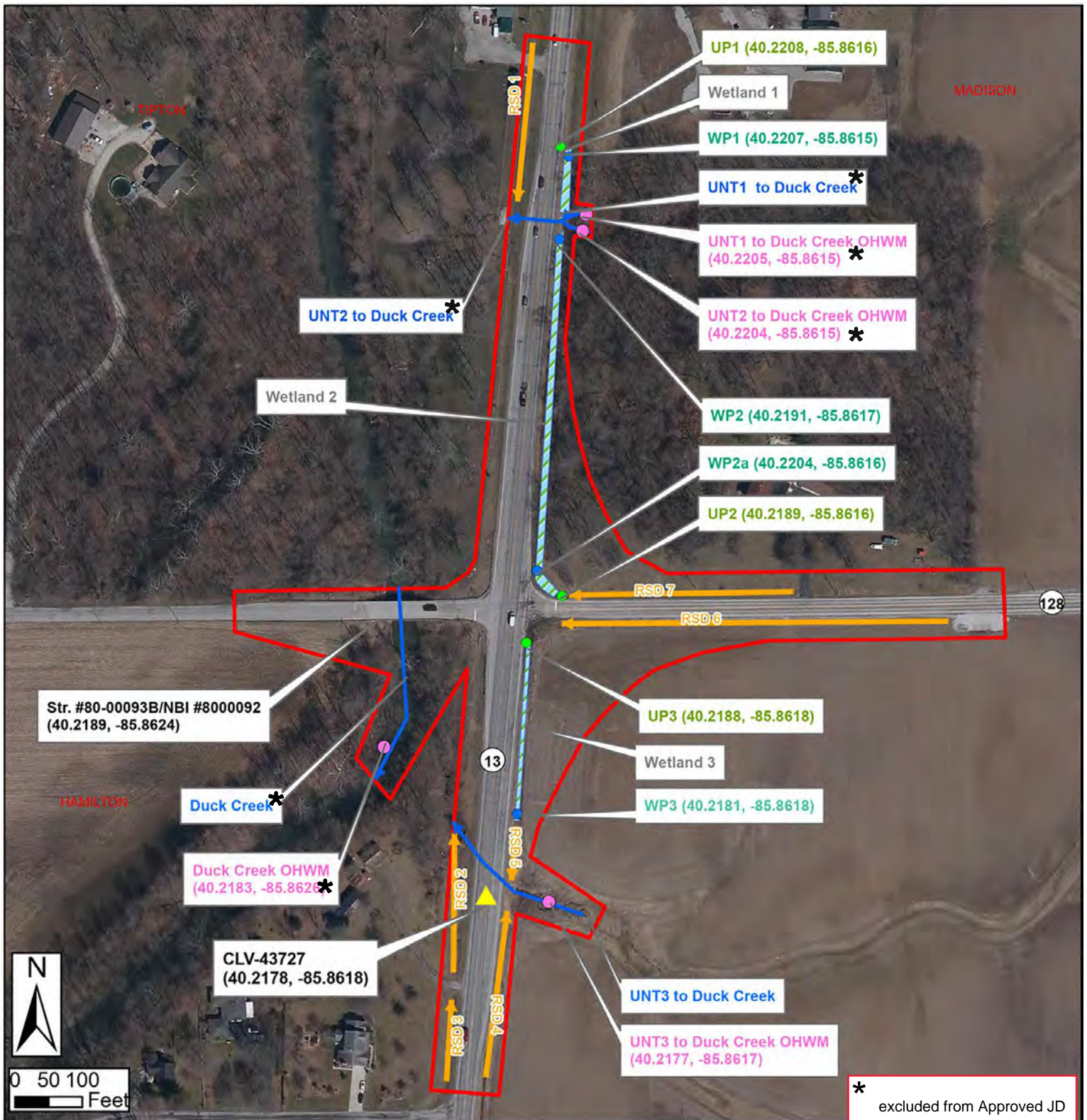
If we can be of any further assistance, please contact me by writing to the above address or calling (317)448-2251. Any correspondence should reference our assigned Identification Number LRL-2024-102-dds.

Sincerely,

Deborah Duda Snyder
Project Manager
Indianapolis Regulatory Office

Enclosure

Copy Furnished: IDEM (Wrin)



LRL-2024-102
 Approved JD
 SR 13 and SR 128 Intersection
 Hamilton, Madison,
 and Tipton Counties
 6 March 2024
 Page 1 of 1

- Investigated Area
- Wetland
- Ordinary High Water Mark
- Wetland Point
- Upland Point
- Non-Wetland Point
- Ditch
- Stream
- ▲ Culvert Location



From: [Wrin, Graham C](#)
To: [Geissler, Aidan](#)
Cc: [Curry, Jennifer](#)
Subject: Re: Wetland Classification Request -- DES 2003081
Date: Friday, March 22, 2024 2:31:50 PM
Attachments: [Outlook-prdlnuwy.png](#)
[Outlook-0m5rz4oo.png](#)
[Outlook-swdanulo.png](#)
[Outlook-kvisti2r.png](#)
[Outlook-0m14uqk0.png](#)
[Outlook-zzxgdr1f.png](#)

Hell Aidan,

Wetland 2 is a Class I wetland and is exempt from regulation under IC 13-18-22.

Wetlands 1 and 3 are Class II wetlands and are available for exemption under IC 13-11-2-74.5(6), you can selected one of these wetlands for exemption.

Thanks,



Graham Wrin, Wetland Project Manager

Wetlands Section, Office of Water Quality

100 North Senate Avenue, Room 1255

Indianapolis Indiana 46204

Phone: (317) 605-4105

Fax: (317) 234-4145

GCWrin@idem.IN.gov

Section 401 Water Quality Certification and Isolated Wetlands Program: <http://www.in.gov/idem/wetlands>

Stormwater Program: <http://www.in.gov/idem/stormwater>

Indiana Stormwater Quality Manual: <http://www.in.gov/idem/stormwater/2363.htm>

Indiana Department of Environmental Management



IDEM values your feedback.

Please take two minutes and complete this brief survey.



APPENDIX G

Public Involvement

Sample

Re: Designation Number: 2003082, SR 13 at Strawtown Avenue Intersection Improvement Project, Madison, Hamilton, and Tipton counties, Indiana

Notice of Entry for Survey or Investigation

May 1, 2023

Dear Property Owner,

Our information indicates that you own/or reside at a property near a proposed transportation project located at the intersection of State Road (SR) 13 and Strawtown Avenue (8th Street Road), within Madison and Hamilton counties, near Strawtown and Lapel, Indiana. Representatives of the Indiana Department of Transportation will be conducting environmental surveys of the project area in the near future. These studies will evaluate the roadway as well as the surrounding area near the intersection. It may be necessary for them to enter onto your property to complete this work. This is permitted under Indiana Code § 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself to you, if you are available, before they enter your property. If you no longer own this property or it is currently occupied by someone else, please let us know the name of the new owner or occupant so that we can contact them about the survey.

Please read the attached notice to inform you of what the “Notice of Entry for Survey or Investigation” means. The survey work may include the identification and mapping of wetlands, measuring and identification of trees and/or vegetation, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites), and various other environmental studies. Any excavation work conducted as part of this project will involve hand tools only. Excavations will be backfilled upon completion. The information we obtain from such studies is necessary for the proper planning and design of this highway project.

Staff performing this work will retain a copy of this letter and will attempt to identify themselves to the occupant before they enter the property. We anticipate these field investigations will occur starting May 2023 (weather dependent).

If any problems do occur, please communicate with the field crew or INDOT Project Manager, Kim Szewczak, at 317-289-3193, email: kszewczak@indot.in.gov or Consultant Project Manager, Tom Heustis at 317-643-4047, email: Heustis.Tom@kimley-horn.com.

Please be aware that you have the right to request any or all archaeological artifacts collected from your property. If you do not ask that artifacts be returned to you, all recovered archaeological material will be curated at a state-approved Qualified Curation Facility. If you wish to have artifacts returned to you, please call or email Matt Coon at mcoon@indot.in.gov or 317-697-6752.

It is our sincere desire to cause as little inconvenience as possible during this survey, and we thank you in advance for your cooperation.

Sincerely,
Bill Curtis, PE
Project Manager - Highway
Michael Baker International, Inc.

Attachments: Omitted

- Notice of Survey
- Indiana Code

S.R. 13 Roundabouts - Public Information Meeting
August 17, 2023
LaPel High School

[illegible]



S.R. 13 Roundabouts

To improve safety and maintain mobility
at two intersections
in Hamilton, Madison and Tipton counties

The Indiana Department of Transportation (INDOT) is seeking public input on the proposed construction of two roundabouts on State Road (S.R.) 13:

1. **S.R. 13/37 and S.R. 128/East 296th Street near Elwood (Des. No. 2003081)**
2. **S.R. 13 and Strawtown Avenue/West 8th Street near Perkinsville (Des. No. 2003082)**

Safety: Low-cost improvements at these intersections have not reduced crash frequency and severity. Reasons for the higher-than-normal number of crashes and injuries include:

- **Limited sight distance for local cross traffic**
- **High traffic speeds on S.R. 13**

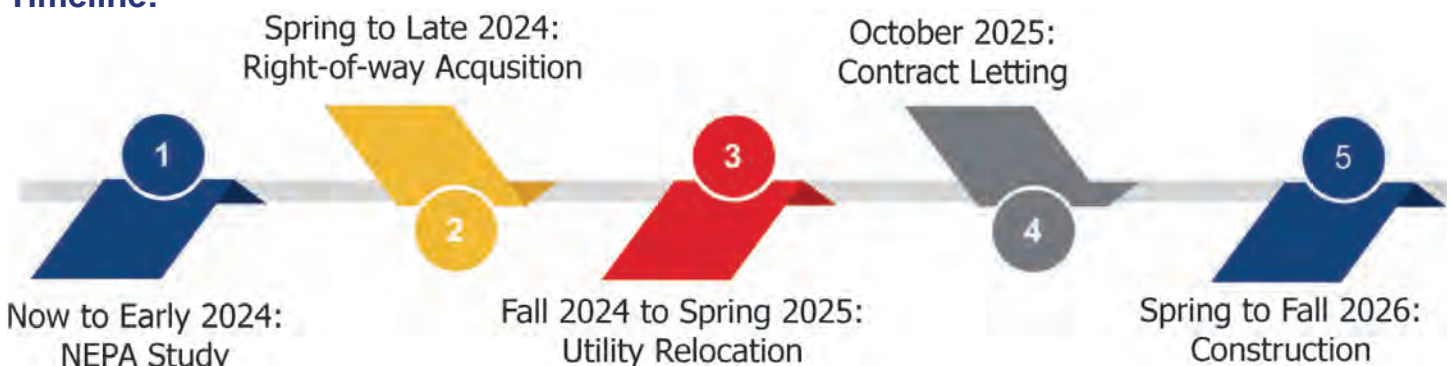
Cost: The existing two-way stop intersections would be converted to single-lane roundabouts at an estimated cost of \$3 to \$4 million per intersection. See the second page for more information about the specific intersections.

Project status: The project is in the early stages of development. The project team will assess potential impacts the project will have on the human and natural environments.

Contact INDOT:

- 855-INDOT4U (1-855-463-6848)
- www.indot4u.com
- indot@indot.in.gov

Timeline:



S.R. 13/37 and S.R. 128/E. 296th St. near Elwood



Location: State Road 13 is also S.R. 37 at this intersection where the Hamilton, Madison and Tipton county lines intersect.

Safety: There were 18 crashes at this intersection over a three-year period, including 7 injury crashes.

Nearby bridge: Roundabout construction would shift the intersection to avoid impacting a bridge 100 feet west of the intersection.

Construction traffic: North-south traffic on S.R. 13/37 is expected to be maintained with short-term closures. The east and west approaches may be closed for the majority of construction.

S.R. 13 and Strawtown Ave./W. 8th St. near Perkinsville

Location: This intersection is just south of the White River bridge on the Hamilton-Madison county line.

Construction traffic: Temporary closures, in phases, of each approach to the intersection are being considered.

Safety: There were 22 crashes at this intersection over a three-year period, including 8 injury crashes. A hill on the south side of the intersection limits sight distance for cross-traffic.



855-INDOT4U
(1-855-463-6848)



www.indot4u.com



indot@indot.in.gov

STATE OF INDIANA }

COUNTY OF HAMILTON } SS.
}

Public Notice: DES #s 2003081 and 2003082

Petitioner: INDOT/Compass
Outreach Solutions

AFFIDAVIT OF PUBLICATION

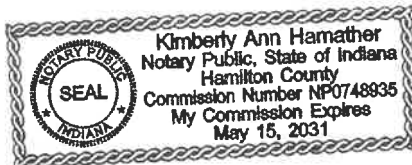
Personally appeared before me, a notary public in and for said county and state, the undersigned, Steve Greenberg who, being duly sworn, says that the Publisher of Current in Fishers and Current in Noblesville newspapers of general circulation printed and published in the English language in the city of Carmel in state and county afore-said, and that the printed matter attached hereto is a true copy, which was duly published in said papers, the date of publication being as follows:

August 15, 2023.

Steve Greenberg

Subscribed and sworn to before me on August 15, 2023.

Kimberly Ann Hamather
Notary Public Signature



Publisher's Fee: \$56.30

**LEGAL NOTICE OF PUBLIC INFORMATION
MEETING FOR INDOT DES #s 2003081 and
2003082**

*S.R. 13 Roundabouts in Hamilton, Madison and
Tipton Counties*

The Indiana Department of Transportation (INDOT) will host a public information meeting to discuss the proposed construction of two roundabouts on State Road (S.R.) 13 in Hamilton, Madison and Tipton counties.

What: INDOT Public Information Meeting

When: Thursday, August 17, 2023

5 to 7 p.m.; presentation at 5:30 p.m.

Where: Lapel High School Auditorium

1850 S 900 W, Lapel, IN 46051

The first roundabout is proposed at the intersection of S.R. 13 and Strawtown Avenue/West 8th Street near Perkinsville. The second roundabout would be located at the intersection of S.R. 13/37 and S.R. 128/East 296th Street near Elwood.

The purpose of the public open house is to give residents an opportunity to learn more about the proposed roundabouts and to provide feedback to the project team. Doors will open at 5 p.m. and the presentation will begin at 5:30 p.m. Project maps and handouts will be available for public review before and after the presentation at an open house session.

The purpose of the project is to improve safety and mobility at both intersections. Existing two-way stop intersections would be converted to single-lane roundabouts at an estimated cost of \$3 to 4 million per intersection.

INDOT is committed to ensuring that all public meetings are accessible to individuals with disabilities. If you require special accommodations to participate in this meeting, please contact Erin Pipkin at erin@compassoutreachsolutions.com or (317) 966-7301 in advance of the meeting.

Daily Reporter

Prescribed by State Board of Accounts

General Form No 99P (Rev. 2009A)

Attn:
Name: Pipkin, Erin /L
Address: 920 Moonlight Court

City/State: Mooresville, IN 46158

Acct # G11218847

Order # 60125200

AIM MEDIA INDIANA
d/b/a DAILY REPORTER
PO BOX 3213
McALLEN, TX 78502-3213
FED I.D. #32-0472774

(Government Unit) County: Hancock

PUBLISHER'S CLAIM

LINE COUNT

Data for computing costs: Number of equivalent lines per column	80
Number of Columns	1
Number of insertions	1

COMPUTATION OF CHARGES

80 lines, 1 column(s) x rate of 0.3739 cents per line

Additional charges for notices containing rule or tabular work
(50 percent surcharge included in rate above)

Charges for extra proofs of publication (\$1.00 for each proof in excess of two included in rate above)

TOTAL AMOUNT OF CLAIM 29.91

Pursuant to the provisions and penalties of IC 5-11-10-1, I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

PUBLISHER'S AFFIDAVIT

I, Sally Clark, Legal Advertising Clerk of the newspaper of general circulation printed and published in the English language in the (city/town) of Greenfield in state and county aforesaid, and that the printed matter attached hereto is a true copy, which publication being as follows:

8/12/2023

Sally Clark

Sally Clark/Legal Advertising Clerk

8/14/2023

Date

Page : 1 of 2 08/14/2023 07:50:56

Order Number : 60125200
 PO Number :
 Customer : G11218847 Pipkin, Erin /L
 Contact :
 Address1 : 920 Moonlight Court
 Address2 :
 City St Zip : Mooresville IN 46158
 Phone : (317) 966-7301
 Fax :
 Credit Card :
 Printed By : Cindy Fillenworth
 Entered By : Dee Berge

Keywords : DES #s 2003081 and 2003082
 Notes :
 Zones :

Ad Number : 50163250
 Ad Key :
 Salesperson : 812 - DR Class 2 - Berge
 Publication : Daily Reporter
 Section : 60 Notices
 Sub Section : 60 Notices
 Category : 6015 Legals
 Dates Run : 08/12/2023-08/12/2023
 Days : 1
 Size : 1 x 7.76, 80 lines
 Words : 261
 Ad Rate : L-Government
 Ad Price : 29.91
 Amount Paid : 0.00
 Amount Due : 29.91

Legal Advertisement
 LEGAL NOTICE OF
 PUBLIC INFORMATION
 MEETING FOR INDOT
 DES #s 2003081 and
 2003082

S.R.13 Roundabouts in
 Hamilton, Madison and
 Tipton Counties

The Indiana Department
 of Transportation
 (INDOT) will host a pub-
 lic information meeting to
 discuss the proposed
 construction of two
 roundabouts on State
 Road (S.R.) 13 in Hamil-
 ton, Madison and Tipton
 counties.

What: INDOT Public Infor-
 mation Meeting

When: Thursday, August
 17, 2023

5 to 7 p.m.; presentation
 at 5:30 p.m.

Where: Lapel High School
 Auditorium
 1850 S 900 W, Lapel, IN
 46051

The first roundabout is
 proposed at the inter-
 section of S.R. 13 and
 Strawtown Avenue/West
 8th Street near Per-
 kinsville. The second
 roundabout would be lo-
 cated at the intersection
 of S.R. 13/37 and S.R.
 128/East 296th Street
 near Elwood.

The purpose of the public
 open house is to give
 residents an opportunity
 to learn more about the
 proposed roundabouts
 and to provide feedback
 to the project team.
 Doors will open at 5 p.m.
 and the presentation will
 begin at 5:30 p.m. Proj-
 ect maps and handouts
 will be available for pub-
 lic review before and af-
 ter the presentation at an
 open house session.

The purpose of the project
 is to improve safety and
 mobility at both intersec-
 tions. Existing two-way
 stop intersections would
 be converted to
 single-lane roundabouts
 at an estimated cost of
 \$3 to 4 million per inter-
 section.

Order Number : 60125200
PO Number :
Customer : G11218847 Pipkin, Erin /L
Contact :
Address1 : 920 Moonlight Court
Address2 :
City St Zip : Mooresville IN 46158
Phone : (317) 966-7301
Fax :
Credit Card :
Printed By : Cindy Fillenworth
Entered By : Dee Berge

Keywords : DES #s 2003081 and 2003082
Notes :
Zones :

Ad Number : 50163250
Ad Key :
Salesperson : 812 - DR Class 2 - Berge
Publication : Daily Reporter
Section : 60 Notices
Sub Section : 60 Notices
Category : 6015 Legals
Dates Run : 08/12/2023-08/12/2023
Days : 1
Size : 1 x 7.76, 80 lines
Words : 261
Ad Rate : L-Government
Ad Price : 29.91
Amount Paid : 0.00
Amount Due : 29.91

INDOT is committed to ensuring that all public meetings are accessible to individuals with disabilities. If you require special accommodations to participate in this meeting, please contact Erin Pipkin at erin@compassoutreachsolutions.com or (317) 966-7301 in advance of the meeting.
60125200 hspaxlp
DR 8/12/23

General Form No. 99P (Revised 20

Tax I.D. 82-2664009

To: Anderson Herald Bulletin
P.O. Box 1090, Anderson, IndIndiana Department of Transportation (INDOT) Lapel High School
(Governmental Unit)
Madison County, Indiana

PUBLISHER'S CLAIM

HB- 590

Ad # 1842845

LINE COUNT

Display Master (Must not exceed two actual lines, neither of which shall total more than four solid lines of the type in which the body of the advertisement is set) - number of equivalent lines

Head - number of lines

Body - number of lines

Tail - number of lines

Total number of lines in notice

COMPUTATION OF CHARGES

<u>54</u> lines,	<u>1</u> columns wide equals	
<u>54</u> equivalent lines at	<u>0.8086</u> cents per line	\$43.66
Additional charge for notices containing rule or tabular work (50 percent of above amount)		
Charge for extra proofs of publication (\$1.00 for each proof in excess of two)		
Total Amount of Claim		\$43.66

DATA FOR COMPUTING COST

Width of single column in picas	<u>9.9</u>	Size of type	<u>7</u> point
Number of insertions	<u>2</u>		


Pursuant to the provisions and penalties of IC 5-11-10-1, I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

I also certify that the printed matter attached hereto is a true copy, of the same column width and type size, which was duly published in said paper 2 times. The dates of publication being as follows:

August 7, 2023 August 14, 2023

Additionally, the statement checked below is true and correct:

- ☐ Newspaper does not have a Web site
- ☒ Newspaper has a Web site and this public notice was posted on the same day as it was published in the newspaper.
- ☐ Newspaper has a Web site, but due to technical problem or error, publish notice was posted on _____
- ☐ Newspaper has a Web site but refuses to post the public notice.

Date: August 14, 2023

 Title: Legal Advertising Clerk

LEGAL NOTICE OF PUBLIC INFORMATION MEETING FOR INDOT

DES #s 2003081 and 2003082 S.R.13 Roundabouts in Hamilton, Madison and Tipton Counties The Indiana Department of Transportation (INDOT) will host a public information meeting to discuss the proposed construction of two roundabouts on State Road (S.R.) 13 in Hamilton, Madison and Tipton counties. What: INDOT Public Information Meeting When: Thursday, August 17, 2023 5 to 7 p.m.; presentation at 5:30 p.m. Where: Lapel High School Auditorium 1850 S 900 W, Lapel, IN 46051 The first roundabout is proposed at the intersection of S.R. 13 and Strawtown Avenue/West 8th Street near Perkinsville. The second roundabout would be located at the intersection of S.R. 13/37 and S.R. 128/East 296th Street near Elwood. The purpose of the public open house is to give residents an opportunity to learn more about the proposed roundabouts and to provide feedback to the project team. Doors will open at 5 p.m. and the presentation will begin at 5:30 p.m. Project maps and handouts will be available for public review before and after the presentation at an open house session. The purpose of the project is to improve safety and mobility at both intersections. Existing two-way stop intersections would be converted to single-lane roundabouts at an estimated cost of \$3 to 4 million per intersection. INDOT is committed to ensuring that all public meetings are accessible to individuals with disabilities. If you require special accommodations to participate in this meeting, please contact Erin Pipkin at erin@compassoutreachsolutions.com or (317) 966-7301 in advance of the meeting. HB-590 8/7, 14 hspaxip 1842845

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Claim No. _____ Warrant No. _____

I have examined the within claim and hereby
certify as follows:

IN FAVOR OF _____

That it is in proper form.

That it is duly authenticated as required by law.

That it is based upon statutory authority.

\$ _____

That it is apparently
correct
incorrect

ON ACCOUNT OF APPROPRIATION FOR _____

I certify that the within claim is true and
correct; that the services there in itemized
and for which charge is made were ordered
by me and were necessary to the public
business

Appropriation No. _____

ALLOWED _____

IN THE SUM OF \$ _____

Attest

LEGAL ADVERTISING

See table of legal rates in the applicable State Board of Accounts Bulletin

APPENDIX H

Air Quality

**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



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-Executive Office
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

July 18, 2023

Mr. Daniel Avery, Executive Director
Northeastern Indiana Regional Coordinating Council
200 East Berry Street, Suite 230
Fort Wayne, IN 46802

Fiscal Year 2024 – 2028 Transportation Improvement Program (TIP) Approval

Dear Mr. Avery:

The Indiana Department of Transportation (INDOT) has completed its review of the FY 2024-2028 Transportation Improvement Program for the Northeastern Indiana Regional Coordinating Council (NIRCC). State and locally initiated transportation projects were reviewed for accuracy and compliance under The Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58.

It is my pleasure to inform you that on behalf of Governor Eric Holcomb, I approve your FY 2024-2028 Transportation Improvement Program. This document will serve as support for the local and INDOT projects in your area that fall within the FY 2024-2028 timeline and will be included by reference in the FY 2024-2028 Indiana Statewide Improvement Program (STIP).

If you should have any questions, please feel free to contact Roy Nunnally at 317-234-1692.

Sincerely,

Michael Smith, Commissioner
Indiana Department of Transportation

cc: Lyndsay Quist
Louis Feagans
Roy Nunnally
Erica Tait
Todd Johnson
Jason Kaiser

File

Madison County Council of Governments (Anderson MPO)
FY 2024-2028 Transportation Improvement Program (TIP)
All Projects: Current Through 10-3-24

PROJECT DETAILS						PROJECT FUNDING							PERFORMANCE MEASURES						MTP PLANNING		AIR QUALITY CONFORMITY				REFERENCE DOCUMENTS			
ROW	DIST	Sponsor Name	Work Category (Work Type)	Location & Description	County	Funding Obligation Year (State Fiscal)	Project Phase	Federal Funds by Phase	Required Local/State Matching Funds	Total Funds by Phase	Federal Funding Program	Letting Date (2-3 weeks prior to Obligation Start of CM Phase)	Contract Number (CM Phase)	Total Project Cost	Complete Streets (MPO)	Safety (MPO/INDOT)	Passenger Comfort (MPO/INDOT/1)	Bridge Completion (MPO/INDOT/1)	Reliability & Freight Reliability (MPO/INDOT)	Congestion Mitigation & Air Quality (EMAC) (MPO/INDOT)	Transit (MPO/INDOT)	MTP Project Category	Analysis Period	AQ Conformity Analysis		Exempt Project Type (AQ)	Reference (AQ)	
149	2201184	INDOT	Bridge Removal	I-49 Northbound Bridge over Abandoned RR, .58 miles North of SR 235	48	2025	CN	\$ -	\$ -	\$ 0.20	\$ 1	NDP	10/9/2024	8-43499	\$ -	1	Exempt			X			N/A	2020-2025	AQ Exempt - 4-24-23	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 4-28-23
150	2200573	INDOT	Bike/Pedestrian Facilities	SR 9, SR 32 to Cross Street	48	2027	CN	\$ 1,434,400	\$ -	\$ 358,600	\$ 1,793,000	STBG	10/7/26	8-44617	\$ 1,793,000	Exempt	X						N/A	2026-2025	TBD (Pending 2024-2028 TIP Approval - USDOT Conformity Letter)	Air Quality: Bicycle and Pedestrian Facilities (3)	40 CFR 93.126.3	Adopted with 2024-2028 TIP
151	2200166	INDOT	Railroad Protection	Various Locations throughout the City of Anderson (DOT# 1388402, 1389561, 1389576, 1389610, 1389439, 1388449, 1389564)	48	2027	CN	\$ 3,850,000	\$ -	\$ -	\$ 3,850,000	NDP	10/9/24	N/A	\$ 3,850,000	Exempt	X						N/A	2026-2025	TBD (Pending 2024-2028 TIP Approval - USDOT Conformity Letter)	Safety: Railroad/Highway Crossing Warning Devices (8)	40 CFR 93.126.8	Adopted with 2024-2028 TIP
152	2002337	INDOT	Drainage Ditch Construction	I-49, 12 miles North of SR 32 to .43 miles South of SR 26	48	2027	CN	\$ 371,857	\$ 96,363	\$ 468,222	NDP	8/14/24	8-43929	\$ 468,222	Exempt			X				N/A	2020-2025	TBD (Pending 2024-2028 TIP Approval - USDOT Conformity Letter)	Safety: Pavement Resurfacing and/or Rehabilitation (10)	40 CFR 93.126.10	Adopted with 2024-2028 TIP	
153	2200503	INDOT	Signage Installation / Repair	SR 9 @ SR 38	48	2027	CN	\$ 1,762,800	\$ 948,200	\$ 4,761,000	STBG	12/1/27	7-44761	\$ 4,761,000	Exempt	X						N/A	2026-2025	TBD (Pending 2024-2028 TIP Approval - USDOT Conformity Letter)	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Adopted with 2024-2028 TIP	
154	2200501	INDOT	Small Structures & Drains	I-49 Southbound On Ramp, 11 miles South of SR 38	48	2027	CN	\$ 262,200	\$ 62,800	\$ 324,000	STBG	7/6/26	8-44564	\$ 324,000	Exempt			X				N/A	2026-2020	TBD (Pending 2024-2028 TIP Approval - USDOT Conformity Letter)	Safety: Pavement Resurfacing and/or Rehabilitation (10)	40 CFR 93.126.10	Adopted with 2024-2028 TIP	
155	2200553	INDOT	Bridge Thin Deck Overlay	SR 9 @ Bridge over Hick Creek, 2.02 miles South of SR 38	48	2027	CN	\$ 144,819	\$ 36,203	\$ 181,024	STBG	7/6/26	8-44564	\$ 1,397,837	Exempt			X				N/A	2026-2020	TBD (Pending 2024-2028 TIP Approval - USDOT Conformity Letter)	Safety: Pavement Resurfacing and/or Rehabilitation (10)	40 CFR 93.126.10	Adopted with 2024-2028 TIP	
156	2200761	INDOT	Bridge Thin Deck Overlay	I-49 @ Bridge over I-65, 1.33 miles South of SR 9	48	2024	CN	\$ 217,228	\$ 54,308	\$ 271,536	STBG	7/6/26	8-44564	\$ 271,536	Exempt			X				N/A	2020-2025	TBD (Pending 2024-2028 TIP Approval - USDOT Conformity Letter)	Safety: Pavement Resurfacing and/or Rehabilitation (10)	40 CFR 93.126.10	Adopted with 2024-2028 TIP	
157	2300718	INDOT	Bridge Painting	SR 32 @ Bridge over White River, 1.37 miles east of SR 9 (Scatterfield Road) (Anderson)	48	2024	PE	\$ 415,075	\$ 101,269	\$ 516,344	STBG	10/14/2027	8-45158	\$ 1,051,090	Exempt			X				N/A	2020-2025	AQ Exempt - 3-6-24 & 3-27-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 3-7-24, Res. 4-4-24	
158	2300718	INDOT	Bridge Painting	SR 32 @ Bridge over White River, 1.37 miles east of SR 9 (Scatterfield Road) (Anderson)	48	2025	PE	\$ 140,000	\$ 40,000	\$ 280,000	STBG	10/14/2027	8-45158	\$ 1,051,090	Exempt			X				N/A	2020-2025	AQ Exempt - 3-6-24 & 3-27-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 3-7-24, Res. 4-4-24	
159	2300863	INDOT	Bridge Painting	I-49 Bridge over CN RL, .46 miles South of SR 9 (Scatterfield Road)	48	2025	PE	\$ 360,000	\$ 40,000	\$ 400,000	NDP	10/14/2027	8-45158	\$ 157,146	Exempt			X				N/A	2020-2025	AQ Exempt - 3-6-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 3-7-24	
160	2300757	INDOT	Replace Superstructure	SR 32 Bridge @ Stony Creek, .42 miles East of SR 13	48	2025	PE	\$ 312,000	\$ 78,000	\$ 390,000	STBG	7/12/2028	8-45185	\$ 2,382,275	Exempt			X				N/A	2020-2025	AQ Exempt - 3-6-24 & 3-27-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 3-7-24, Res. 4-4-24	
161	2005568	INDOT	HMA Overlay, Preventative Maintenance	SR 13, I-69 to .33 miles S of SR 32	48	2025	CN	\$ 5,043,566	\$ 1,260,892	\$ 6,304,458	STBG	7/10/2024	8-44880	\$ 6,668,178	Exempt		X					N/A	2020-2025	AQ Exempt - 8-5-20, 1-6-21, & 3-27-24	Safety: Pavement Resurfacing and/or Rehabilitation (10)	40 CFR 93.126.10	Res. 8-6-20, Res. 1-8-21, Res. 4-4-24	
162	2300737	INDOT	Soar Protection (Bridges)	SR 13 @ Bridge over Fall Creek, 1.92 miles South of I-49	48	2025	PE	\$ 48,000	\$ 12,000	\$ 60,000	STBG	7/6/2026	8-45147	\$ 601,083	Exempt			X				N/A	2020-2025	AQ Exempt - 7-23-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 8-1-24, Adopted with 2024-2028 TIP	
163	2301200	INDOT	Bike/Pedestrian Facilities	SR 9 (Scatterfield Road), SR 32 (South Junction)/SR 232 (Blounts Road/Ohio Avenue) to SR 32 (South Junction)/University Boulevard/Main Street (Anderson)	48	2025	PE	\$ 738,154	\$ 79,396	\$ 799,080	HSP	7/14/2024	8-45188	\$ 4,128,476	Exempt				X			N/A	2020-2025	AQ Exempt - 7-23-24	Air Quality: Bicycle and Pedestrian Facilities (3)	40 CFR 93.126.3	Res. 8-1-24, Adopted with 2024-2028 TIP	
164	2301200	INDOT	Bike/Pedestrian Facilities	SR 9 (Scatterfield Road), SR 32 (South Junction)/SR 232 (Blounts Road/Ohio Avenue) to SR 32 (South Junction)/University Boulevard/Main Street (Anderson)	48	2028	CN	\$ 2,996,474	\$ 332,942	\$ 3,329,416	HSP	7/14/2024	8-45188	\$ 4,128,476	Exempt				X			N/A	2026-2020	AQ Exempt - 7-23-24	Air Quality: Bicycle and Pedestrian Facilities (3)	40 CFR 93.126.3	Res. 8-1-24, Adopted with 2024-2028 TIP	
165	2300771	INDOT	Bridge Rehabilitation or Repair	SR 38 @ Bridge over Mud Creek, .11 miles West of SR 13 (Asper)	48	2025	PE	\$ 134,800	\$ 14,980	\$ 149,800	STBG	10/14/2027	8-45157	\$ 3,108,258	Exempt				X			N/A	2026-2020	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
166	2300771	INDOT	Bridge Rehabilitation or Repair	SR 38 @ Bridge over Mud Creek, .11 miles West of SR 13 (Asper)	48	2028	CN	\$ 100,407	\$ 11,156	\$ 111,563	STBG	10/14/2027	8-45157	\$ 3,108,258	Exempt				X			N/A	2026-2020	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
167	2003061	INDOT	Intersection Improvement/Reconstruction	SR 13 @ SR 128 (Jackson)	48	2025	EW	\$ 157,000	\$ 17,000	\$ 175,000	HSP	10/9/2025	8-46024	\$ 3,632,488	Exempt				X			N/A	2026-2020	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	

Madison County Council of Governments (Anderson MPO)
FY 2024-2028 Transportation Improvement Program (TIP)
 All Projects: Current Through 10-3-24

PROJECT DETAILS						PROJECT FUNDING								PERFORMANCE MEASURES				MTP PLANNING		AIR QUALITY CONFORMITY			REFERENCE DOCUMENTS					
REF	DIS	Sponsor Name	Work Category (Work Type)	Location & Description	County	Funding Obligation Year (State Fiscal)	Project Phase	Federal Funds by Phase	Required Local/State Matching Funds	Total Funds by Phase	Federal Funding Program	Selling Date 12-3 weeks prior to Payment Date of CN Phase	Contract Number (CN Phase)	Total Project Cost	Complete Streets (HSP)	Safety (MPO/INDOT)	Prevent Condition (MPO/INDOT)	Bridge Condition (MPO/INDOT)	Reliability & Freight Reliability (MPO/INDOT)	Congestion Management & Air Quality (EMAQ/ MPO/INDOT)	Travel (MPO/INDOT)	MTP Project Category		Analysis Period	AQ Conformity Analysis	Exempt Project Type (AQ)	Reference (AQ)	
168	200361	INDOT	Intersection Improvement, Roundabout	SR 13 @ SR 228 (Stratford)	IN	2024	CN	\$ 2,931,739	\$ 325,763	\$ 3,257,498	HSP	10/9/2025	8-46024	\$ 3,432,488	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
169	200362	INDOT	Intersection Improvement, Roundabout	SR 13 @ Stratford Avenue/W. Eight Street Road (Pekinville)	IN	2025	PE	\$ 81,735	\$ 9,082	\$ 90,817	HSP	10/9/2025	8-46024	\$ 5,611,534	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
170	200362	INDOT	Intersection Improvement, Roundabout	SR 13 @ Stratford Avenue/W. Eight Street Road (Pekinville)	IN	2025	RW	\$ 157,500	\$ 17,500	\$ 175,000	HSP	10/9/2025	8-46024	\$ 5,611,534	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
171	200362	INDOT	Intersection Improvement, Roundabout	SR 13 @ Stratford Avenue/W. Eight Street Road (Pekinville)	IN	2026	CN	\$ 3,863,689	\$ 429,299	\$ 4,292,988	HSP	10/9/2025	8-46024	\$ 5,611,534	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
172	200772	INDOT	Bridge Rehabilitation or Repair	SR 38 @ Bridge over Forters Branch, 1.03 miles West of I-69 (Lape)	IN	2025	PE	\$ 126,360	\$ 15,040	\$ 105,400	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt			X				N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
173	200772	INDOT	Bridge Rehabilitation or Repair	SR 38 @ Bridge over Forters Branch, 1.03 miles West of I-69 (Lape)	IN	2026	CN	\$ 110,447	\$ 12,272	\$ 122,719	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
174	200816	INDOT	Bridge Rehabilitation or Repair	SR 9/SR 47 @ Bridge over I-69 NB/TA, 2.45 miles North of US 36 (Anderson)	IN	2025	PE	\$ 146,160	\$ 16,140	\$ 62,490	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
175	200816	INDOT	Bridge Rehabilitation or Repair	SR 9/SR 47 @ Bridge over I-69 NB/TA, 2.45 miles North of US 36 (Anderson)	IN	2026	CN	\$ 271,097	\$ 30,122	\$ 61,119	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
176	200929	INDOT	Bridge Rehabilitation or Repair	SR 9 @ Bridge over Prairie Creek, 1.12 miles South of I-69 (Pendleton)	IN	2025	PE	\$ 136,963	\$ 15,220	\$ 122,200	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
177	200929	INDOT	Bridge Rehabilitation or Repair	SR 9 @ Bridge over Prairie Creek, 1.12 miles South of I-69 (Pendleton)	IN	2026	CN	\$ 170,691	\$ 18,966	\$ 189,617	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
178	200865	INDOT	Bridge Rehabilitation or Repair	I-69 @ NB Bridge over SR 9/SR 106, 3.35 miles South of SR 236 (Anderson)	IN	2025	PE	\$ 177,570	\$ 18,730	\$ 187,600	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
179	200865	INDOT	Bridge Rehabilitation or Repair	I-69 @ NB Bridge over SR 9/SR 106, 3.35 miles South of SR 236 (Anderson)	IN	2026	CN	\$ 240,976	\$ 26,775	\$ 267,751	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
180	200861	INDOT	Bridge Rehabilitation or Repair	CR 402 @ Bridge over I-69, 2.19 miles North of SR 38 (Anderson)	IN	2025	PE	\$ 148,770	\$ 16,330	\$ 165,100	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
181	200861	INDOT	Bridge Rehabilitation or Repair	CR 402 @ Bridge over I-69, 2.19 miles North of SR 38 (Anderson)	IN	2026	CN	\$ 145,569	\$ 15,619	\$ 136,188	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
182	200862	INDOT	Bridge Rehabilitation or Repair	CR 202 W/Brown Street @ Bridge over I-69, 1.67 miles North of SR 67 (Anderson)	IN	2025	PE	\$ 137,070	\$ 15,230	\$ 152,300	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
183	200862	INDOT	Bridge Rehabilitation or Repair	CR 202 W/Brown Street @ Bridge over I-69, 1.67 miles North of SR 67 (Anderson)	IN	2026	CN	\$ 142,569	\$ 15,619	\$ 156,188	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
184	200866	INDOT	Bridge Rehabilitation or Repair	I-69 Bridge over SR 9/SR 109 (Dusterfield Road), 1.25 miles South of SR 236 (Anderson)	IN	2026	CN	\$ 240,976	\$ 26,775	\$ 267,751	SRBG	10/14/2027	8-45157	\$ 3,308,258	Exempt				X			N/A	2030-2050	AQ Exempt - 9-9-24	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
185	200100	INDOT	Bike/Pedestrian Facilities	SR 9 (Dusterfield Road), S. Junction of SR 32 (Mounts Re/Ohio Avenue) to N. Junction of SR 32 (University Boulevard)	IN	2025	PE	\$ 719,554	\$ 79,006	\$ 799,060	HSP	7/14/2027	8-45188	\$ 4,126,476	Exempt	X			X			N/A	2030-2050	AQ Exempt - 9-9-24	Air Quality: Bicycle and Pedestrian Facilities (3)	40 CFR 93.126.3	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
186	200100	INDOT	Bike/Pedestrian Facilities	SR 9 (Dusterfield Road), S. Junction of SR 32 (Mounts Re/Ohio Avenue) to N. Junction of SR 32 (University Boulevard)	IN	2026	CN	\$ 2,096,474	\$ 332,962	\$ 3,329,436	HSP	7/14/2027	8-45188	\$ 4,126,476	Exempt	X			X			N/A	2030-2050	AQ Exempt - 9-9-24	Air Quality: Bicycle and Pedestrian Facilities (3)	40 CFR 93.126.3	Res. 9-18-24, Adopted with 2024-2028 TIP (Res. 9-18-24 2024-2028)	
Section 7 - State-Funded (INDOT) Non-Infrastructure, Group 4, & Statewide Projects - Exempt from Air Quality Conformity Analysis																												

APPENDIX I

Additional Information

Engineering Assessment Report

**SR 13 / 37 @ SR 128, Single Lane Roundabout
DES No. 2003081**

Safety Project
Proposed Fiscal Year: 2026
Score: 89

Greenfield District
Tipton Sub-District
Madison County, Indiana
9/25/2020

Attachments were removed
in the interest of document
consolidation.

Prepared by:
Mark Muenz
Greenfield District Traffic Planning Engineer

Approved by:
Luis Laracuenta, P.E.
District Traffic Engineer

Indiana Department of Transportation

Traffic Engineering

Greenfield District

32 South Broadway Greenfield IN 46140



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10. RoW Information
11. Utilities Information
12. Environmental Information
13. Project Support Letters

Executive Summary

The purpose of this report is to document the engineering assessment phase of project development, including all coordination that has been completed in preparation for this project. This document outlines the proposal and is intended to serve as a guide for subsequent survey, design, environmental, right of way and other project activities leading to construction. The preferred alternative identified in this document is considered predecisional, pending the outcome of environmental studies. An alternative other than the preferred alternative may not be selected without consultation with the preparer of this report.

This project is located at the intersection of SR 13 / 37 with SR 128 to the east, and with E 296th St. to the west. It is located between the Reference Posts of 20 + 75 and 21 + 25 along SR 13, which itself is located on the boundary of Madison, Tipton, and Hamilton Counties. The intersection is experiencing a high amount of severe crashes comparative to its current volumes. Specifically, a high frequency of right-angle crashes at this intersection, which can be attributed to suboptimal sightlines, high speeds along SR 13, and a large risk exposure window for vehicles on the minor approaches.

Because of this, the preferred alternative is to convert the two-way stop-controlled intersection into a single lane roundabout to reduce the frequency and severity of crashes at this intersection, while maintaining adequate intersection mobility. This alternative is expected to operate exceptionally (LOS A) through the design year of 2046, as well as solve the extremely high frequency of right-angle crashes occurring at this intersection. The proposed safety improvement project scores 89 out of 100. The scoring details are included in attachment 6. The estimated cost of the preferred alternative at this location is \$2,271,000

Project Location

Table 1: Project Location Information

Location Description			
Route	SR 13 / 37	Latitude	40.218925
City	Elwood	Longitude	-85.681909
County	Madison	Nearest Cross Street	N Duck Creek Ave
District	Greenfield	Distance From	750 ft.
Sub District	Tipton	RP From	20 + 75
MPO	Madison (MCCOG)	RP To	21 + 25
NHS Route?	No	Length	0.5
Functional Class	Minor Arterial	Work Type	Intersection Improvement, Roundabout
Rural or Urban	Rural	Work Category	Intersection Improvement Project
Other Location Info:	Historic Bridge on western leg, 100 ft. from intersection center		

See attachments for a map showing the project location and for other pictures of the site.

Purpose and Need

The identified need at this location involves the very high frequency of severe crashes comparative to the volumes of traffic at this intersection. Specifically, the high frequency and severity of right-angle crashes.

The purpose of this project is to reduce or eliminate the high frequency and severity of crashes at this intersection, while maintaining good intersection mobility.

Project History

This intersection was first investigated in 2019. A signal warrant was performed, but the crashes did not provide the statistical need for further safety investigation. To mitigate a few failures to yield to the minor street stop signs, the stop signs were doubled up, and more advanced warning of the stop signs was added along SR 128.

Existing Conditions

Structure Information

There is a historical bridge located 100 ft. west of the current intersection center. Its deck has been replaced sometime between 2009 and 2013. Impacts to this bridge by this project should be avoided.

Roadway Geometrics and Pavement Information

Table 2: Roadway Geometrics and Pavement Information

Lane Width	12 ft.
Curbed	No
Shoulder Width	2.0 ft.
Number of lanes in each direction	1
Intersection Traffic Control	Two Way Stop
Speed Limit	55 mph
Pavement Type	Asphalt
Median Type	None

Traffic Data and Capacity Analysis

Table 3: Volume Information and Traffic Forecast

Representative AADT	8358
AADT Year	2019
% Trucks	13.79 %
DHV (%)	10.77 %
% Yearly Traffic Growth	1.00 %
2020 AADT	8442
2025 AADT	8872
2030 AADT	9325
2035 AADT	9800
2040 AADT	10,300

The complete traffic forecast as provided by the Traffic Statistics Section in Central Office has been included in attachment 2.

Table 4&5: Capacity Analysis

Road	Parameter	AM PEAK											
		EB			WB			NB			SB		
		L	T	R	L	T	R	L	T	R	L	T	R
TWSC: 2020	LOS	-	C	-	-	C	-	-	A	-	-	A	-
	Delay	-	15.6	-	-	17.9	-	-	0.1	-	-	0.1	-
TWSC: 2046	LOS	-	C	-	-	D	-	-	A	-	-	A	-
	Delay	-	21.0	-	-	30.0	-	-	0.1	-	-	0.1	-
AWSC: 2046	LOS	-	B	-	-	B	-	-	C	-	-	C	-
	Delay	-	10.3	-	-	11.7	-	-	15.3	-	-	19.5	-
Signal: 2046	LOS	B	-	-	B	-	B	A	-	A	A	-	A
	Delay	17.2	-	-	18.0	-	17.7	9.8	-	8.4	8.9	-	9.3
Roundabout: 2046	LOS	-	A	-	-	A	-	-	A	-	-	A	-
	Delay	-	5.6	-	-	5.8	-	-	6.4	-	-	7.8	-

Road	Parameter	PM PEAK											
		EB			WB			NB			SB		
		L	T	R	L	T	R	L	T	R	L	T	R
TWSC: 2020	LOS	-	C	-	-	C	-	-	A	-	-	A	-
	Delay	-	21.6	-	-	23.0	-	-	0.2	-	-	0.1	-
TWSC: 2046	LOS	-	E	-	-	E	-	-	A	-	-	A	-
	Delay	-	43.0	-	-	49.8	-	-	0.2	-	-	0.1	-
AWSC: 2046	LOS	-	B	-	-	B	-	-	E	-	-	C	-
	Delay	-	12.0	-	-	11.7	-	-	37.6	-	-	22.4	-
Signal: 2046	LOS	C	-	-	B	-	C	B	-	B	B	-	B
	Delay	21.1	-	-	19.3	-	20.1	12.2	-	11.9	12.7	-	11.2
Roundabout: 2046	LOS	-	A	-	-	A	-	-	A	-	-	A	-
	Delay	-	6.0	-	-	7.1	-	-	10.7	-	-	7.4	-

1.00% Growth Rate from forecast used.

For more information on the capacity analysis, see attachment 3.

Crash Information

Table 6: Crash History

ICC	2.31	Number of Crashes	18
ICF	1.90	Number of Fatal and Incapacitating Crashes	6
First Year of Crash Data	2017	Number of Non-Incapacitation Crashes	1
Last Year of Crash Data	2019	Number of Property Damage Only Crashes	11

The RoadHAT output, a detailed crash statistics summary and a crash diagram have been included in attachment 4 of this report.

Crash data from 2017 to 2019 was analyzed for this intersection. During this timeframe, there were a total of 18 crashes, of which 7 were right angle crashes, 5 rear end crashes, 4 ran off road crashes, and 2 sideswipe crashes. Of these 18 crashes, 7 resulted in injury, with 6 being incapacitating, and 1 non-incapacitating. The remaining 11 crashes were property damage in nature. The intersection was analyzed via the RoadHAT 3 tool, determining the statistics of Index of Crash Costs, or ICC, and Index of Crash Frequency, or ICF. The ICC for this intersection is 2.31, indicating that this intersection is prone to crashes of significant severity and cost. The ICF of this intersection is 1.90, indicating that the frequency of crashes at this intersection is very above what could be expected for an average intersection of similar vehicular volume.

Design Considerations

Special considerations should be taken with regards to the high speeds along SR 13 / 37, as well as the presence of a historical bridge on the western leg of the intersection, roughly 100 ft. from the intersection center. Impacts to this bridge would vastly increase costs at this intersection, and as such, potential impacts should be avoided. For alternatives such as the roundabout, shifting the road out as far east as needed to avoid compromising the eastbound approach would be preferred.

Table 7: Other Design Considerations

Land Survey Location	NW ¼ of Section 6, T. 20 N., R. 6 E
Civil Township	Pipe Creek
Federal Aid System	Qualifies as “Rural On”
National Truck Network	Intersection is on the NTN
Urban Area Boundary	None
Adjacent Land Use	Agricultural and Forest

Community/External Stakeholder Context

The Madison County Highway Engineer has expressed support for the single lane roundabout alternative at this intersection. Email supporting the roundabout is shown in the attachment 12.

The design and environmental process of the roundabout development must include community outreach and education. Input from the community should be obtained in public forums to ensure their input is taken into consideration.

Adjacent INDOT Projects

There are several projects in the planning stage nearby to this location. The most significant of which is a plan for a superstructure replacement of the bridge located 1.4 miles to the east of this intersection along SR 128. While it is only in the planning stages at the moment, it is a significant enough of a project to be noted here. This potential project is planned for 2025. A few potential pavement projects are also around this project, scheduled for 2025 and 2026.

Other Miscellaneous Information

This project resides on the border between Madison, Tipton and Hamilton Counties. As such, all three should be consulted in terms of details for this project, but for simplicity Madison is labeled primarily in this report. This is chosen as they have a larger portion of the intersection under their borders, as well as having reported a majority of the crashes at the intersection.

Analysis and Alternatives

Description of Alternatives

Alternative 1 – Single Lane Roundabout. This alternative would maintain both good mobility and level of service through the design year of 2046, as well as essentially eliminating this intersection's most common and severe crash type, right angle crashes. Considering the intersection's limitations due to a nearby historic bridge, an offset roundabout will be necessary to be fully effective, which will be more intrusive on the surrounding lands. Due to high speeds, the splitter islands of the roundabout will likely need to be at least 300 ft. in length to accommodate for appropriate approach speed and angles. With the installation of this alternative, KABC crashes are expected to decrease by 61 %, with a total reduction in crashes of 48 %. A preliminary sketch is included in attachment 8.

The cost estimate of this alternative is **\$2,271,000**

Alternative 2 – Traffic Signal. This alternative would likely maintain good mobility through the design year of 2046. However, this intersection's volumes do not meet signal warrants, and with the high speeds along SR 13, rear end crashes are likely to increase, as well as risk of crashes due to disobedience of the traffic signal. Some pavement overhaul was included in this alternatives cost analysis for the addition of turn lanes on all approaches except eastbound due to space constraints and renewing of existing pavement.

The cost estimate of this alternative is **\$1,256,000**

Alternative 3 – All-Way Stop Control. This alternative would be the addition of stop signs with associated warning signs along the mainline of SR 13 / 37. This alternative is lower cost by comparison to the others but has several flaws. Rear end crashes are likely to severely increase due to the high speeds along SR 13, and right-angle crashes associated with this intersection are likely to remain extremely severe. Once the public has adjusted to the intersection, crashes may be reduced. However, the adjustment period will likely have a spike in severe crashes. Lastly, this alternative does not maintain adequate mobility through the design year (See capacity analysis: attachment 3), with a predicted LOS E for northbound traffic, and LOS C for southbound during peak hour traffic.

The cost estimate for this alternative is **\$1,000**

Alternative 4 – No Build. The No build option was considered for this project. However, crashes at this intersection appear to only be worsening. The long-term safety consequences of this option are extremely detrimental to the safety of the public.

Cost Estimates

Table 8: Cost Estimate Summary

Alternative	Funding Category	Estimated Cost
Alternative 1 Roundabout	CN	\$1,768,000
	PE	\$442,000
	Utility	\$20,000
	RoW	\$40,000
	Total Cost	\$2,271,000
Alternative 2 Traffic signal	CN	\$956,391
	PE	\$239,098
	Utility	\$20,000
	RoW	\$40,000
	Total Cost	\$1,256,000
Alternative 3 4-Way Stop	CN	\$1000
	PE	\$0
	Utility	\$0
	RoW	\$0
	Total Cost	\$1000
Alternative 4 No Build	CN	-
	PE	-
	Utility	-
	RoW	-
	Total Cost	\$ 0

Complete and detailed cost estimates for all considered alternatives are included in attachment 9 of this report. Cost estimates were developed through averages from the Indiana 2019 Unit Price Summary list, and quantities were determined through digital measurement and evaluation.

Preliminary Maintenance of Traffic Plan (MOT)

This project is a fairly mobility significant project based on the classification of the facility, AADT, and additional factors. So long as some movement North-South is maintained, impacts are likely to be minimal. No nearby facilities are significantly impacted by a partial closure of this intersection. If the potential bridge superstructure replacement east of this intersection is coordinated with this project, the eastern approach could consequentially have a full closure.

The above information is preliminary and conceptual in nature. The designer of record for this project shall be responsible for the determination of MOT scheme and the full design of that scheme. The above information can be used to inform the decision making of the designer, but it does not absolve him of the responsibility of the design.

The provisions of the Indiana Manual on Uniform Traffic Control Devices, the Indiana Design Manual and the INDOT Standard Drawings concerning the design of an MOT zone shall be adhered to. A detailed design showing the MOT layout should be included in the final set of plans. The provisions of the Interstate Highway Congestion Policy shall be followed.

Pavement and Roadway Design

Standard single lane roundabout design features should be assumed and incorporated into this project. The major object of note should be the historic bridge on the western leg. Approach and exit radii will need to have careful mind made to them. Additionally, the high approach speeds should be considered by including sufficient splitter islands and deflection to allow for more appropriate entry speeds into the roundabout. See attached sketch in Attachment 8 for reference.

Right-of-Way and Survey

Based on the proposed layout, the Right-of-Way Office estimates that there will be needed acquisitions for all corners of this intersection. Given the current agricultural land use of the SE corner, and the residential land use of the NE corner, it is estimated that this acquisition will cost \$40,000.

Utilities and Railroads

After a discussion with the Greenfield Utilities Department, impacts to utilities and railroads are expected to be minimal. A commented diagram is in attachment 11. The utilities are expected to be reimbursable but should be covered by contingency costs should something arise.

Hydraulic Recommendations

Some minor drainage ditch modifications will likely be necessary for this intersection. Additionally, drainage within the roundabout alternative should be accounted for and directed accordingly.

Environmental and Historic Considerations

The cost of environmental and historical considerations depends on whether the historic bridge to the west is impacted by the project. If it is not impacted, costs will be covered by existing PE. Should the bridge need to be impacted, CE4 documentation will be required, along with an additional 5-10% PE costs added to the project's cost estimate.

As is, this project will require an environmental document level CE2.

Design Criteria

The design of this project shall adhere to 3R Project, Non-Freeways standards per the Indiana Design Manual.

SEE IDM 40-06.01 FOR MORE INFORMATION.

Recommended Alternative

The preferred alternative is Alternative 1, a single lane roundabout. While this alternative is not the lowest cost it provides the most benefits to both the safety and mobility operations at this intersection. This is the only alternative that can be proven to address both the purpose and need of this intersection. This alternative will eliminate right angle and left turn crashes at this intersection. It also acts as a traffic calming measure, reducing the speed of vehicles along SR 13, especially as traffic moves towards Elwood to the north. Additionally, the lighting and stimulation of a roundabout may help wake up sleepy drivers, which are a common crash cause at this intersection. A roundabout presents the best option for long term capacity and improves side traffic conditions. This alternative maintains an overall LOS A through the design year of 2046, scores an **89** for TSAM, and will cost **\$2,271,000**

Changes to Proposal

Contact the Greenfield District Traffic Engineer if deviation from this document is determined to be necessary during a later phase of project development, including but not limited to scope of work or letting changes. Any desired changes should include justification for the change and the estimated cost.

Concurrence and Approval

This document was prepared by: *Mark Muenz*

NAME Mark Muenz

TITLE Traffic Planning Engineer

DATE **9/25/2020**

This document was approved by: *Luis A. Laracunte*

NAME Luis Laracunte

TITLE District Traffic Engineer

DATE **09/25/2020**

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800017	1800017	Hamilton	Forest Park & Trail, White River Access Site
1800058	1800058	Hamilton	Forest Park & Trail, White River Access Site
1800128	1800128	Hamilton	Morse Park & Beach
1800198	1800198	Hamilton	Cicero Community Park
1800236	1800236	Hamilton	Forest Park & Trail, White River Access Site
1800493	1800493	Hamilton	Flowing Well Park
1800502	1800502	Hamilton	Cool Creek County Park
1800519	1800519	Hamilton	Taylor Property
1800551	1800551	Hamilton	MacGregor Park
1800581	1800581	Hamilton	MacGregor Park

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800136	1800136	Madison	Funk Historic (8th St.) Park
1800139	1800139	Madison	General Pulaski ParkE. 38th St. Park
1800143	1800143	Madison	Streaty Park
1800145	1800145	Madison	Southside Sports Complex
1800169	1800169	Madison	Shadyside Recreation Complex (Aqua Gardens)
1800169.6	1800169.6	Madison	Crawford Field
1800171	1800171H	Madison	Mounds State Park
1800204	1800204	Madison	Beulah Park
1800238	1800238	Madison	Beulah Park
1800254	1800254	Madison	Falls Park
1800255	1800255	Madison	Alvin D. Brown Memorial Pool
1800258	1800258	Madison	Athletic Park
1800287	1800287	Madison	Shepherd Park
1800292	1800292	Madison	Elwood Municipal Swimming Pool
1800299	1800299	Madison	Alvin D. Brown Memorial Pool
1800305	1800305G	Madison	Mounds State Park
1800312	1800312I	Madison	Mounds State Park
1800370	1800370	Madison	Maple Meadows Park/Frankton Community Park
1800382	1800382	Madison	Mounds State Park
1800413	1800413O	Madison	Mounds State Park
1800442	1800442	Madison	Walbridge Acres Park
1800466	1800466	Madison	Grand Avenue Wetlands & Killbuck Walkway
1800477	1800477a	Madison	Anderson Riverwalk
1800534	1800534	Madison	General Pulaski Park
1800587	1800587	Madison	Bodenhorn Park

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800023	1800023	Tipton	Tipton City Park
1800249	1800249	Tipton	Kemp Memorial Park

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

Table: ACSDT5Y2021.B03002

	United States	Hamilton County, Indiana	Census Tract 1101.02, Hamilton County, Indiana
Label	Estimate	Estimate	Estimate
Total:	329,725,481	341,616	4,200
Not Hispanic or Latino:	268,918,512	326,985	4,015
White alone	196,010,370	280,770	3,866
Black or African American alone	40,196,302	13,244	0
American Indian and Alaska Native alone	1,936,842	290	0
Asian alone	18,554,697	21,235	0
Native Hawaiian and Other Pacific Islander alone	555,712	145	22
Some other race alone	1,208,267	1,342	0
Two or more races:	10,456,322	9,959	127
Two races including Some other race	1,446,567	1,296	0
Two races excluding Some other race, and three or more races	9,009,755	8,663	127
Hispanic or Latino:	60,806,969	14,631	185
White alone	28,778,739	8,832	185
Black or African American alone	1,196,710	133	0
American Indian and Alaska Native alone	785,819	0	0
Asian alone	228,227	116	0
Native Hawaiian and Other Pacific Islander alone	59,845	0	0
Some other race alone	17,174,529	1,923	0
Two or more races:	12,583,100	3,627	0
Two races including Some other race	10,609,037	2,950	0
Two races excluding Some other race, and three or more races	1,974,063	677	0

Table: ACSDT5Y2021.B17001

	United States	Hamilton County, Indiana	Census Tract 1101.02, Hamilton County, Indiana
Label	Estimate	Estimate	Estimate
Total:	321,897,703	339,636	4,200
Income in the past 12 months below poverty level:	40,661,636	13,437	26
Male:	18,132,275	5,717	26
Under 5 years	1,804,943	497	0
5 years	353,798	205	0
6 to 11 years	2,181,236	949	0
12 to 14 years	1,026,148	285	0
15 years	340,274	133	0
16 and 17 years	637,739	211	0
18 to 24 years	2,391,976	619	26
25 to 34 years	2,091,261	466	0
35 to 44 years	1,771,681	647	0
45 to 54 years	1,677,723	733	0
55 to 64 years	2,013,935	514	0
65 to 74 years	1,145,870	292	0
75 years and over	695,691	166	0
Female:	22,529,361	7,720	0
Under 5 years	1,730,648	386	0
5 years	338,260	55	0
6 to 11 years	2,091,832	639	0
12 to 14 years	984,832	405	0
15 years	330,341	102	0
16 and 17 years	623,373	274	0
18 to 24 years	2,938,139	947	0
25 to 34 years	3,288,904	1,246	0
35 to 44 years	2,618,050	1,054	0
45 to 54 years	2,093,750	714	0
55 to 64 years	2,394,677	909	0
65 to 74 years	1,606,946	374	0
75 years and over	1,489,609	615	0
Income in the past 12 months at or above poverty level:	281,236,067	326,199	4,174
Male:	140,410,519	161,105	2,345
Under 5 years	7,949,219	10,242	67
5 years	1,629,773	2,702	142
6 to 11 years	10,365,093	14,991	102
12 to 14 years	5,510,127	7,805	84
15 years	1,837,564	2,951	11
16 and 17 years	3,700,754	5,160	171
18 to 24 years	11,432,099	12,761	226
25 to 34 years	20,162,923	18,843	148
35 to 44 years	19,005,426	24,275	274
45 to 54 years	18,704,195	23,780	430
55 to 64 years	18,632,874	19,131	352
65 to 74 years	13,557,621	12,190	241
75 years and over	7,922,851	6,274	97
Female:	140,825,548	165,094	1,829
Under 5 years	7,579,318	10,131	16
5 years	1,554,236	2,228	0
6 to 11 years	9,880,929	14,248	119
12 to 14 years	5,242,034	8,196	76
15 years	1,763,653	2,873	52
16 and 17 years	3,539,941	4,907	70
18 to 24 years	10,383,838	12,028	141
25 to 34 years	19,004,663	19,414	185
35 to 44 years	18,424,189	25,306	241
45 to 54 years	18,735,695	23,941	353
55 to 64 years	19,429,976	19,694	396
65 to 74 years	14,950,065	13,665	58
75 years and over	10,337,011	8,463	122

Table: ACSDT5Y2021.B03002

	United States	Madison County, Indiana	Census Tract 104, Madison County, Indiana
Label	Estimate	Estimate	Estimate
Total:	329,725,481	130,037	2,714
Not Hispanic or Latino:	268,918,512	124,263	2,660
White alone	196,010,370	109,091	2,582
Black or African American alone	40,196,302	10,185	0
American Indian and Alaska Native alone	1,936,842	122	3
Asian alone	18,554,697	748	16
Native Hawaiian and Other Pacific Islander alone	555,712	1	0
Some other race alone	1,208,267	456	0
Two or more races:	10,456,322	3,660	59
Two races including Some other race	1,446,567	528	0
Two races excluding Some other race, and three or more races	9,009,755	3,132	59
Hispanic or Latino:	60,806,969	5,774	54
White alone	28,778,739	3,177	44
Black or African American alone	1,196,710	144	0
American Indian and Alaska Native alone	785,819	202	0
Asian alone	228,227	4	0
Native Hawaiian and Other Pacific Islander alone	59,845	0	0
Some other race alone	17,174,529	1,389	4
Two or more races:	12,583,100	858	6
Two races including Some other race	10,609,037	745	6
Two races excluding Some other race, and three or more races	1,974,063	113	0

Table: ACSDT5Y2021.B17001

	United States	Madison County, Indiana	Census Tract 104, Madison County, Indiana
Label	Estimate	Estimate	Estimate
Total:	321,897,703	123,456	2,714
Income in the past 12 months below poverty level:	40,661,636	18,639	180
Male:	18,132,275	8,282	106
Under 5 years	1,804,943	865	0
5 years	353,798	236	0
6 to 11 years	2,181,236	688	0
12 to 14 years	1,026,148	492	0
15 years	340,274	389	0
16 and 17 years	637,739	337	0
18 to 24 years	2,391,976	806	0
25 to 34 years	2,091,261	706	0
35 to 44 years	1,771,681	1,143	0
45 to 54 years	1,677,723	891	8
55 to 64 years	2,013,935	1,054	22
65 to 74 years	1,145,870	389	31
75 years and over	695,691	286	45
Female:	22,529,361	10,357	74
Under 5 years	1,730,648	811	0
5 years	338,260	229	0
6 to 11 years	2,091,832	814	0
12 to 14 years	984,832	636	7
15 years	330,341	163	8
16 and 17 years	623,373	342	8
18 to 24 years	2,938,139	1,297	0
25 to 34 years	3,288,904	1,484	11
35 to 44 years	2,618,050	1,166	7
45 to 54 years	2,093,750	1,123	0
55 to 64 years	2,394,677	1,228	30
65 to 74 years	1,606,946	665	0
75 years and over	1,489,609	399	3
Income in the past 12 months at or above poverty level:	281,236,067	104,817	2,534
Male:	140,410,519	52,350	1,265
Under 5 years	7,949,219	2,674	86
5 years	1,629,773	781	7
6 to 11 years	10,365,093	3,965	28
12 to 14 years	5,510,127	1,816	40
15 years	1,837,564	567	25
16 and 17 years	3,700,754	1,218	14
18 to 24 years	11,432,099	4,223	23
25 to 34 years	20,162,923	6,607	153
35 to 44 years	19,005,426	6,388	122
45 to 54 years	18,704,195	7,178	151
55 to 64 years	18,632,874	7,365	242
65 to 74 years	13,557,621	5,933	154
75 years and over	7,922,851	3,635	220
Female:	140,825,548	52,467	1,269
Under 5 years	7,579,318	2,497	65
5 years	1,554,236	672	0
6 to 11 years	9,880,929	3,222	41
12 to 14 years	5,242,034	1,629	25
15 years	1,763,653	416	0
16 and 17 years	3,539,941	1,499	48
18 to 24 years	10,383,838	3,608	61
25 to 34 years	19,004,663	6,317	119
35 to 44 years	18,424,189	6,371	151
45 to 54 years	18,735,695	7,164	131
55 to 64 years	19,429,976	7,549	239
65 to 74 years	14,950,065	6,703	253
75 years and over	10,337,011	4,820	136

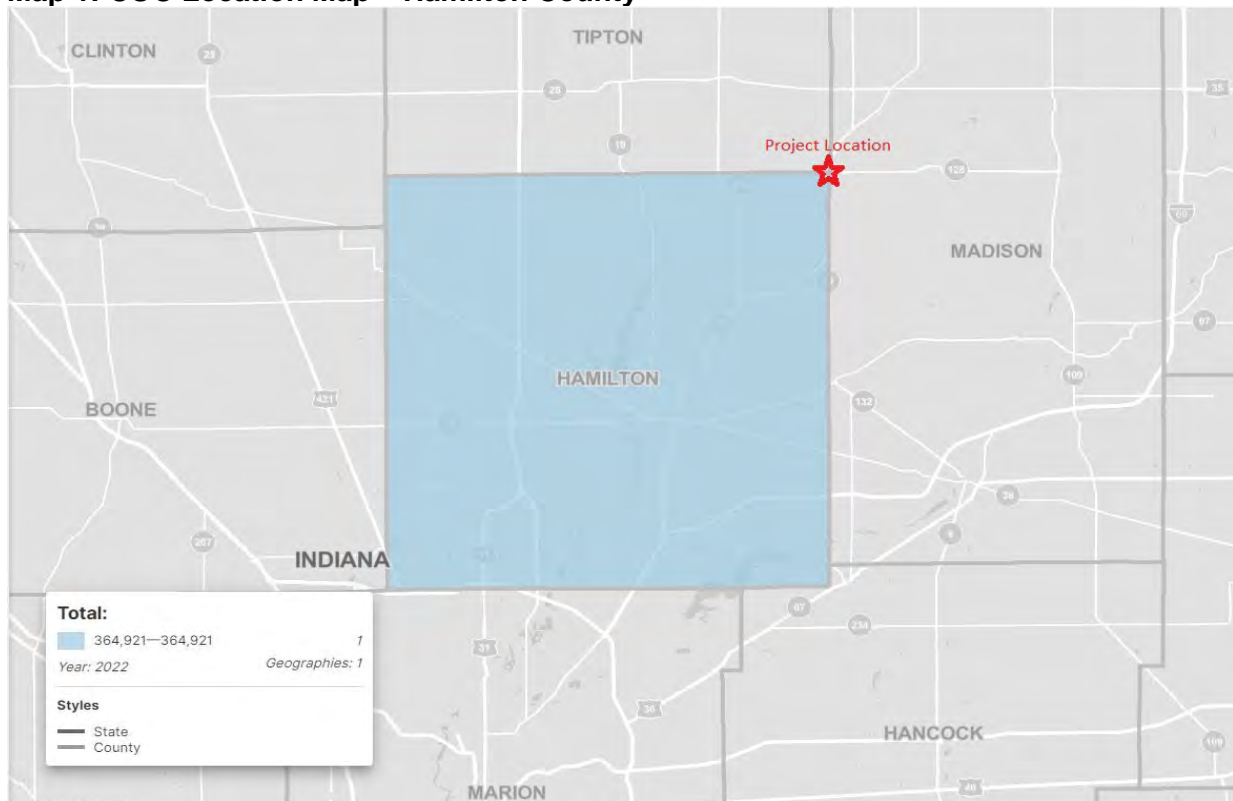
Table: ACSDT5Y2021.B03002

	United States	Tipton County, Indiana	Census Tract 201, Tipton County, Indiana
Label	Estimate	Estimate	Estimate
Total:	329,725,481	15,290	2,481
Not Hispanic or Latino:	268,918,512	14,835	2,283
White alone	196,010,370	14,461	2,241
Black or African American alone	40,196,302	48	0
American Indian and Alaska Native alone	1,936,842	26	0
Asian alone	18,554,697	70	18
Native Hawaiian and Other Pacific Islander alone	555,712	0	0
Some other race alone	1,208,267	2	2
Two or more races:	10,456,322	228	22
Two races including Some other race	1,446,567	0	0
Two races excluding Some other race, and three or more races	9,009,755	228	22
Hispanic or Latino:	60,806,969	455	198
White alone	28,778,739	308	178
Black or African American alone	1,196,710	0	0
American Indian and Alaska Native alone	785,819	0	0
Asian alone	228,227	33	0
Native Hawaiian and Other Pacific Islander alone	59,845	0	0
Some other race alone	17,174,529	70	0
Two or more races:	12,583,100	44	20
Two races including Some other race	10,609,037	44	20
Two races excluding Some other race, and three or more races	1,974,063	0	0

Table: ACSDT5Y2021.B17001

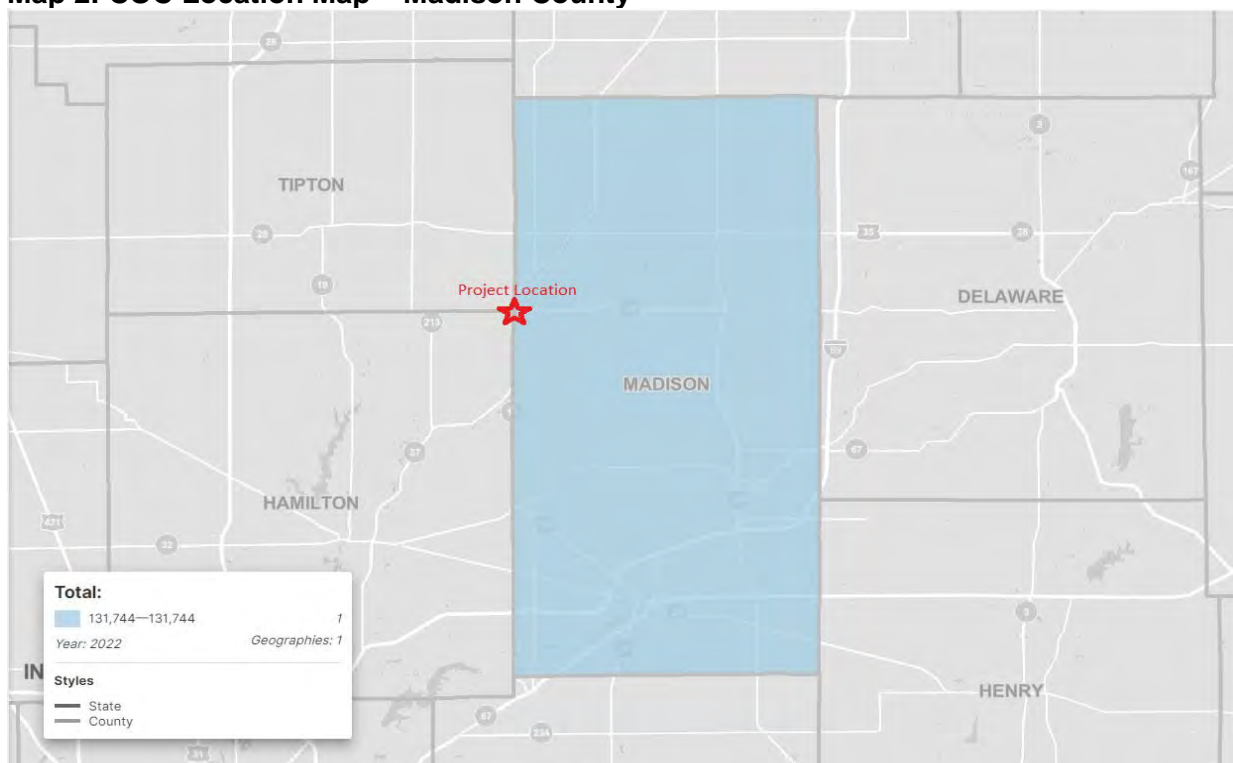
	United States	Tipton County, Indiana	Census Tract 201, Tipton County, Indiana
Label	Estimate	Estimate	Estimate
Total:	321,897,703	15,022	2,458
Income in the past 12 months below poverty level:	40,661,636	1,595	335
Male:	18,132,275	482	123
Under 5 years	1,804,943	34	12
5 years	353,798	15	0
6 to 11 years	2,181,236	95	61
12 to 14 years	1,026,148	26	4
15 years	340,274	6	0
16 and 17 years	637,739	23	0
18 to 24 years	2,391,976	33	0
25 to 34 years	2,091,261	55	5
35 to 44 years	1,771,681	22	0
45 to 54 years	1,677,723	27	2
55 to 64 years	2,013,935	39	0
65 to 74 years	1,145,870	50	28
75 years and over	695,691	57	11
Female:	22,529,361	1,113	212
Under 5 years	1,730,648	129	23
5 years	338,260	11	0
6 to 11 years	2,091,832	59	14
12 to 14 years	984,832	0	0
15 years	330,341	22	5
16 and 17 years	623,373	40	0
18 to 24 years	2,938,139	110	21
25 to 34 years	3,288,904	237	56
35 to 44 years	2,618,050	230	53
45 to 54 years	2,093,750	88	7
55 to 64 years	2,394,677	87	6
65 to 74 years	1,606,946	42	17
75 years and over	1,489,609	58	10
Income in the past 12 months at or above poverty level:	281,236,067	13,427	2,123
Male:	140,410,519	6,952	1,125
Under 5 years	7,949,219	391	129
5 years	1,629,773	36	30
6 to 11 years	10,365,093	507	10
12 to 14 years	5,510,127	83	10
15 years	1,837,564	48	17
16 and 17 years	3,700,754	208	20
18 to 24 years	11,432,099	611	115
25 to 34 years	20,162,923	791	120
35 to 44 years	19,005,426	805	158
45 to 54 years	18,704,195	1,052	157
55 to 64 years	18,632,874	1,111	123
65 to 74 years	13,557,621	839	181
75 years and over	7,922,851	470	55
Female:	140,825,548	6,475	998
Under 5 years	7,579,318	295	96
5 years	1,554,236	62	26
6 to 11 years	9,880,929	457	30
12 to 14 years	5,242,034	265	35
15 years	1,763,653	113	9
16 and 17 years	3,539,941	176	46
18 to 24 years	10,383,838	417	146
25 to 34 years	19,004,663	635	136
35 to 44 years	18,424,189	571	47
45 to 54 years	18,735,695	913	133
55 to 64 years	19,429,976	1,047	154
65 to 74 years	14,950,065	889	90
75 years and over	10,337,011	635	50

Map 1: COC Location Map – Hamilton County

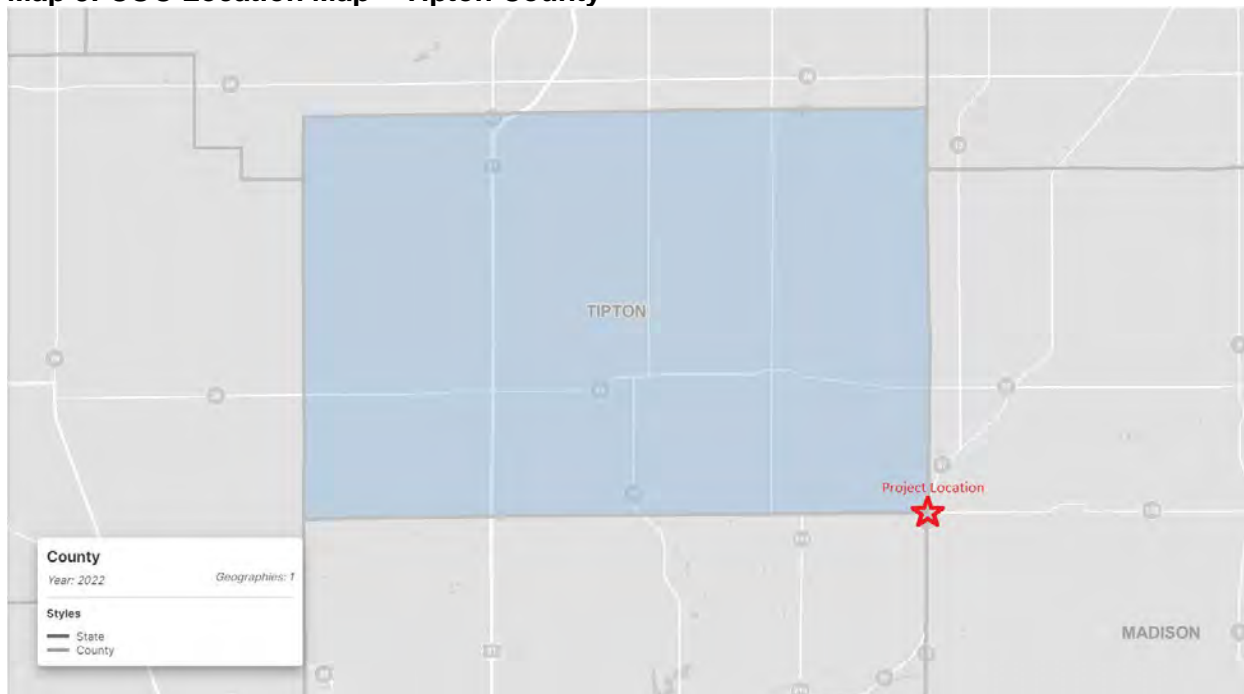


Source: US Census Bureau Maps, accessed November 13, 2023

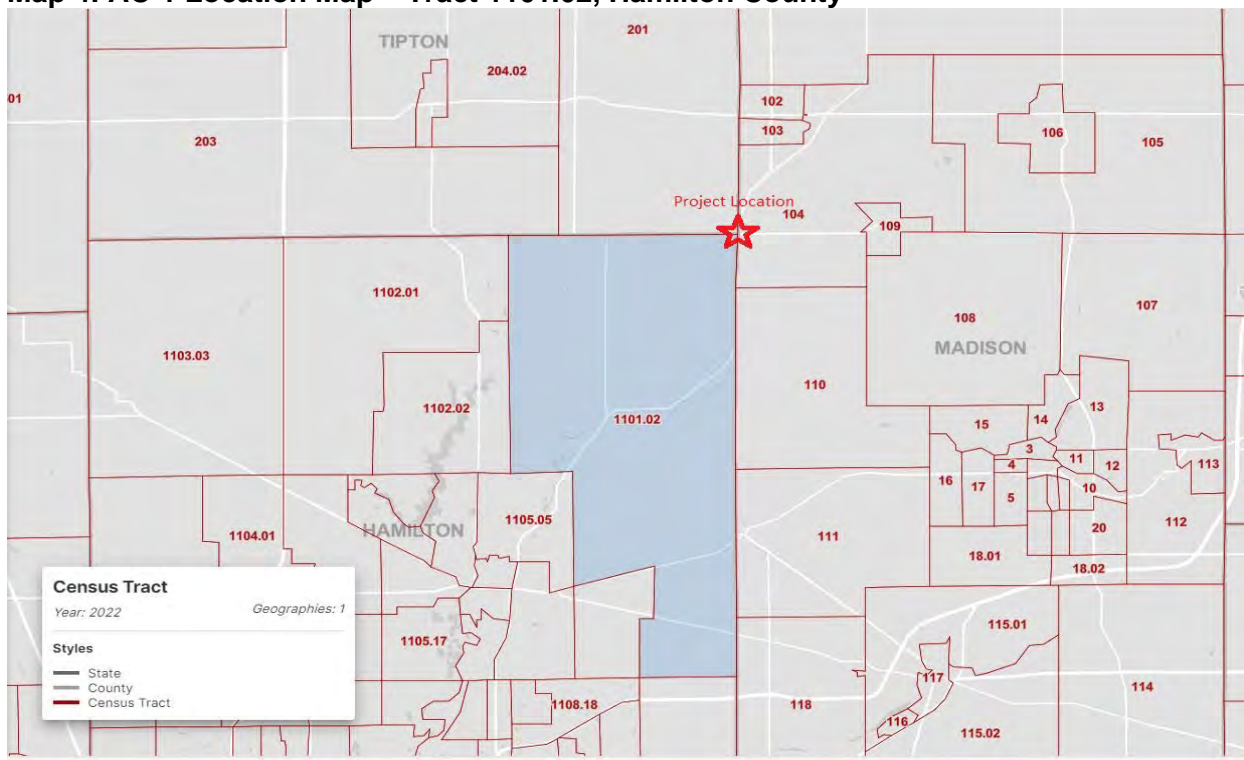
Map 2: COC Location Map – Madison County



Source: US Census Bureau Maps, accessed November 13, 2023

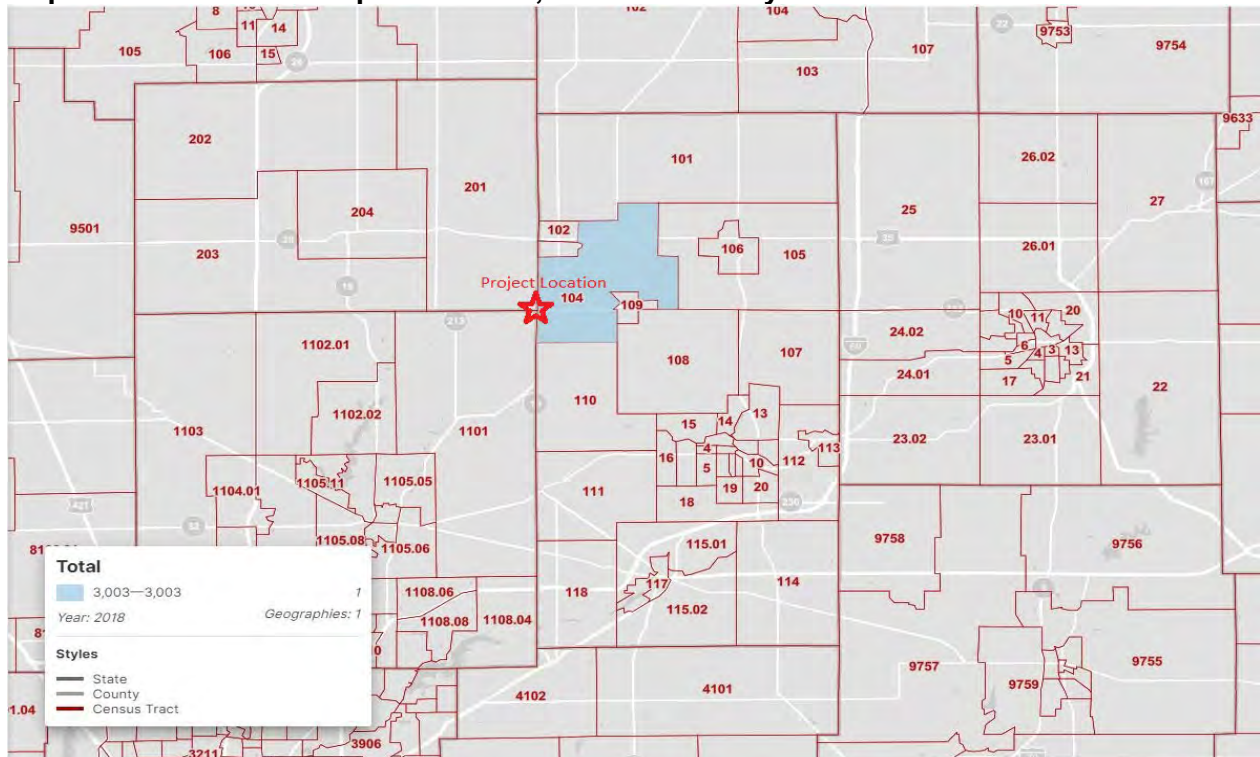
Map 3: COC Location Map – Tipton County

Source: US Census Bureau Maps, accessed November 13, 2023

Map 4: AC-1 Location Map – Tract 1101.02, Hamilton County

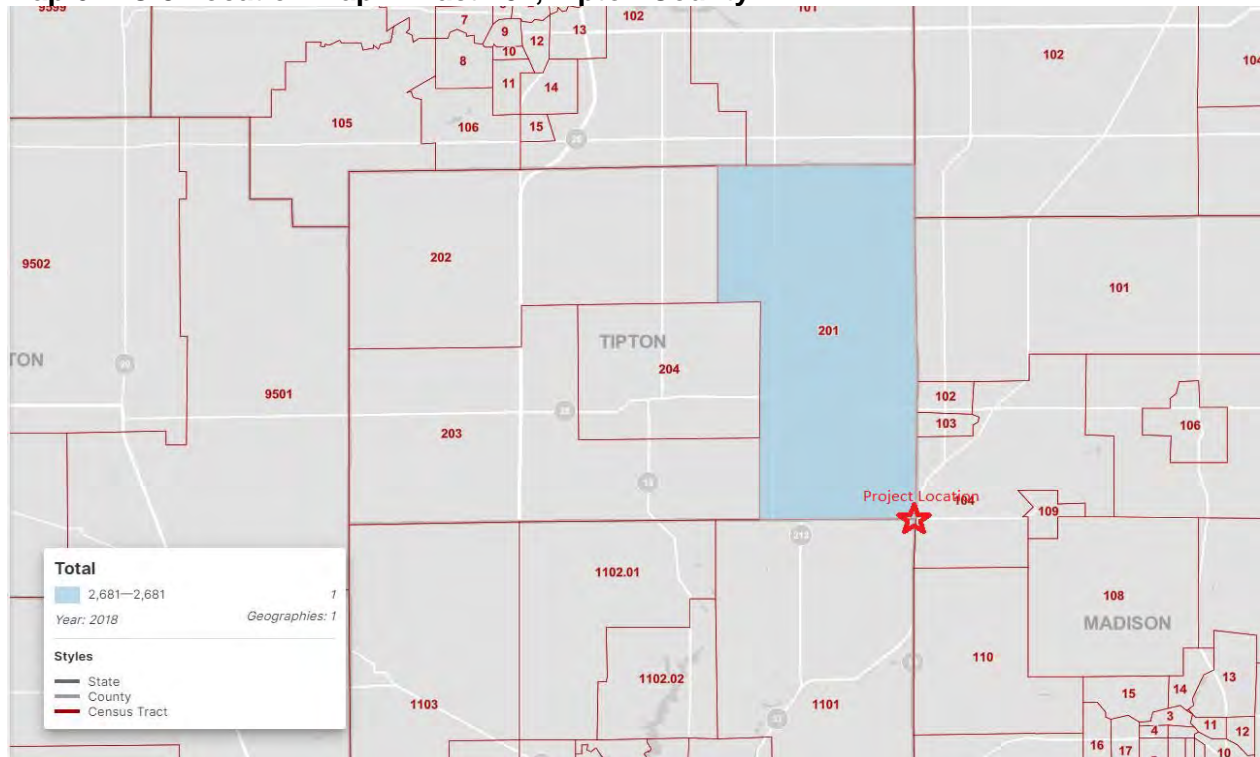
Source: US Census Bureau Maps, accessed November 13, 2023

Map 5: AC-2 Location Map – Tract 104, Madison County



Source: US Census Bureau Maps, accessed November 13, 2023

Map 6: AC-3 Location Map – Tract 201, Tipton County



Source: US Census Bureau Maps, accessed November 13, 2023

Census Table	Census Table Line Item	COC	AC-1	Notes
		Hamilton County	Census Tract 1101.02, Hamilton County	
Low-Income				
B17001	Pop, for whom Poverty Status Determined: Total	339,636	4,200	
B17001	Pop, for whom Poverty Status Determined: Income past 12 mos below poverty level	13,437	26	
	<i>% Low-Income</i>	4	1	
	<i>125 % COC</i>	5	-	
	<i>Potential Low-Income EJ Impact?</i>		No	Is the AC greater than 50%?
			No	Is the AC 25% higher than the COC?
Minority				
B03002	Total Population: Total	341,616	4,200	
B03002	Total Population - Not Hispanic or Latino: White Alone	280,770	3,866	
	<i>Number Non-White/Minority</i>	60,846	334	
	<i>% Non-White/Minority</i>	18	8	
	<i>125 % COC</i>	22	-	
	<i>Potential Minority EJ Impact?</i>		No	Is the AC greater than 50%?
			No	Is the AC 25% higher than the COC?

Census Table	Census Table Line Item	COC	AC-2	Notes
		Madison County	Census Tract 104, Madison County	
Low-Income				
B17001	Pop, for whom Poverty Status Determined: Total	123,456	2,714	
B17001	Pop, for whom Poverty Status Determined: Income past 12 mos below poverty level	18,639	180	
	<i>% Low-Income</i>	15	7	
	<i>125 % COC</i>	19	-	
	<i>Potential Low-Income EJ Impact?</i>		No	Is the AC greater than 50%?
			No	Is the AC 25% higher than the COC?
Minority				
B03002	Total Population: Total	130,037	2,714	
B03002	Total Population - Not Hispanic or Latino: White Alone	109,091	2,582	
	<i>Number Non-White/Minority</i>	20,946	132	
	<i>% Non-White/Minority</i>	16	5	
	<i>125 % COC</i>	20	-	
	<i>Potential Minority EJ Impact?</i>		No	Is the AC greater than 50%?
			No	Is the AC 25% higher than the COC?

Census Table	Census Table Line Item	COC	AC-3	Notes
		Tipton County	Census Tract 201, Tipton County	
Low-Income				
B17001	Pop, for whom Poverty Status Determined: Total	15,022	2,458	
B17001	Pop, for whom Poverty Status Determined: Income past 12 mos below poverty level	1,595	335	
	% Low-Income	11	14	
	125 % COC	13	-	
	Potential Low-Income EJ Impact?		No	Is the AC greater than 50%?
			Yes	Is the AC 25% higher than the COC?
Minority				
B03002	Total Population: Total	15,290	2,481	
B03002	Total Population - Not Hispanic or Latino: White Alone	14,461	2,241	
	Number Non-White/Minority	829	240	
	% Non-White/Minority	5	10	
	125 % COC	7	-	
	Potential Minority EJ Impact?		No	Is the AC greater than 50%?
			Yes	Is the AC 25% higher than the COC?

From: [Fair, Terri](#)
To: [Chad Kelly](#)
Subject: EJ Analysis Section Review: DES 2003081: SR 13 & SR 128, Intersection Improvement RAB, Hamilton/Madison/Tipton Counties, IN [21-1155.03]
Date: Friday, April 26, 2024 4:19:55 PM
Attachments: [EJ Analysis 2003081 Revised.pdf](#)

INDOT-Environmental Services Division (ESD) has reviewed the project information along with the Environmental Justice (EJ) Analysis for the above referenced project. With the information provided, the project may require right-of-way, requires no relocations, and would not disrupt community cohesion or create a physical barrier. With the information provided, INDOT-ESD would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low-income populations of EJ concern relative to non-EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.