

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

Road No./County:	State Road (SR) 58/Jackson County
Designation Number(s):	1900321
Project Description/Termini:	Small structure replacement and roadway rehabilitation on SR 58, approximately 7.09 miles east of SR 446

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

_____	_____
INDOT DE Initials and Date	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: _____ Erin Mulryan, SJCA Inc.

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Part I – Public Involvement

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

Does the project have a historic bridge processed under the Historic Bridges PA*?	Yes <input type="checkbox"/>	No <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 Entry letters were mailed to potentially affected property owners near the project area on December 5, 2019, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in Appendix G-1 through G-2.

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

Public Controversy on Environmental Grounds

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

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

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

Sponsor of the Project: INDOT INDOT District: Seymour

Local Name of the Facility: SR 58

Funding Source (mark all that apply): Federal [X] State [X] 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.

Need:

The need for this project is due to the poor rating of the existing structure. The August 14, 2019, Culvert Inspection Report by INDOT gave the structure a condition rating of 4 of 9 (poor) due to failing headwalls and sloping abutments with spalls and cracks in the abutments. Bank erosion is affecting the roadway. Also, the slab is sagging down on both ends and there was a one (1) foot scour hole on north side of the structure and there is sediment present throughout the structure (Appendix I-13 through I-14).

Purpose:

The purpose of this project is to provide a structure with a rating to at least 7 of 9 (good) or better.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Jackson Municipality: N/A

Limits of Proposed Work: From approximately 240 feet to the west of the structure, CV 058-036-96.15, to approximately 70 feet east of the project structure

Total Work Length: 0.06 Mile(s) Total Work Area: 0.444 Acre(s)

Is an Interstate Access Document (IAD)1 required?

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

Yes1 [] No [X] Date: []

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.

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

Location:

This project is located on SR 58, approximately 7.09 miles east of SR 446 in Jackson County, Indiana. Specifically, the project is in Section 14, Township 6 North, Range 2 East in Owen Township, as shown on the Norman 7.5-minute Quadrangle Map. This project will be approximately 0.06 mile in length. Project location graphics are included in Appendix B-1 to B-3.

Existing Conditions:

The existing SR 58 roadway is classified as a Rural Major Collector and consists of two (2) 9-foot-wide travel lanes with 3-foot-wide usable shoulders. The posted speed limit in the project area is 45 miles per hour (mph). The existing structure, CV 058-036-96.15, is a 40-foot-long reinforced concrete box (RCB) structure that is 5.7-foot high and 2.7-foot wide. The existing structure carries an unnamed tributary (UNT) to Tipton Creek under SR 58 from north to south. The structure is at a significant skew with the roadway alignment and is located within a tight horizontal curve within a superelevated pavement section. Guardrails exist on both sides of the structure. The structure is bordered on either side by forested land. Minimal ditching exists on the north side of the roadway through the curve, which has begun to cause erosion and deterioration of the roadway edge near the structure. The August 14, 2019, INDOT Large Culvert Inspection Report gave the structure a rating of 4 of 9 (poor), citing that the headwalls have failed, affecting the active roadway, and the abutments were sloping with spalls and cracks in the abutments. The slab is sagging down on both ends, and there was a one (1) foot scour hole on the north side with sediment throughout the structure. In addition, bank erosion is affecting the active roadway (Appendix I-13 to I-14).

The surrounding area is hilly and heavily wooded. There are no utilities located within the project area.

Preferred Alternative:

The preferred alternative is to replace the existing structure, CV 058-036-96.15, with a seven (7) foot by four (4) foot RCB culvert that is 46 feet in length. Headwalls and wingwalls will be placed at the inlet and outlet of the new structure. The structure will be sumped six (6) inches to allow for a natural channel bottom to develop. Riprap will be placed over geotextile at the inlet and outlet and along the west slope adjacent to the roadway. A paved side ditch approximately 169 linear feet in length and a permanent turf reinforcement mat will be placed on the west side of the roadway to reinforce the roadside ditch and to prevent erosion from undermining of the roadway. The existing guardrails will be replaced throughout the project limits. Full depth hot mix asphalt (HMA) pavement reconstruction will occur at the structure. Travel lanes will remain nine (9) feet wide, with two (2) to three (3) foot paved shoulders and a two (2) to four (4) foot aggregate/ earthen shoulder. The shoulder width will vary due to tightness of the curve and in the roadway where the guardrails are being replaced. Refer to Appendix B-7 to B-13 for project plans.

This alternative meets both the purpose and need of the project by providing a structure with a rating to at least 7 of 9 (good) or better.

Maintenance of Traffic (MOT) is anticipated to be a closure of SR 58 and a detour utilizing SR 135, United States (US) 50, and SR 446, resulting in approximately 23 miles and 40 minutes of additional travel. More details regarding the road closure and detour can be found in the MOT section of this document.

Logical Termini/Independent Utility:

The termini allow for the construction equipment to access the structure for replacement, the placement of riprap and turf along the slopes and at the structure inlet and outlet, and for construction of the paved ditch. The project does not rely on another project to meet its purpose and need. Therefore, the project has logical termini and independent utility.

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.

There were three (3) alternatives, as well as the "do nothing" alternative discussed in the March 27, 2020, Abbreviated Engineering Assessment by USI Consultants and the August 15, 2018, INDOT Hydraulics Memo (Appendix I-6 to I-7 and I-15 to I-17).

83-inch by 57- inch Corrugated Metal Pipe Arch (CMPA) with Square Edge Headwall, Sumped 6 inches

This alternative involves replacing the existing structure with an 83- inch by 57-inch CMPA with a square edge headwall sumped six (6) inches. Revetment riprap would be placed at the outlet for scour protection. The corrugated pipe was determined not to be

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hydraulically adequate. Therefore, this alternative was dismissed from further consideration.

91-inch by 58-inch Reinforced Concrete Elliptical Pipe (RCEP) Sumped 6 inches

This alternative involves replacing the existing structure with a 91-inch by 58-inch RCEP sumped six (6) inches. Revetment riprap would be placed at the outlet for scour protection. It was determined that this type of structure would not be hydraulically adequate. Therefore, this alternative was dismissed from further consideration.

78-inch Reinforced Concrete Pipe (RCP) Sumped 6 inches

This alternative involves replacing the existing structure with a 49-foot-long, seven (7) foot by four (4) foot RCP sumped six (6) inches. Revetment riprap would be placed at the outlet for scour protection. It was determined that this type of structure would not be hydraulically adequate. Therefore, this alternative was dismissed from further consideration.

Do Nothing Alternative

This alternative allows the existing structure to remain in place with no improvements. This alternative will result in continued deterioration of the structure, which could allow development of unsafe travel conditions, roadway failure, and an increase in repair costs in the future. This alternative does not meet the purpose and need of this project. Therefore, it was discarded from 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):

ROADWAY CHARACTER:

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

Name of Roadway: SR 58
 Functional Classification: Rural Major Collector
 Current ADT: 365 VPD (2023) Design Year ADT: 365 VPD (2043)
 Design Hour Volume (DHV): 365 Truck Percentage (%): 5
 Designed Speed (mph): 45 Legal Speed (mph): 45

	Existing	Proposed
Number of Lanes:	2	2
Type of Lanes:	asphalt through lanes	asphalt through lanes
Pavement Width:	21 ft.	21 ft.
Shoulder Width:	3 ft.	2-4 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

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BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s): CV 058-036-96.15 Sufficiency Rating: N/A
 (Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	40 foot long, 5.7-foot by 2.7-foot RCB		46 foot long, seven 7-foot by 4-foot RCB	
Number of Spans:	1		1	
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.

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

The existing structure, CV 058-036-96.15, is a 40-foot-long, 5.7-foot by 2.7-foot RCB that carries an UNT to Tipton Creek under SR 58 from north to south. The structure is at a significant skew from the roadway, located within a tight horizontal curve, and is within a superelevated pavement section. The project proposes to replace the existing structure with a seven (7) foot by four (4) foot RCB with a length of 46 feet, sumped six (6) inches, with headwalls, wingwalls, and riprap at the inlet and outlet. No other bridges or small structures are within the project area.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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.

MOT is anticipated to be a short-term closure of SR 58 due to the narrow and heavily wooded corridor at the project location. The detour route will utilize SR 135, US 50, and SR 446, and will add approximately 23 miles and 40 minutes of travel. Signs will be used in advance of the project location to limit traffic flow near the project site. Barricades will be placed at the project location indicating the hard closure. Access for local businesses and residences will be maintained throughout construction. See Appendix B-10 for detailed MOT plans.

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 will cease upon project completion. Delays may occur during construction but will cease with project completion.

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ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 375,000 (2020) Right-of-Way: \$ 50,000 (2022) Construction: \$ 593,006 (2024)

Anticipated Start Date of Construction: July 2022

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0	0
Commercial	0	0
Agricultural	0	0
Forest	0.63	0
Wetlands	0	0
Other:	0	0
Other:	0	0
TOTAL	0.63	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.

Existing ROW limits are approximately 10.5 feet from the center line of pavement in each direction of travel throughout the project area. Proposed ROW limits will vary from 60 feet to 40 feet from the edge of pavement to the north of SR 28 and vary from 31 feet to 50 feet from the edge of pavement to the south of SR 28 (Appendix B-11).

The project requires approximately 0.63 acre of permanent ROW. ROW will be acquired from the north side of the roadway to allow for access to the structure, riprap placement, the paved ditch, and guardrail replacement; and acquired from the south of the structure to allow access to the structure, riprap placement, and guardrail replacement.

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

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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.

An early coordination letter was sent to regulatory agencies on December 31, 2020, June 4, 2021, and June 9, 2021. All early coordination documentation can be found in Appendix C.

Agency	Date Sent	Response Date	Appendix C- page
US Fish and Wildlife Service (USFWS)	December 31, 2020	January 27, 2021	C-14
Indiana Geological and Water Survey (IGWS) (Automated response letter)	December 31, 2020	December 31, 2020	C-4
Indiana Department of Environmental Management (IDEM) (Automated response letter)	December 31, 2020	December 31, 2020	C-7
Midwest Regional Office Nation Park Service (NPS)	December 31, 2020	No Response Received	-
Indiana Department of Natural Resources (IDNR)	December 31, 2020	January 29, 2021	C-16
US Army Corps of Engineers Louisville District (USACE)	December 31, 2020	No Response Received	-
Federal Highway Administration (FHWA)	December 31, 2020	No Response Received	-
US Department of Housing and Urban Development (HUD)	December 31, 2020	No Response Received	-
INDOT Seymour District	December 31, 2020	No Response Received	-
Jackson County Commissioner	December 31, 2020	No Response Received	-
Jackson County Highway Department	December 31, 2020	No Response Received	-
Hoosier National Forest	December 31, 2020	No Response Received	-
INDOT Project Manager- Terry Summers	December 31, 2020	No Response Received	-
IDEM Groundwater Section	June 4, 2021	June 9, 2021	C-19
(Source Water Owner Contact)	June 9, 2021	June 9, 2021	C-20
(Source Water Owner Contact)	June 9, 2021	June 9, 2021	C-21

Specific agency responses and recommendations are included in the corresponding sections of this document. All applicable recommendations are included in the Environmental Commitments section of this Categorical Exclusion (CE) document.

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SECTION B – ECOLOGICAL RESOURCES:

Streams, Rivers, Watercourses & Other Jurisdictional Features

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

Presence

X

Impacts

Yes	No
X	

Total stream(s) in project area: 470 Linear feet

Total impacted stream(s): 155 (permanent) Linear feet
50 (temporary)

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
UNT 1 to Tipton Creek	Intermittent	370	155 linear feet of permanent impacts 50 linear feet of temporary impacts	Flows east and then northeast under SR 58 within the investigated area, then northeast of the project toward Tipton Creek. UNT 1 to Tipton Creek is likely a Waters of the U.S. (Appendix F-4 to F-5).
UNT 2 to Tipton Creek	Ephemeral	100	N/A	Flows northwest to connect to UNT 1 to Tipton Creek. UNT 2 to Tipton Creek is not likely a Waters of the U.S. because it exhibits ephemeral flow conditions (Appendix F-5).

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 a desktop review, the aerial map of the project area (Appendix B-3), and the red flag investigation (RFI) report (Appendix E-2), there are five (5) streams within the 0.5-mile search radius and no streams within the project area. That number was updated to seven (7) total streams in the 0.5-mile search radius; two additional (2) stream segments were found to be in the project area during a site visit by SJCA Inc. on August 26, 2020. The stream segments that were identified are not included as water features on the US Geological Survey (USGS) topography map (Appendix F-10) or the National Wetlands Inventory (NWI) map (Appendix F-13) within the investigated area. There are five (5) IDEM 303d listed stream segments located within 0.5 mile of the project area. The nearest segment is 0.10 mile northeast of the project area.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office (EWPO) on January 8, 2021. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that UNT 1 to Tipton Creek is likely a jurisdictional waterway and UNT 2 to Tipton Creek is likely not a jurisdictional waterway. The USACE makes all final determinations regarding jurisdiction.

There are no Federal, Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana; navigable waterways or National Rivers Inventory waterways present in the project area. Sections of the East Fork of the White River and the Muscatatuck River are listed as Navigable on the IDNR website, <https://www.in.gov/nrc/2392.htm>, in Jackson County. However, these sections are not located within or adjacent to the project area. Therefore, no impacts are expected.

UNT 1 to Tipton Creek is an intermittent stream throughout the investigated area. The upstream drainage area of UNT 1 to Tipton Creek is 0.036 square miles from where it crosses under SR 58. Approximately 370 linear feet of this tributary is within the investigated area. The stream measurements were taken outside the influence of the structure. The stream has a bank full width of approximately seven (7) feet and is characterized by silt substrate on the south side of SR 58 and riprap substrate on the north side

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of SR 58, with low flow at the time of investigation, and an OHWM of six (6) feet wide and approximately two (2) inches deep. The stream has heavy in-stream cover and vegetation but shows characteristics of flow. The stream has moderate sinuosity and contains no riffle/run complexes. The quality of the stream is rated average due to the to the lack of riffles/runs, moderate floodplain habitat, moderate sinuosity, high in-stream cover, and intermittent flow conditions. UNT 1 to Tipton Creek receives drainage from the runoff from SR 58 and surrounding hills. The stream flows northeast under SR 58, and then eventually northeast towards Tipton Creek. Tipton Creek eventually connects to East Fork White River. East Fork White River is approximately 14 miles southwest of the project area. East Fork White River is a navigable waterway and jurisdictional under the USACE. Due to the presence of an OHWM and eventual connectivity to the East Fork White River, UNT 1 to Tipton Creek is likely a Waters of the U.S.

UNT 2 to Tipton Creek is an ephemeral stream throughout the investigated area. The upstream drainage area of UNT 2 to Tipton Creek is 0.004 square miles, from where it connects to UNT 1 to Tipton Creek. Approximately 100 linear feet of this tributary is within the investigated area. The stream measurements were taken outside the influence of the structure. The stream has a bank full width of approximately five (5) feet and is characterized by silt substrate and rock, with no flow at the time of investigation, and an OHWM of three (3) feet wide and approximately two (2) inches deep. The stream has no sinuosity and contains no riffle/run complexes. The quality of the stream is rated poor due to the to the lack of riffles/runs, low floodplain habitat, low in-stream cover, and ephemeral flow conditions. UNT 2 to Tipton Creek receives drainage from the runoff from the surrounding hills. The stream flows northwest to connect to UNT 1 to Tipton Creek. Tipton Creek eventually connects to East Fork White River. East Fork White River is approximately 14 miles southwest of the project area. UNT 2 to Tipton Creek is not likely a jurisdictional water feature because it exhibits ephemeral flow conditions. INDOT asks that USACE take jurisdiction over this feature since impacts will not likely necessitate mitigation.

Approximately 155 total linear feet (0.02 acre) of UNT 1 to Tipton Creek will be permanently impacted by replacing the structure and the placement of riprap. Approximately 50 linear feet (0.01 acre) of UNT 1 to Tipton Creek will be temporarily impacted by accessing the structure for the placement of riprap. Total stream impact avoidance is not practicable because access to the structure is necessary for replacement and to meet the purpose and need of the project. A USACE Regional General Permit (RGP) is anticipated. Mitigation is not anticipated.

Early Coordination letters were sent to agencies on December 31, 2020. IDNR responded on January 29, 2021, and gave recommendations regarding the placement and types of structures, maintaining natural stream flow conditions, the placement and type of riprap used, maintaining clearing of trees and brush to areas within project limits, restricting work in the stream channel from April 1 through June 30 without prior IDNR approval, implementing proper erosion control measures, limiting excavation in the low flow area of streams, and seeding and protecting bank slopes upon project completion (Appendix C-16 to C-18). IDEM's December 31, 2020, automated response letter gave recommendations for obtaining appropriate waterway permits and suggested limiting the disturbance to vegetation and trees overhanging water bodies to that which is absolutely necessary to complete the project (Appendix C-7 to C-13). USFWS responded on January 27, 2021, with standard recommendations to not clear trees and vegetation outside of the project limits, for the new structure to provide natural habitat to the aquatic community, to restrict channel work to that which is necessary to replace the structure, to minimize the use of riprap, and to avoid work in the stream channel during fish spawning season (Appendix C-14 to C-15). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Open Water Feature(s)	Presence	Impacts	
		Yes	No
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retention/Detention Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm Water Management Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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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 (Appendix B-3), and the RFI report (Appendix E-2) there are four (4) lakes within the 0.5-mile search radius. No open water features were reported within or adjacent to the project area, which was confirmed by the site investigation by SJCA Inc. on August 26, 2020.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT EWPO on January 8, 2021. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that no open water features were present. Therefore, no impacts are expected.

	<u>Presence</u>	<u>Impacts</u>	
Wetlands	<input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
		0.007 (permanent); 0.005 (temporary) Acre(s)	
Total wetland area:	<u>0.07</u>	Acre(s)	Total wetland area impacted:

(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, likely Water of the US, appendix reference)
1	forested	0.07	0.007 acre of permanent impacts 0.005 acre of temporary impacts	Located within the bank of UNT 1 to Tipton Creek and is poor in quality. Wetland 1 is likely jurisdictional due to the connectivity to UNT 1 to Tipton Creek (Appendix F-5).

Wetlands (Mark all that apply)	<u>Documentation</u>	<u>ESD Approval Dates</u>
Wetland Determination	<input checked="" type="checkbox"/>	<input type="text" value="January 8, 2021"/>
Wetland Delineation	<input checked="" type="checkbox"/>	<input type="text" value="January 8, 2021"/>
USACE Isolated Waters Determination	<input type="checkbox"/>	<input type="text"/>

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;	<input type="checkbox"/>
Substantially increased project costs;	<input type="checkbox"/>
Unique engineering, traffic, maintenance, or safety problems;	<input checked="" type="checkbox"/>
Substantial adverse social, economic, or environmental impacts, or	<input checked="" type="checkbox"/>
The project not meeting the identified needs.	<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 (Appendix B-3), and the RFI report (Appendix E-2) there are 11 wetlands within the 0.5-mile search radius. That number was updated to 12 wetlands during the site visit on August 26, 2020, by SJCA Inc.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT EWPO on January 8, 2021. Please refer

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to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that one (1) wetland is present within the project area. The USACE makes all final determinations regarding jurisdiction.

Wetland 1 is located within the streambanks of UNT 1 to Tipton Creek. It was dominated in the herb stratum by jewelweed (*Impatiens capensis*), and ladyfern (*Athyrium filix-femina*), and sugar maple (*Acer saccharum*) in the tree stratum. Hydrophytic vegetation, hydric soil, and wetland hydrology were present at the sample point (Appendix F-5); therefore, the wetland criteria were met. Wetland 1 is a forested wetland of poor quality, with approximately 0.07 acre present within the investigated area. Wetland 1 is likely jurisdictional due to its connectivity to UNT 1 to Tipton Creek.

Approximately 0.007 acre of Wetland 1 will be permanently impacted by the new structure and by the placement of riprap. Approximately 0.005 acre of Wetland 1 will be temporarily impacted for access to the structure and the placement of riprap. Total wetland impact avoidance is not practicable because access to the structure is necessary for replacement and to meet the purpose and need of the project. Avoidance would potentially require unique engineering due to the hilly terrain and steep slopes in the project area and would potentially require the removal of additional terrestrial habitat. A USACE 401/404 RGP is anticipated. Mitigation is not anticipated. Wetland boundaries will be marked as "Do Not Disturb" on the final plans and on the project site; refer to the Environmental Commitments section of this CE document.

Early Coordination letters were sent to agencies on December 31, 2020. IDEM's December 31, 2020, automated response gave permit recommendations for construction in wetlands (Appendix C-7 to C-13). No other recommendations from agencies regarding impacts to wetlands were received. All applicable recommendations are included in the Environmental Commitments of this CE document.

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

Total terrestrial habitat in project area: 0.444 Acre(s) Total tree clearing: 0.27 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 August 26, 2020, by SJCA Inc, and the aerial map of the project area (Appendix B-3) the project area consists primarily of mature trees and plants commonly found along wooded roadsides. Tree species consists of American beech (*Fagus grandifolia*), Sugar maple (*Acer saccharum*), and Shellbark hickory (*Carya laciniosa*). Herbaceous plant species consists of Ladyfern (*Athyrium filix-femina*), Jewelweed (*Impatiens capensis*), Christmas fern (*Polystichum acrostichoides*), and Wild yam (*Dioscorea villosa*).

The preferred alternative will require approximately 0.444 acre of total land disturbance for replacement of the structure and improvement of the roadway. Approximately 0.27 acre of tree removal is anticipated for access to the structure for removal and replacement and installation of riprap, the proposed paved ditch, and the installation of a turf reinforcement mat. Avoidance of impacts are not practicable because it would not allow for the project to proceed and the purpose and need of the project would not be met.

An early coordination letter was sent to agencies on December 31, 2020, for comment on impacts to terrestrial habitat. The IDEM automated response dated December 31, 2020, recommended limiting vegetation and tree removal to that which is absolutely necessary and provided permit recommendations for land disturbance (Appendix C-7 to C-13). The USFWS responded on January 27, 2021, with recommendations regarding tree removal and stabilizing disturbed soils (Appendix C-14 to C-15). The IDNR responded on January 29, 2021, with recommendations regarding replacement of non-wetland tree replacement, stabilizing and revegetating disturbed soils with native species after construction, and developing a mitigation plan for unavoidable habitat impacts (Appendix C-16 to C-18). All applicable recommendations are included in the Environmental Commitments of this CE document.

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

Determination Received for Listed Bats from USFWS: NE NLAA LAA

Other Species not included in IPaC

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

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

Migratory Birds

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

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

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

Based on a desktop review and the RFI report (Appendix E-8 to E-10), completed by SJCA Inc. on February 17, 2021, the IDNR Jackson Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR Division of Fish and Wildlife (DFW) early coordination response letter dated January 29, 2021 (Appendix C-16), the Natural Heritage Program's Database was checked and no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C-35 to C-40). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*). No additional species were found within or adjacent to the project area other than the Indiana bat and northern long-eared bat.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on February 16, 2021, and based on the responses provided, the project was found to "may affect, but not likely to adversely affect" the Indiana bat and/or the NLEB (Appendix C-23 to C-32). INDOT reviewed and verified the effect finding on February 16, 2021 and requested USFWS's review of the finding (Appendix C-22). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Mitigation Measures (AMMs) are included as firm commitments in the *Environmental Commitments* section of this document. These include the restrictions on the use of temporary lighting and tree removal. The project falls under the "2013 USFWS Interim Policy for the Review of Highway Transportation Projects in Indiana" (found at <https://www.in.gov/indot/2523.htm>).

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

Geological and Mineral Resources

Project located within the Potential Karst Features Area of Indiana
 Karst features identified within or adjacent to the project area
 Oil/gas or exploration/abandoned wells identified in the project area

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

Date Karst Study/Report reviewed by INDOT EWPO (if applicable): N/A

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Discuss if project is located in Potential Karst Features Area of Indiana and if any karst features have been identified in the project area (from RFI). Discuss response received from IGWS coordination. Discuss if any mines, oil/gas, or exploration/abandoned wells were identified and if impacts will occur. Describe if any impacts will occur to any karst features. Include discussion of karst 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, the project is outside of the designated karst region of Indiana as outlined in the October 13, 1993, Memorandum of Understanding (MOU). According to the USGS topographic map in Appendix B-2 and the RFI report (Appendix E-2), there are no karst features identified within or adjacent to the project area. In the early coordination response on December 31, 2020, the IGWS did not indicate that karst features exist in the project area (Appendix C-4 to C-6). The IGWS stated that there are no geological hazards documented in the area, there is a high potential for bedrock resources, and there are no sand or gravel resources or active or abandoned mineral resources extraction sites documented in the area. The features will not be affected because there are no bedrock resource extraction sites within or adjacent to the project area. The response from IGWS has been communicated with the designer on February 22, 2021. No impacts are expected.

SECTION C – OTHER RESOURCES

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Drinking Water Resources			
Wellhead Protection Area(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Source Water Protection Area(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water Well(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urbanized Area Boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Water System(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the project located in the St. Joseph Sole Source Aquifer (SSA):		<input type="checkbox"/>	<input checked="" type="checkbox"/>
If Yes, is the FHWA/EPA SSA MOU Applicable?		<input type="checkbox"/>	<input type="checkbox"/>
If Yes, is a Groundwater Assessment Required?		<input type="checkbox"/>	<input type="checkbox"/>

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.

Sole Source Aquifer

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

Wellhead Protection and Source Water

The Indiana Department of Environmental Management's Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on June 4, 2021, by SJCA Inc. This project is not located within a Wellhead Protection Area but is located within a Source Water Area. An early coordination letter was sent to IDEM Groundwater Section on June 4, 2021, to request contact information for the Source Water Area and a response with the contract information for Salt Creek Services, Inc. and the City of Bloomington Utilities was received on June 9, 2021 (Appendix C-19). The City of Bloomington Water Quality Coordinator responded on June 9, 2021, stating that the entity had no comments regarding the project (Appendix C-20). Bynum Fanyo Utilities, Inc. responded on June 9, 2021, stating that none of its clients, including Salt Creek Services, have any facilities in the area of the proposed project (Appendix C-21). No impacts are expected.

Water Wells

The Indiana Department of Natural Resources Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on June 4, 2021, by SJCA Inc. No wells are located near the project. Therefore, no impacts are expected.

Urban Area Boundary

Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) by SJCA Inc. on January 22, 2021, this project is not located in an Urban Area Boundary (UAB) location. No impacts are expected.

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Public Water System

Based on a desktop review, a site visit on August 26, 2020, by SJCA Inc., and the project plans (Appendix B-7 to B-13), there are no public water systems identified. Therefore, no impacts are expected.

Floodplains

Project located within a regulated floodplain
 Longitudinal encroachment
 Transverse encroachment
 Homes located in floodplain within 1000' up/downstream from project

Presence

Impacts

Yes	No

If applicable, indicate the Floodplain Level?

Level 1 Level 2 Level 3 Level 4 Level 5

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

The Indiana Department of Natural Resources Indiana Floodway Information Portal website

(<http://dnrmmaps.dnr.in.gov/appsphp/fdms/>) was accessed on January 22, 2021, by SJCA Inc. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F-11). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

Farmland

Agricultural Lands
 Prime Farmland (per NRCS)

Presence

Impacts

Yes	No

Total Points (from Section VII of CPA-106/AD-1006*) N/A
**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 August 26, 2020, by SJCA Inc., and the aerial map of the project area (Appendix B-3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The project area consists of heavily forested slopes and roadway. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected.

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SECTION D – CULTURAL RESOURCES

Minor Projects PA	Category(ies) and Type(s) Category B, Type 9	INDOT Approval Date(s) February 3, 2021	N/A
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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)		ESD Approval Date(s)	SHPO Approval Date(s)
APE, Eligibility and Effect Determination	<input type="checkbox"/>		
800.11 Documentation	<input type="checkbox"/>		
Historic Properties Report or Short Report	<input type="checkbox"/>		
Archaeological Records Check and Assessment	<input type="checkbox"/>		
Archaeological Phase Ia Survey Report	<input checked="" type="checkbox"/>	February 3, 2021	N/A
Archaeological Phase Ic Survey Report	<input type="checkbox"/>		
Other:	<input type="checkbox"/>		

Memorandum of Agreement (MOA) **MOA Signature Dates** (List all signatories)

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

On February 3, 2021, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 9 under the Minor Projects Programmatic Agreement (MPPA; Appendix D-1).

Category B, Type 9 projects consist of the installation, replacement, repair, lining, or extension of culverts and other drainage structures. A Phase 1a Archaeological Literature Review and Reconnaissance Survey was completed (Jackson 2021). No archaeological sites are located within the project area and no further work was recommended (Appendix D-5). No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

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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 type="checkbox"/>	<input type="checkbox"/>	<input 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"/>
<u>Evaluations Prepared</u>			
Programmatic Section 4(f)	<input type="checkbox"/>		
"De minimis" Impact	<input type="checkbox"/>		
Individual Section 4(f)	<input type="checkbox"/>		
Any exception included in 23 CFR 774.13	<input type="checkbox"/>		

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

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

Based on a desktop review, the aerial map of the project area (Appendix B-3), and the RFI report (Appendix E-2), there are two (2) 4(f) resources located within the 0.5-mile search radius. There are none located within or adjacent to the project area. Therefore, no use is expected. The Hoosier National Forest, a managed land, is located 0.24-mile northeast of the project area. An early coordination letter was sent to the Hoosier National Forest on December 31, 2020, but no response was received.

Section 6(f) Involvement

Section 6(f) Property

Presence

Use

Yes	No
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discuss Section 6(f) resources present or not present. Discuss if any conversion would occur as a result of this project. If conversion will occur, discuss the conversion approval.

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

A review of 6(f) properties on the Land and Water Conservation Fund (LWCF) list at <https://www.in.gov/indot/2523.htm> revealed a total of six (6) properties in Jackson County (Appendix I-1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

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SECTION F – Air Quality

STIP/TIP and Conformity Status of the Project

Is the project in the most current STIP/TIP? Yes No
 Is the project located in an MPO Area? Yes No
 Is the project in an air quality non-attainment or maintenance area? Yes No
 If Yes, then:
 Is the project in the most current MPO TIP? Yes No
 Is the project exempt from conformity? Yes No
 If No, then:
 Is the project in the Transportation Plan (TP)? Yes No
 Is a hot spot analysis required (CO/PM)? Yes No

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

Location in STIP:

Fiscal Year (FY) 2020-2024 (Amendment #4; Appendix H-1)

Name of MPO (if applicable):

N/A

Location in TIP (if applicable):

N/A

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 included in the FY 2020-2024 Statewide Transportation Improvement Program (STIP) (Appendix H-1).

This project is located in Jackson County, which is currently a non-attainment area for Ozone, under the 1997 8-hour Ozone 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*. The project's design concept and scope are accurately reflected in the STIP and conforms to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.

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? Yes No

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

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

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

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SECTION H – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

- Will the proposed action comply with the local/regional development patterns for the area?
- Will the proposed action result in substantial impacts to community cohesion?
- Will the proposed action result in substantial impacts to local tax base or property values?
- Will construction activities impact community events (festivals, fairs, etc.)?
- Does the community have an approved transition plan?
- If No, are steps being made to advance the community's transition plan?
- Does the project comply with the transition plan? (explain in the discussion below)

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

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.

This project complies with the 2006 Jackson County Comprehensive Plan to improve local roads. The plan can be found at: http://www.jacksoncounty.in.gov/government/departments_i-z/planning_and_zoning/index.php. It will not have a substantial impact to community cohesion or local tax bases and property values. Minor decreases in property value may occur for properties that will require ROW acquisition. The website www.fairsandfestivals.net was reviewed to determine if the project would impact any community fairs or festivals in the vicinity of the project area. While there are fairs and festivals that are planned within a 10-mile radius of the project area during the construction period, this project will not preclude any of these fairs or festivals, nor will it restrict access to facilities that host these events.

Jackson County has an Americans with Disabilities Act (ADA) Transition Plan (<http://www.jacksoncounty.in.gov/search.php?q=ADA+PLAN>) which was enacted in May 2015. This project does not include sidewalks and there are currently no pedestrian facilities in the project area. This project complies with the ADA transition plan because it will not restrict access to any facilities. No impacts are expected.

Public Facilities and Services

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

Based on a desktop review, the aerial map of the project area (Appendix B-3), and the RFI report (Appendix E-2), there is one (1) public facility, a pipeline, located within 0.5 mile of the project but not within or adjacent to the project area. Therefore, no impacts are expected. Based on review of the project plans in Appendix B-7 to B-13, there are no public utilities in the project area. This was confirmed by a site visit by SJCA Inc. on August 26, 2020. Access to all properties will be maintained during construction.

Due to the proposed road closure and detour, temporary impacts to school bus routes and emergency services will occur but will be restricted to the period of construction. 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 checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" 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

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populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. The project will require 0.63 acre of ROW. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Jackson County, Indiana. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 9680. 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 2019 American Community Survey (ACS) 5-year Estimates was obtained from the US Census Bureau Website (<https://data.census.gov/cedsci/advanced>) on May 20, 2021 by SJCA Inc. The data collected for minority and low-income populations within the AC are summarized in the below table.

Minority and Low-income Data- 2019: ACS five-year Estimates

	COC- Jackson County	AC- Census Tract 9680, Jackson County, Indiana
Percent Minority	11.9%	0.8%
125% of COC	14.8%	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	14.6%	13.6%
125% of COC	18.3%	AC < 125% COC
EJ Population of Concern		No

The AC, Census Tract 9680, has a percent minority of 0.8% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain minority populations of EJ concern. Census Tract 9860 has a percent low-income of 13.6% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain low-income populations of EJ concern.

The census data sheets, maps, and calculations can be found in Appendix I-18 through I-22. The AC does not contain low-income or minority populations of EJ concerns. No further EJ analysis is warranted.

Relocation of People, Businesses or Farms

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

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

Number of relocations: Residences: 0 Businesses: 0 Farms: 0 Other: 0

Discuss any relocations that will occur due to the project. If a BIS or CSRS is required, discuss the results in the discussion below.

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

Indiana Department of Transportation

County Jackson

Route SR 58

Des. No. 1900321

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): February 22, 2021

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, a RFI was concurred by INDOT Site Assessment and Management (SAM) on February 22, 2021 (Appendix E). There are no other hazardous material sites located within 0.5 mile of the project area and there are no known sites within the project area. Further investigation for hazardous material concerns is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

Army Corps of Engineers (404/Section10 Permit)

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

IN Department of Environmental Management (401/Rule 5)

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

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."

An USACE 401/404 RGP permit will be required due to anticipated stream impacts. In their January 29, 2021, response, the IDNR stated that formal approval by the DNR under the regulatory programs administered by the Division of Water is not required for this project (Appendix C-16).

Indiana Department of Transportation

County Jackson

Route SR 58

Des. No. 1900321

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

ENVIRONMENTAL COMMITMENTS

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

Firm:

- 1) If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT Seymour 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) USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after August 26, 2022, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)
- 4) 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)
- 5) Wetland boundaries will be marked as "Do Not Disturb" on the final plans and on the project site. (INDOT ESD)
- 6) 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)
- 7) Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (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 (April 1 to September 30) 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, IDNR)
- 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)

For Further Consideration:

- 12) If box or pipe culverts are used the bottoms should be buried to a minimum of 6" (or 20% of the culvert height/pipe diameter whichever is greater up to a maximum 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossing should: span the entire channel width (a minimum of 1.2 times the bank full width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width/ length) of 0.25; and have stream depth and water velocities during low-flow conditions that are approximate to those in the natural stream

This is page 22 of 23 Project name: SR 58 Small Structure Replacement & Roadway Improvement Date: September 9, 2021

Indiana Department of Transportation

County Jackson Route SR 58 Des. No. 1900321

channel. The new, replacement, or rehabbed structure should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR)

- 13) Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Riprap may be used only at the toe of the sideslopes up to the ordinary high water mark (OHWM). The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. (IDNR)
- 14) Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on the area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees). (IDNR)
- 15) Use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR)
- 16) Do not excavate in low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR)
- 17) Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumpharounds. (IDNR)
- 18) Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting from April 1 through September 30. (IDNR)
- 19) Restrict below low water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)
- 20) Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles, and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community. (USFWS)
- 21) Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below the OHWM during this time unless the machinery is within the caissons or on the cofferdams. (USFWS)
- 22) Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing. (USFWS)
- 23) Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat. (USFWS)

DES NO 1900321 APPENDICES

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DES 1900321

Appendix A

INDOT Supporting Documentation

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	-	-
Relocations	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 ⁶)	“Not likely to Adversely Affect” (With any AMMs or commitments)	-	“Likely to Adversely Affect”	Project does not fall under Species Specific Programmatic ⁷
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 ⁸
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any ⁹
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ¹⁰
Approval Level	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA
<ul style="list-style-type: none"> • District Env. (DE) • Env. Serv. Div. (ESD) • FHWA 					

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

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

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

⁴ US Army Corps of Engineers Individual 404 Permit

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

⁶ Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

⁷ 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.

⁸ Potential for causing a disproportionately high and adverse impact.

⁹ 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.

¹⁰ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

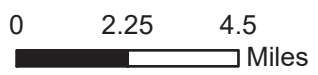
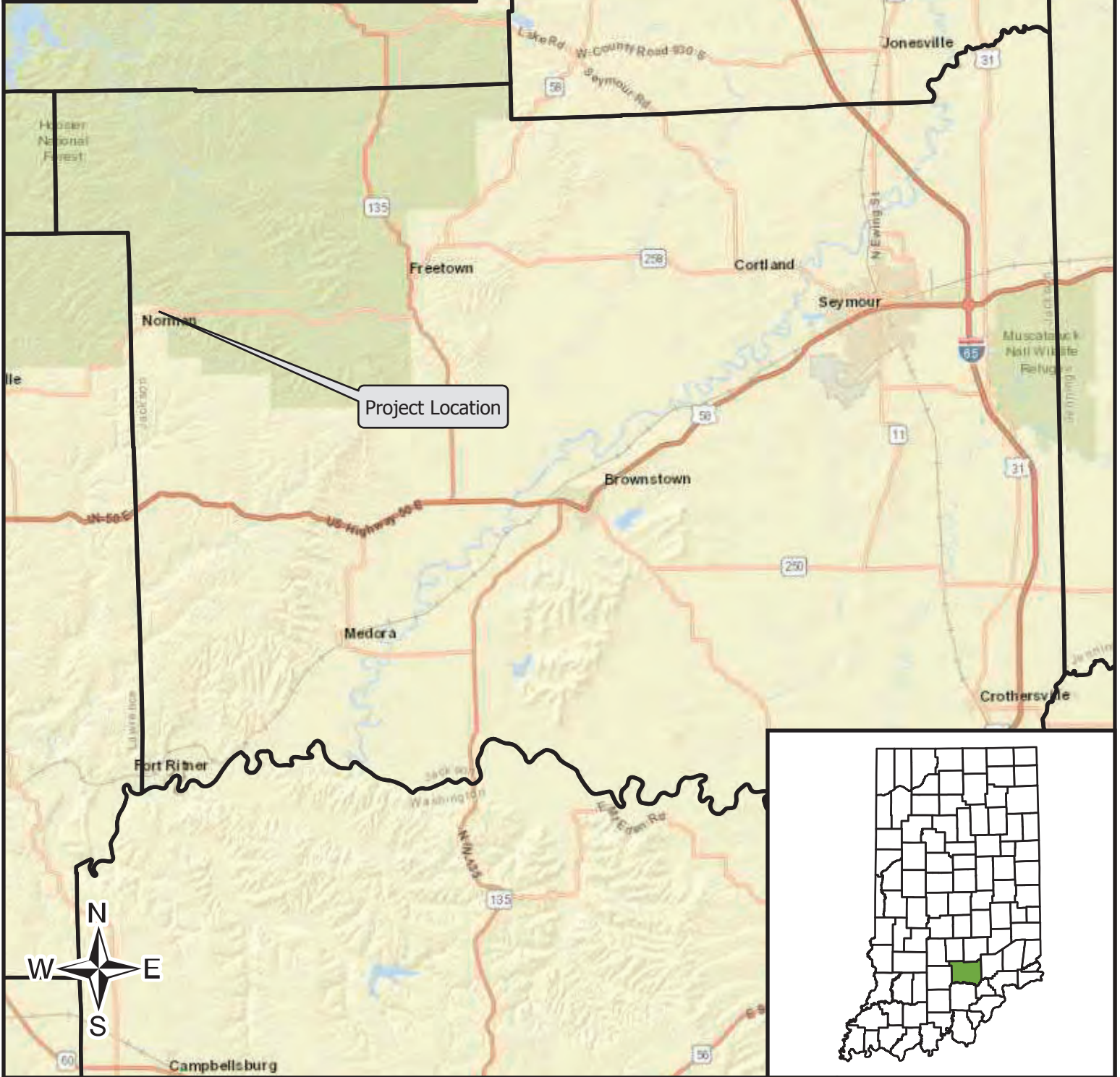
Note: Substantial public or agency controversy may require a higher-level NEPA document.



DES 1900321

Appendix B

Graphics

Project Location Map (1:246,741)
 Small Structure Project
 SR 58 over UNT, 7.09 Miles East of SR 446
 Des. No. 1900321
 Jackson County, Indiana
 Source: Indiana Geological Survey

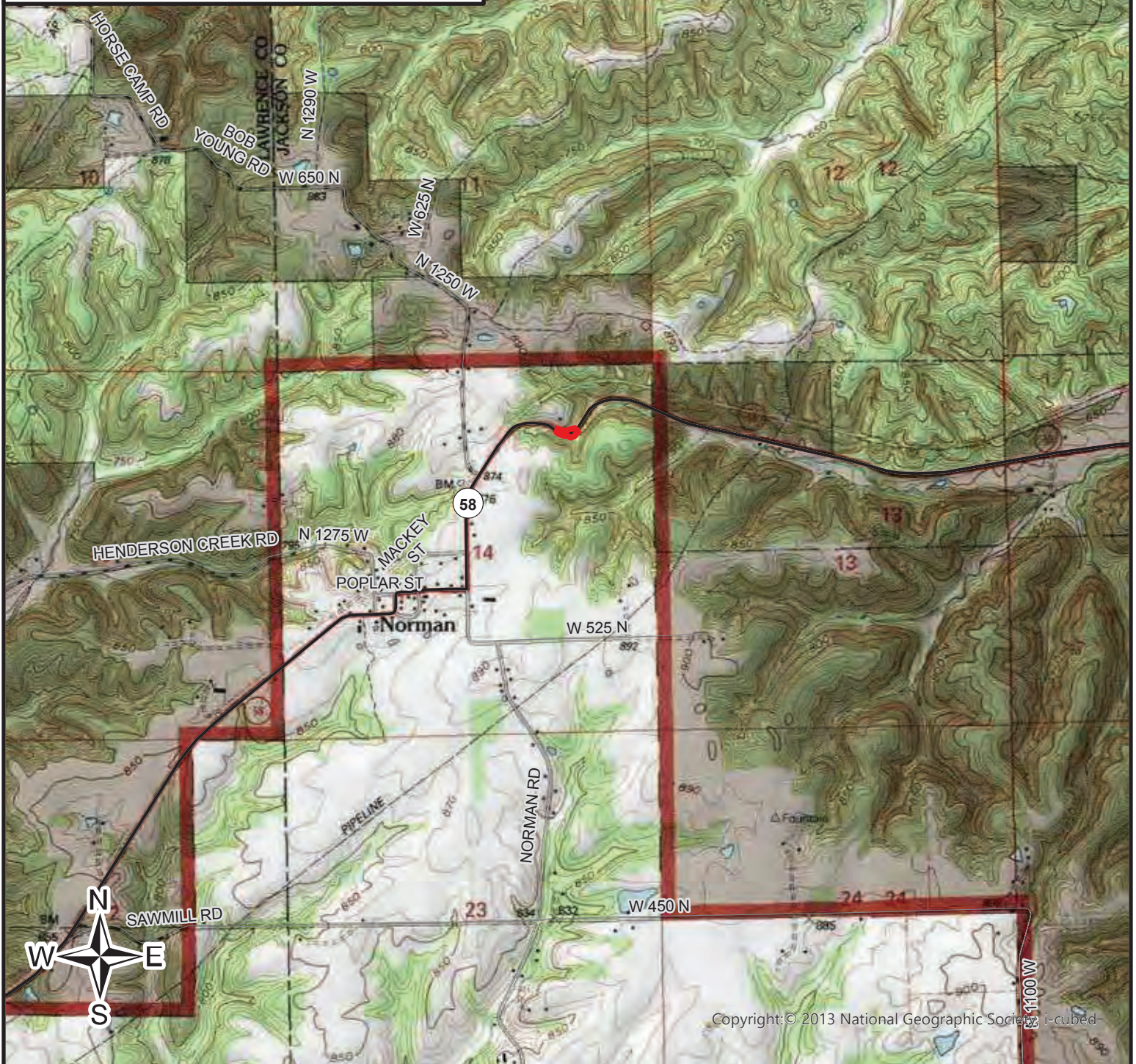


 County Boundary
 Project County



11/30/2020

Topographic Map (1:24,000)
Small Structure Project
SR 58 over UNT, 7.09 Miles East of SR 446
Des. No. 1900321
Jackson County, Indiana
Norman Quadrangle
Source: US Geological Survey PLSS



Copyright: © 2013 National Geographic Society, i-cubed

0 1,250 2,500
Feet

 Project Area

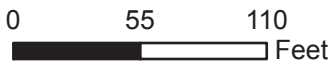


11/30/2020

Aerial Map (1:1,000)
Small Structure Project
SR 58 over UNT, 7.09 Miles East of SR 446
Des. No. 1900321
Jackson County, Indiana
Source: NAIP 2016 Imagery



National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U. S. Department of Agriculture (USDA), UIITS, Indiana Spatial Data Portal



 Project Area



11/30/2020

Photo Location and Orientation Map (1:750)
Small Structure Project
SR 58 over UNT, 7.09 Miles East of SR 446
Des. No. 1900321
Jackson County, Indiana
Source: NAIP 2016 Imagery



National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U.S. Department of Agriculture (USDA), UIITS, Indiana Spatial Data Portal



▲ Photo Location
▭ Project Location



12/3/2020

Des. 1900321, SR 58 Small Structure Replacement August 26, 2020 Site Photos



Photo 1- Northeast terminus, SR 58 facing east



Photo 2- Northeast terminus, SR 58 facing west

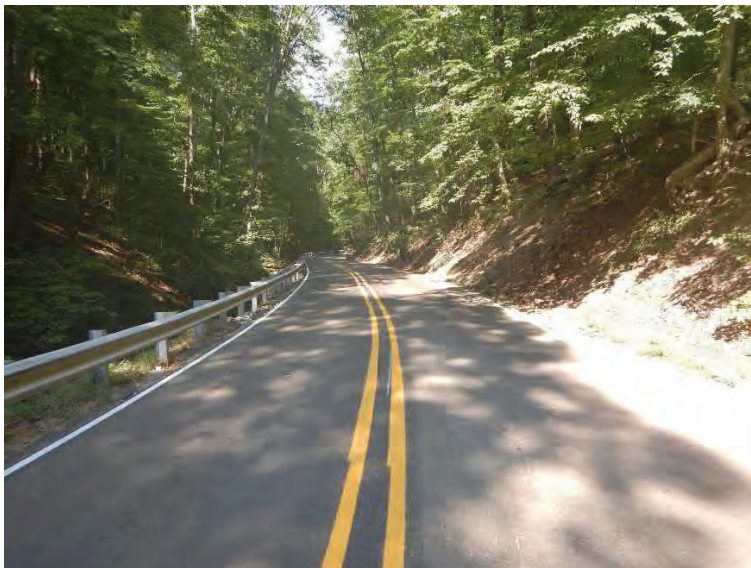


Photo 3- Northwest Terminus, SR 58 facing west



Photo 4- Northwest Terminus, SR 58 facing east

Des. 1900321, SR 58 Small Structure Replacement August 26, 2020 Site Photos



Photo 5- Ditch from south outlet facing north



Photo 6- Pipe Outlet, south end of structure



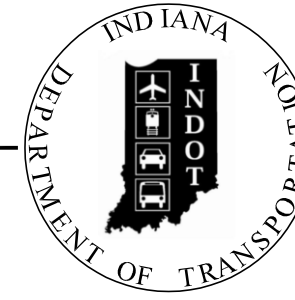
Photo 7- Pipe Inlet, north end of structure



Photo 8- Inside structure, facing south

PROJECT 1900321	DESIGNATION NO. 1900321
CONTRACT B-42313	

INDIANA DEPARTMENT OF TRANSPORTATION



TRAFFIC DATA	S.R. 58
A.A.D.T. (2023)	365 V.P.D.
A.A.D.T. (2043)	365 V.P.D.
D.H.V. (2043)	365 V.P.H.
DIRECTIONAL DISTRIBUTION	51%
TRUCKS	5% D.H.V. 5% A.A.D.T.
DESIGN DATA	S.R. 58
DESIGN SPEED	45 MPH
PROJECT DESIGN CRITERIA	3R (Non-Freeway)
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
RURAL/URBAN	RURAL
TERRAIN	ROLLING
ACCESS CONTROL	None

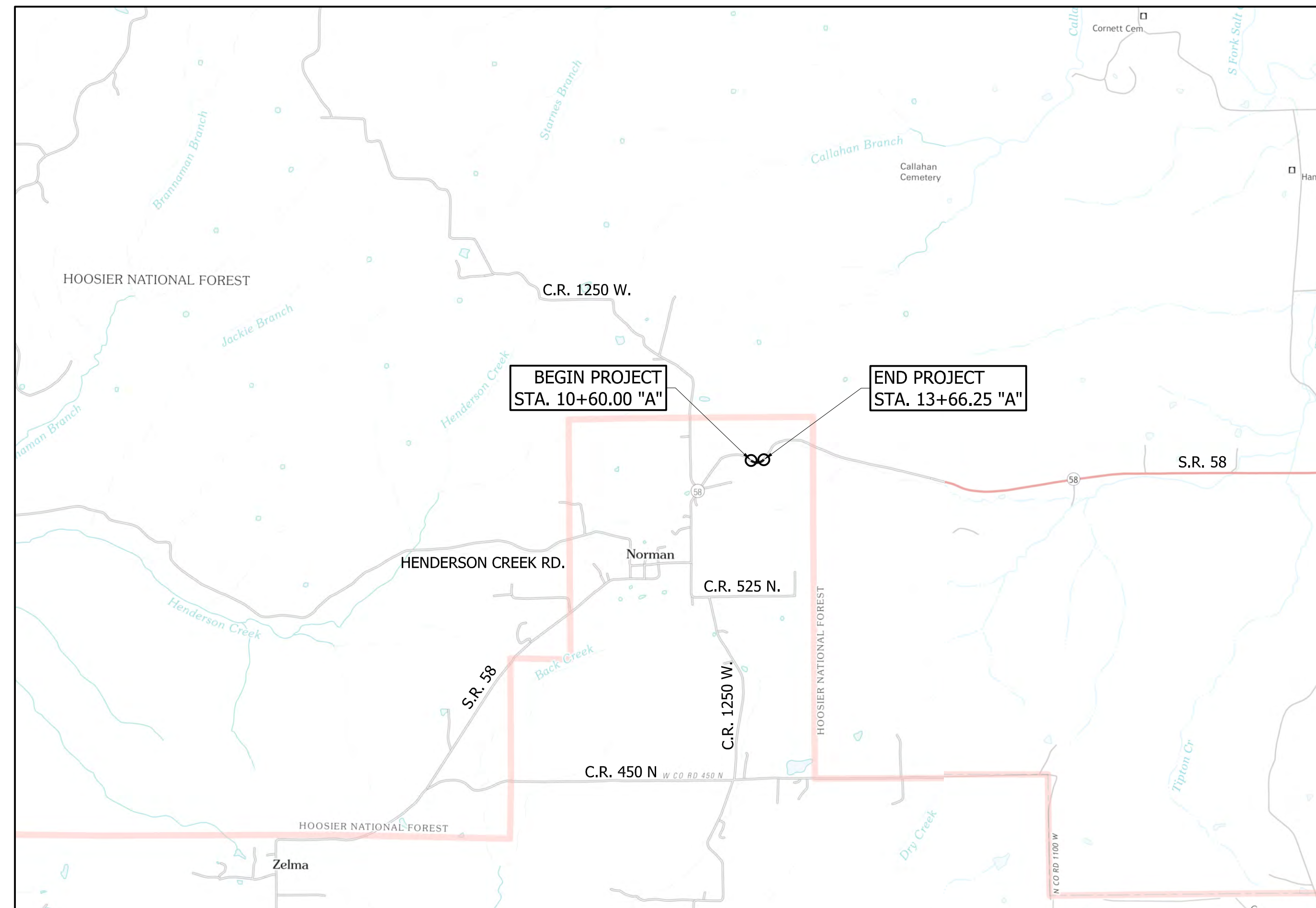
KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
1800287	S.R. 135 SUPERSTRUCTURE REPLACEMENT
1802993	S.R. 258 SMALL STRUCTURE REPLACEMENT OVER UNT TO SPRAY CREEK

ROAD PLANS

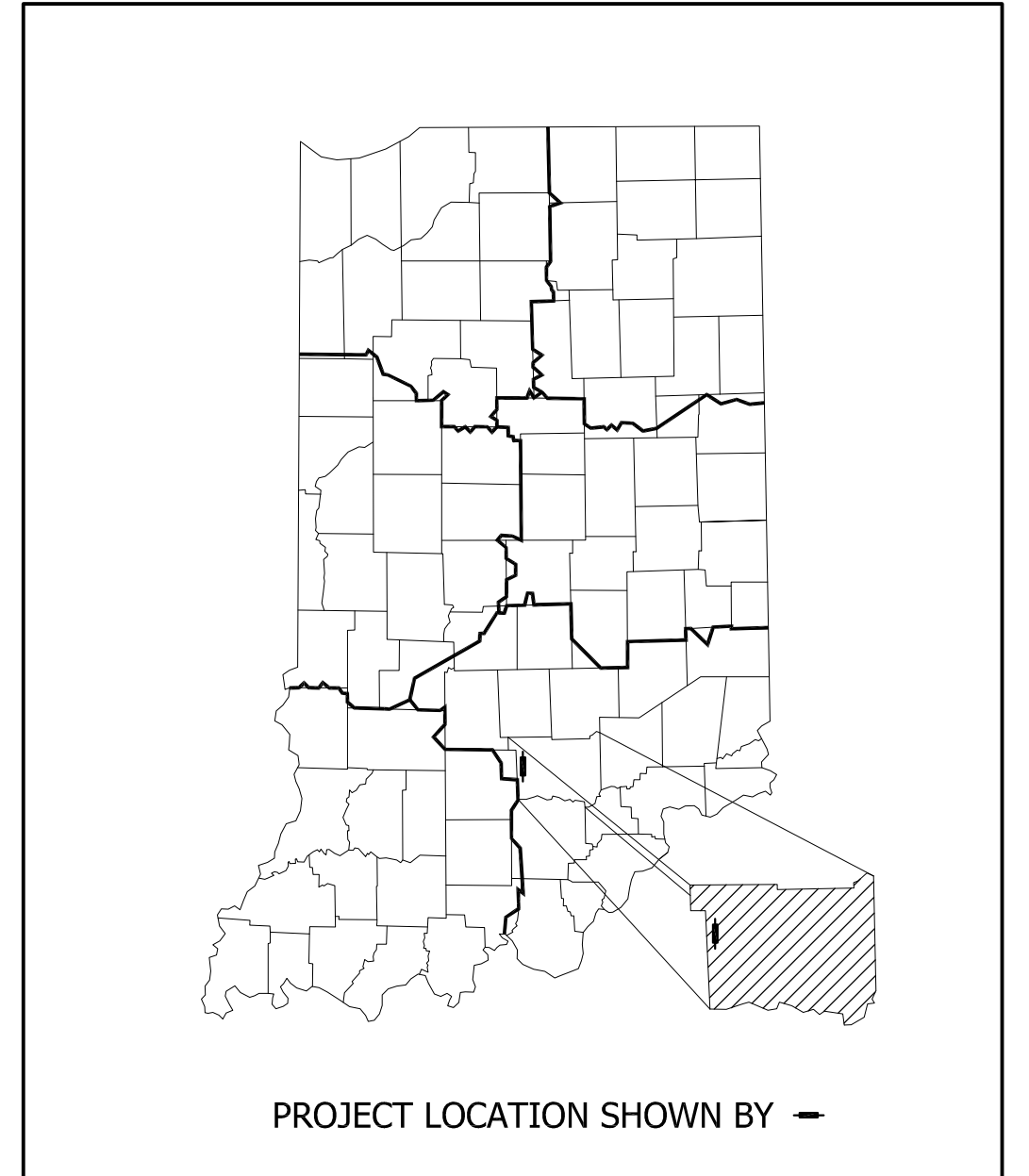
ROUTE: S.R. 58 AT RP 96+15
PROJECT NO. 1900321 P.E.
 1900321 R/W
 1900321 CONST.

SMALL STRUCTURE REPLACEMENT OVER UNNAMED DITCH 7.09 MILES EAST OF
JUNCTION OF S.R. 446 ON S.R. 58 IN SEC. 14, T. 6 N, R. 2 E IN JACKSON COUNTY, INDIANA

Gross Length: 0.06 Mi.
Net Length: 0.06 Mi.
Max. Grade: 11.02%



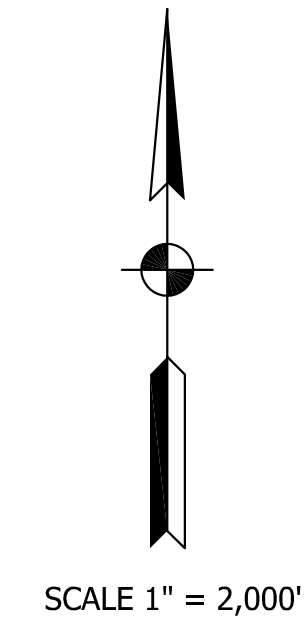
LOCATION MAP



LATITUDE 38° 57' 30.96" N LONGITUDE 86° 15' 53.35" W

HUC: 05120208060030

CULVERT ASSETS	
DESIGNATION NO.	CULVERT ASSET I.D.
1900321	CV 058-036-096.15



STAGE 2 PLANS 8/28/2020

[INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS]



PLANS PREPARED BY:	USI Consultants, Inc.	317-544-4996
		PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

DESIGNATION NO.	1900321
SHEETS	1 of 29
CONTRACT	B-42313
PROJECT NO.	1900321

NOTE TO REVIEWER
 Pavement Design items to be updated upon receipt of INDOT Pavement Design

LEGEND

- (K) HMA FULL DEPTH PAVEMENT
 XXX#/Syd. QC/QA-HMA, 3, 64, Surface 9.5 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Intermediate 19.0 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Base 19.0 mm on
 Subgrade Treatment, Type 1C
- (K1) HMA FOR WIDENING
 XXX#/Syd. QC/QA-HMA, 3, 64, Surface 9.5 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Intermediate 19.0 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Base 19.0 mm on
 Subgrade Treatment, Type 1C
- (R) HMA RESURFACE / SURFACE MILLING
 XXX#/Syd. QC/QA-HMA, 3, 64, Surface 9.5 mm on
 1-1/2" Surface Milling
- (O) Compacted Aggregate, No. 53
- (S) Sawcut
- (29) Mulched Seeding, R (All side slopes 2:1 and steeper to have Erosion Control Blanket except where riprap to be placed)

NOTES:

OFZ = Obstruction Free Zone

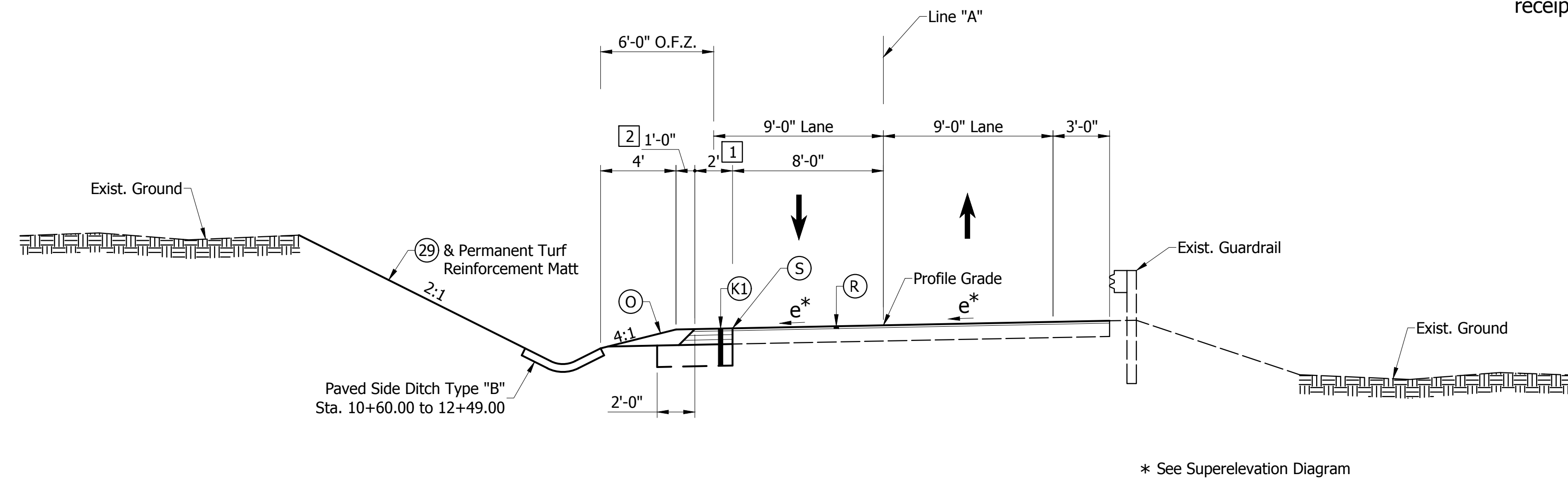
1 Varies 2'-0" @ Sta. 12+25.00 to 3'-0" @ Sta. 12+35.00 "A"

2 Varies 1'-0" @ Sta. 12+25.00 to 4'-0" @ Sta. 12+35.00 "A"

After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG 64-22 only; no emulsion should be used. The sealed cracks should not be overbanded.

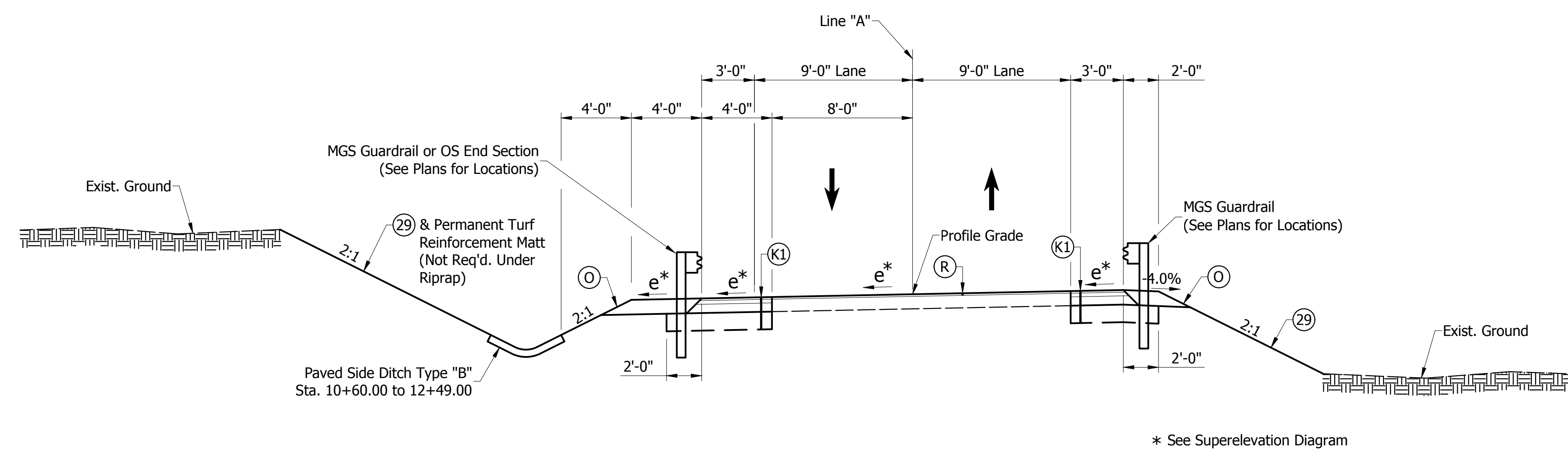
HMA pavements shall have joint adhesive installed at all longitudinal joints in the surface layer as per Standard Specification 401.15. A 24-inch wide liquid asphalt sealant shall be placed centered on longitudinal joints that have joint adhesive installed, as per Standard Specification 401.15.

Depending on weather condition, wet subgrade soils may be encountered during construction. Such moisture can migrate into Subgrade Treatment, Type 1C aggregate material during compaction rendering it too difficult to obtain the required density. Should this situation occur, contact the INDOT Office of Geotechnical Services for specific recommendations.



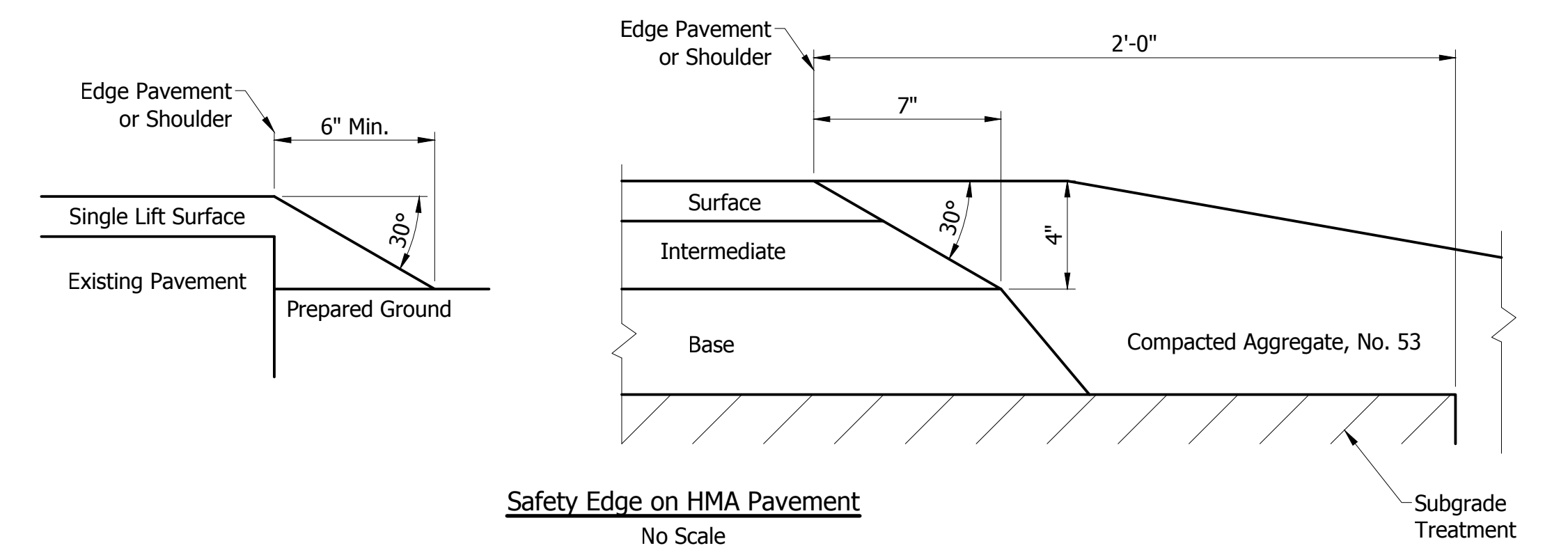
TYPICAL CROSS SECTION-RESURFACE WITH WIDENING

Sta. 10+60.00 to Sta. 12+35.00 Line "A"



TYPICAL CROSS SECTION-RESURFACE WITH WIDENING

Sta. 12+35.00 to Sta. 12+65.00 Line "A"



NOT FOR CONSTRUCTION

DESIGNED: JGP	DRAWN: JGP
CHECKED: WAH	CHECKED: WAH

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

S.R. 58

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1900321
SURVEY BOOK	SHEETS
	3 of 29
CONTRACT	PROJECT
B-42313	1900321

NOTE TO REVIEWER
 Pavement Design items to be updated upon receipt of INDOT Pavement Design

LEGEND

- (K) HMA FULL DEPTH PAVEMENT
 XXX#/Syd. QC/QA-HMA, 3, 64, Surface 9.5 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Intermediate 19.0 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Base 19.0 mm on
 Subgrade Treatment, Type 1C
- (K1) HMA FOR WIDENING
 XXX#/Syd. QC/QA-HMA, 3, 64, Surface 9.5 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Intermediate 19.0 mm on
 XXX#/Syd. QC/QA-HMA, 2, 64, Base 19.0 mm on
 Subgrade Treatment, Type 1C
- (R) HMA RESURFACE / SURFACE MILLING
 XXX#/Syd. QC/QA-HMA, 3, 64, Surface 9.5 mm on
 1-1/2" Surface Milling
- (O) Compacted Aggregate, No. 53
- (S) Sawcut
- (29) Mulched Seeding, R (All side slopes 2:1 and steeper to have Erosion Control Blanket except where riprap to be placed)

NOTES:

OFZ = Obstruction Free Zone

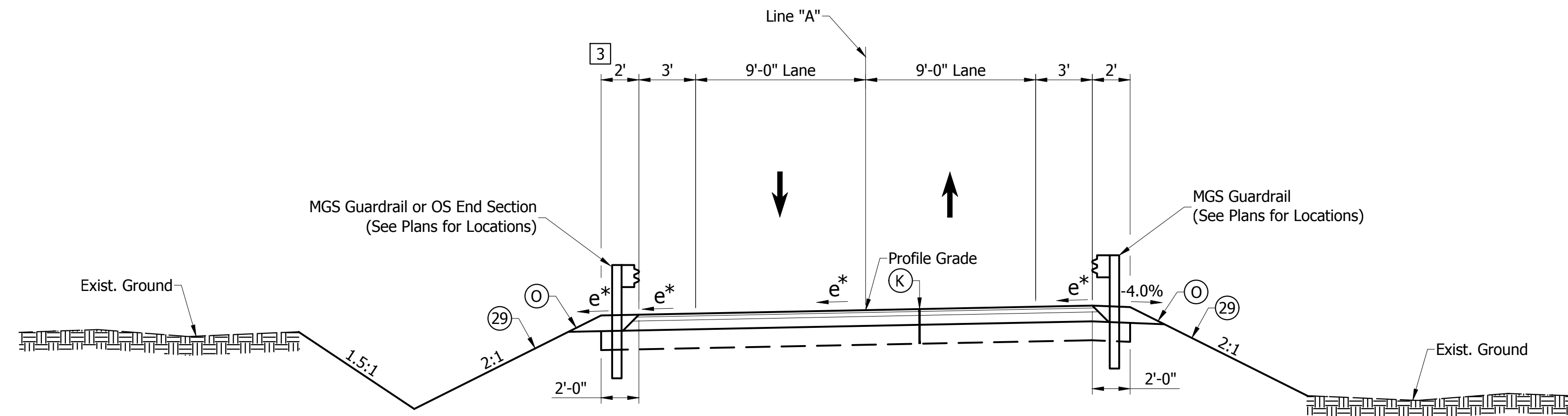
[3] Varies 4'-0" @ Sta. 12+85.00 to 2'-0" @ Sta. 12+95.00

[4] Varies 3'-0" @ Sta. 13+25.00 to 2'-0" @ Sta. 13+62.00

After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG 64-22 only; no emulsion should be used. The sealed cracks should not be overbanded.

HMA pavements shall have joint adhesive installed at all longitudinal joints in the surface layer as per Standard Specification 401.15. A 24-inch wide liquid asphalt sealant shall be placed centered on longitudinal joints that have joint adhesive installed, as per Standard Specification 401.15.

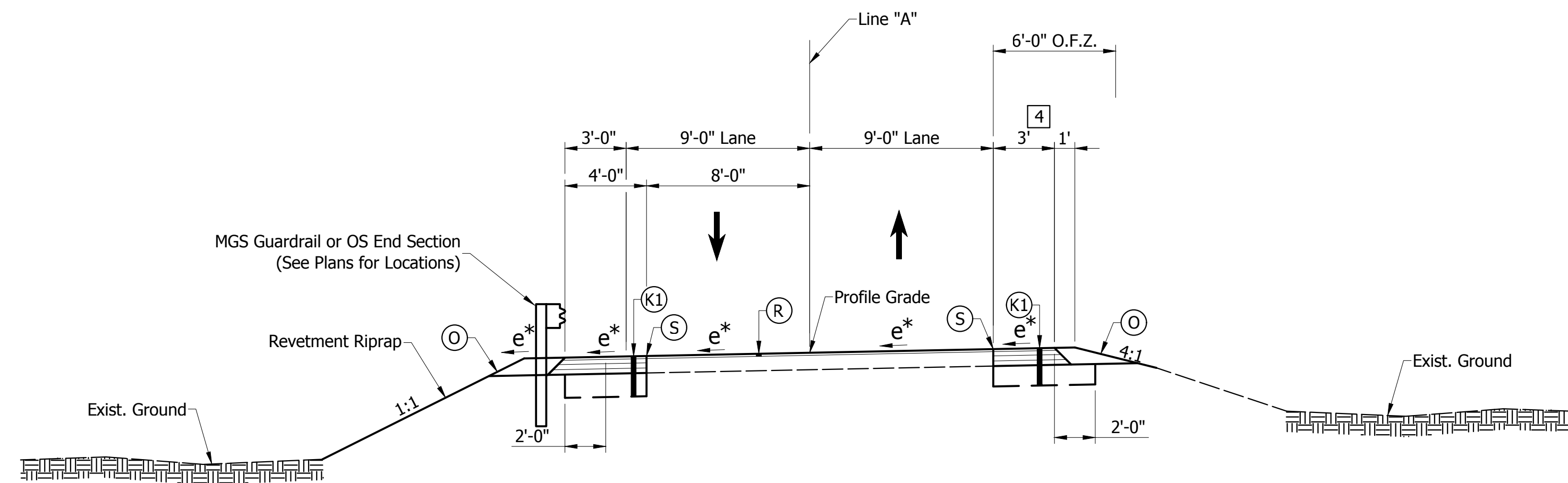
Depending on weather condition, wet subgrade soils may be encountered during construction. Such moisture can migrate into Subgrade Treatment, Type IC aggregate material during compaction rendering it too difficult to obtain the required density. Should this situation occur, contact the INDOT Office of Geotechnical Services for specific recommendations.



* See Superelevation Diagram

TYPICAL CROSS SECTION-FULL DEPTH HMA

Sta. 12+65.00 to Sta. 13+25.00 Line "A"



* See Superelevation Diagram

TYPICAL CROSS SECTION-RESURFACE WITH WIDENING

Sta. 13+25.00 to Sta. 13+62.00 Line "A"

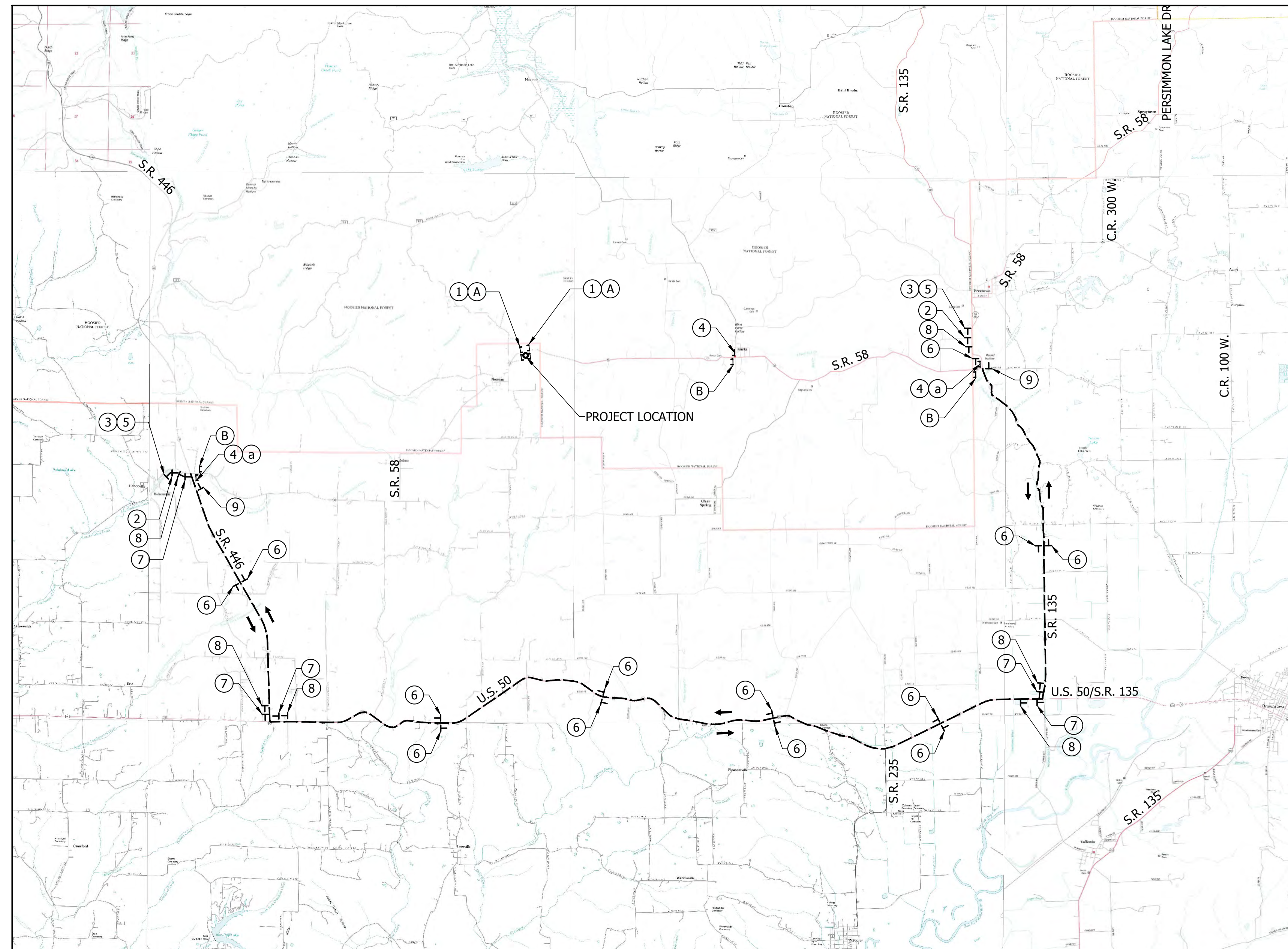
NOT FOR CONSTRUCTION

DESIGNED: JGP	DRAWN: JGP
CHECKED: WAH	CHECKED: WAH

**INDIANA
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL CROSS SECTION
 S.R. 58**

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE
VERTICAL SCALE 1" = 5'	DESIGNATION 1900321
SURVEY BOOK	SHEETS 4 of 29
CONTRACT B-42313	PROJECT 1900321



DETOUR ROUTE
Scale: 1" = 6000'

LEGEND	DESCRIPTION	SIZE	TYPE	NO.	
①	ROAD CLOSED	R11-2	48" X 30"	Road Closure Assembly	2
②	DETOUR AHEAD	XW20-2	48" X 48"	A	2
③	ROAD CLOSED AHEAD	XW20-3	48" X 48"	A	2
④	ROAD CLOSED TO THRU TRAFFIC	R11-4	60" X 30"	Road Closure Assembly	3
a	DETOUR	XM4-10 (L or R)	48" X 18"	B	2
⑤	ROAD CLOSED ON OR AFTER X / X / XX	XG20-6	60" X 30"	A	2
⑥	DETOUR 58 EAST WEST	XM4-8 M1-5 (58) M3-1 or M3-3 M6-3	30" X 15" 24" X 24" 30" X 15" 21" X 15"	Detour Route Assembly	13
⑦	DETOUR 58 EAST WEST	XM4-8 M1-5 (58) M3-1 or M3-3 M6-1 (L or R)	30" X 15" 24" X 24" 30" X 15" 21" X 15"	Detour Route Assembly	5
⑧	DETOUR 58 EAST WEST	XM4-8 M1-5 (58) M3-1 or M3-3 M5-1 (L or R)	30" X 15" 24" X 24" 30" X 15" 21" X 15"	Detour Route Assembly	6
⑨	END DETOUR 58	XM4-6 XM4-8 M1-5 (58) M5-1 (L or R) or M6-3	30" X 15" 30" X 15" 24" X 24" 21" X 15"	Detour Route Assembly	2
A	TYPE III-A BARRICADE		12'		48
B	TYPE III-B BARRICADE		12'		72

LEGEND	
Detour Route	Indicates Traffic Flow
Construction Sign	Type III Barricade

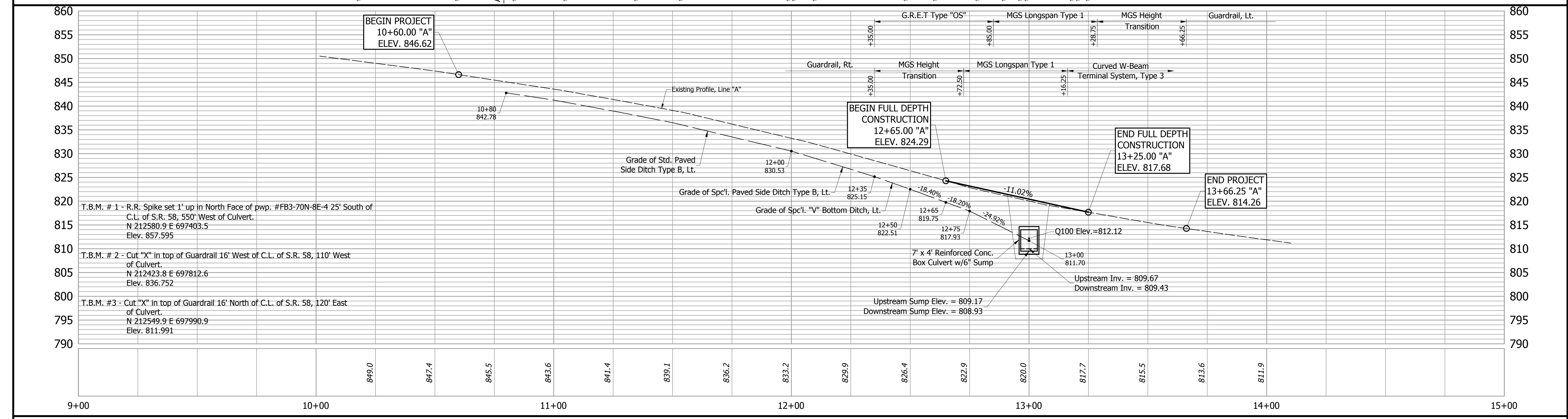
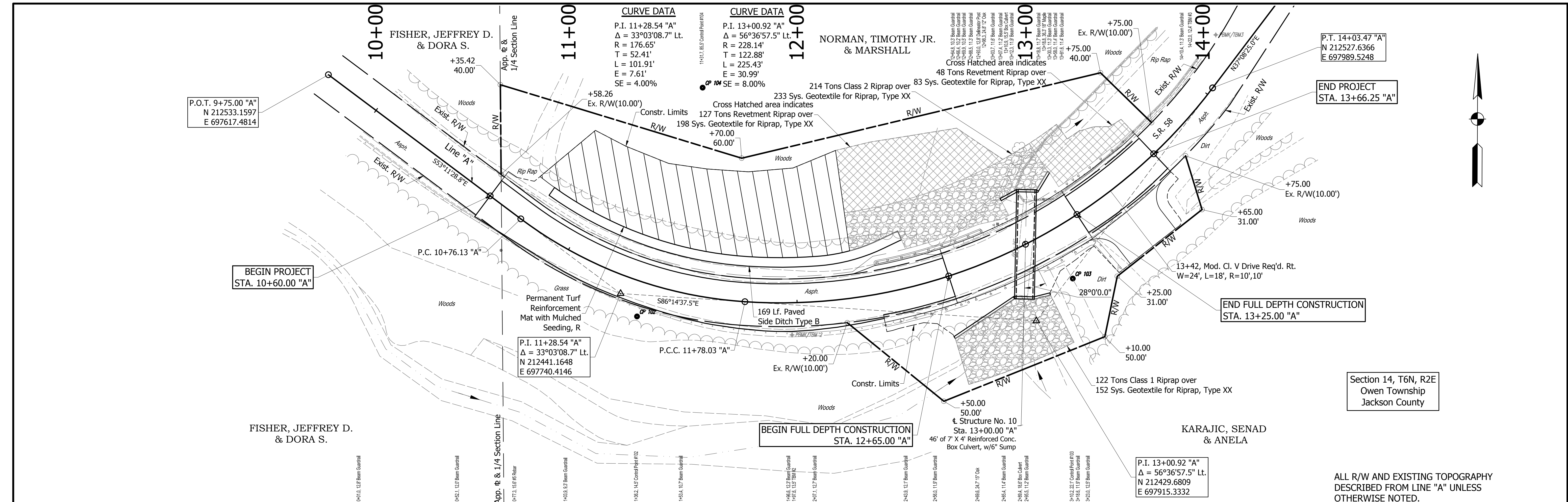
NOT FOR CONSTRUCTION

DESIGNED: JGP	DRAWN: JGP
CHECKED: WAH	CHECKED: WAH

INDIANA
DEPARTMENT OF TRANSPORTATION

TRAFFIC DETOUR ROUTE
S.R. 58

HORIZONTAL SCALE 1" = 6000'	BRIDGE FILE
VERTICAL SCALE 1" = 6000'	DESIGNATION 1900321
SURVEY BOOK	SHEETS 6 of 29
CONTRACT B-42313	PROJECT 1900321



NOT FOR CONSTRUCTION

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE

S.R. 58

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	DESIGNATION
VERTICAL SCALE	1900321
1" = 10'	SURVEY BOOK
7	SHEETS
of	29
CONTRACT	PROJECT
B-42313	1900321

DESIGNED: JGP DRAWN: JGP

CHECKED: WAH CHECKED: WAH

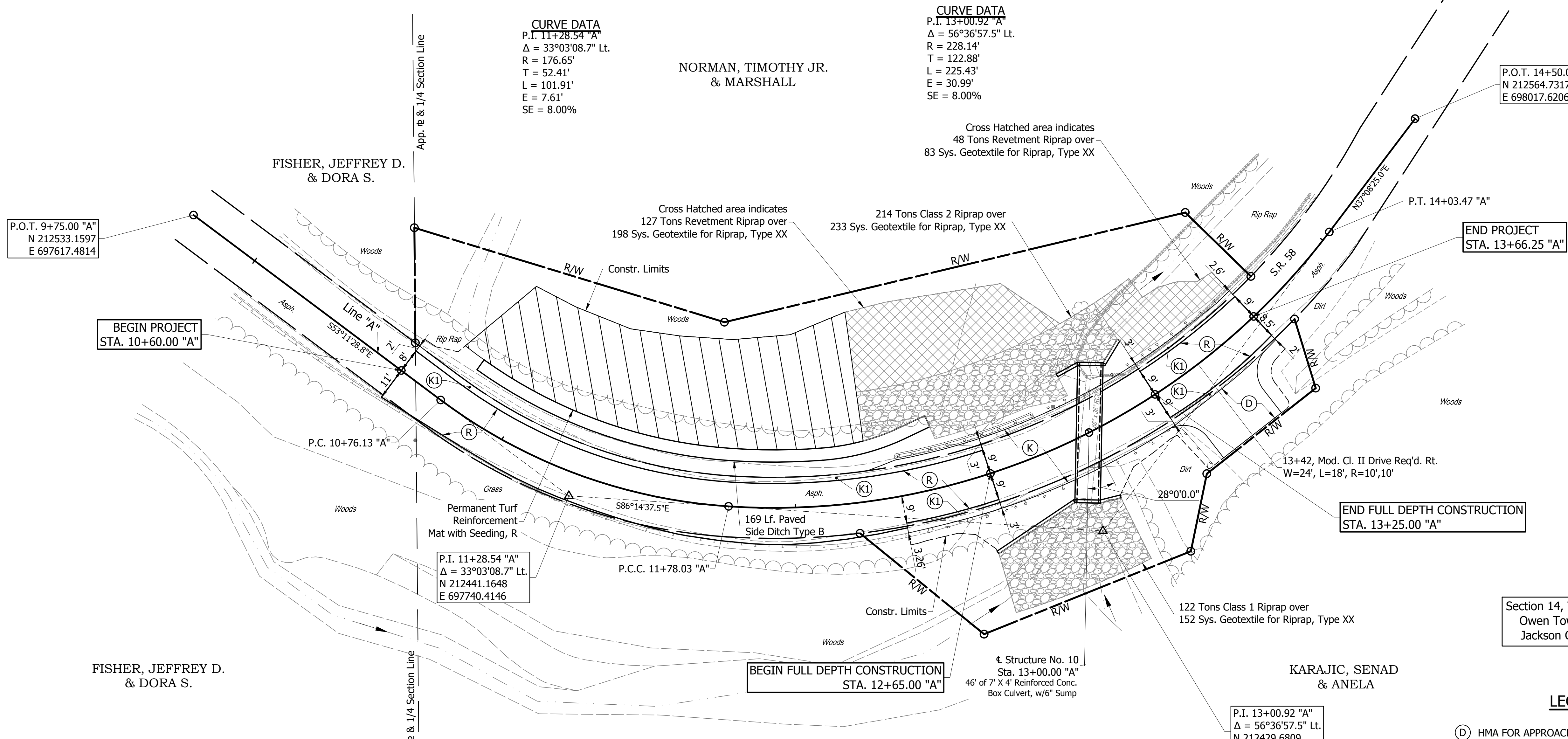
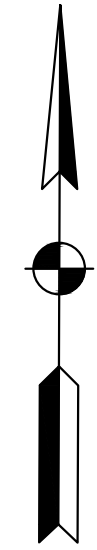
10+00

11+00

12+00

13+00

14+00



P.O.T. 9+75.00 "A"
 N 212533.1597
 E 697617.4814

BEGIN PROJECT
 STA. 10+60.00 "A"

FISHER, JEFFREY D.
 & DORA S.

CURVE DATA
 P.I. 11+28.54 "A"
 Δ = 33°03'08.7" Lt.
 R = 176.65'
 T = 52.41'
 L = 101.91'
 E = 7.61'
 SE = 8.00%

NORMAN, TIMOTHY JR.
 & MARSHALL

CURVE DATA
 P.I. 13+00.92 "A"
 Δ = 56°36'57.5" Lt.
 R = 228.14'
 T = 122.88'
 L = 225.43'
 E = 30.99'
 SE = 8.00%

P.O.T. 14+50.00 "A"
 N 212564.7317
 E 698017.6206

END PROJECT
 STA. 13+66.25 "A"

END FULL DEPTH CONSTRUCTION
 STA. 13+25.00 "A"

BEGIN FULL DEPTH CONSTRUCTION
 STA. 12+65.00 "A"

FISHER, JEFFREY D.
 & DORA S.

P.I. 11+28.54 "A"
 Δ = 33°03'08.7" Lt.
 N 212441.1648
 E 697740.4146

P.I. 13+00.92 "A"
 Δ = 56°36'57.5" Lt.
 N 212429.6809
 E 697915.3332

KARAJIC, SENAD
 & ANELA

Section 14, T6N, R2E
 Owen Township
 Jackson County

LEGEND

- (D) HMA FOR APPROACHES
 165#/syd HMA Type B on
 275#/syd HMA Intermediate Type B on
 6" Compacted Aggregate Mp/ 53, on
 Subgrade Treatment Type II
- (K) HMA FULL DEPTH PAVEMENT WITH SAFETY EDGE
 xxx#/Syd. QC/QA-HMA, x, xx, Surface 9.5 mm on
 xxx#/Syd. QC/QA-HMA, x, xx, Intermediate 19.00 mm on
 x In. of Compacted Aggregate, No. 53, Base
- (K1) HMA FOR WIDENING
 xxx#/Syd. QC/QA-HMA, x, xx, Surface 9.5 mm on
 xxx#/Syd. QC/QA-HMA, x, xx, Intermediate 19.00 mm on
 x In. of Compacted Aggregate, No. 53, Base
- (R) HMA RESURFACE / SURFACE MILLING
 xxx#/Syd. QC/QA-HMA, x, xx, Surface 9.5 mm on
 1 1/2" Surface Milling
- (S) Saw Cut

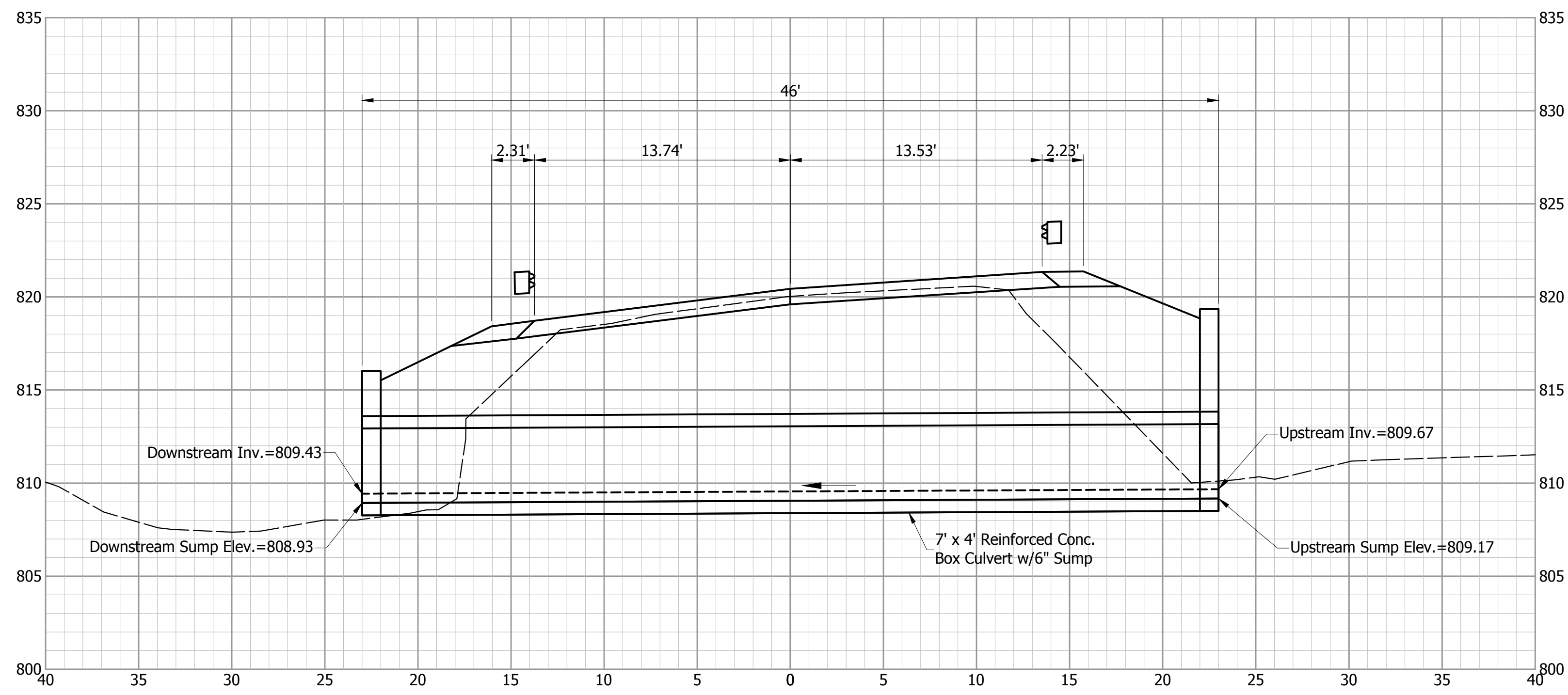
NOT FOR CONSTRUCTION

DESIGNED: JGP DRAWN: JGP
 CHECKED: WAH CHECKED: WAH

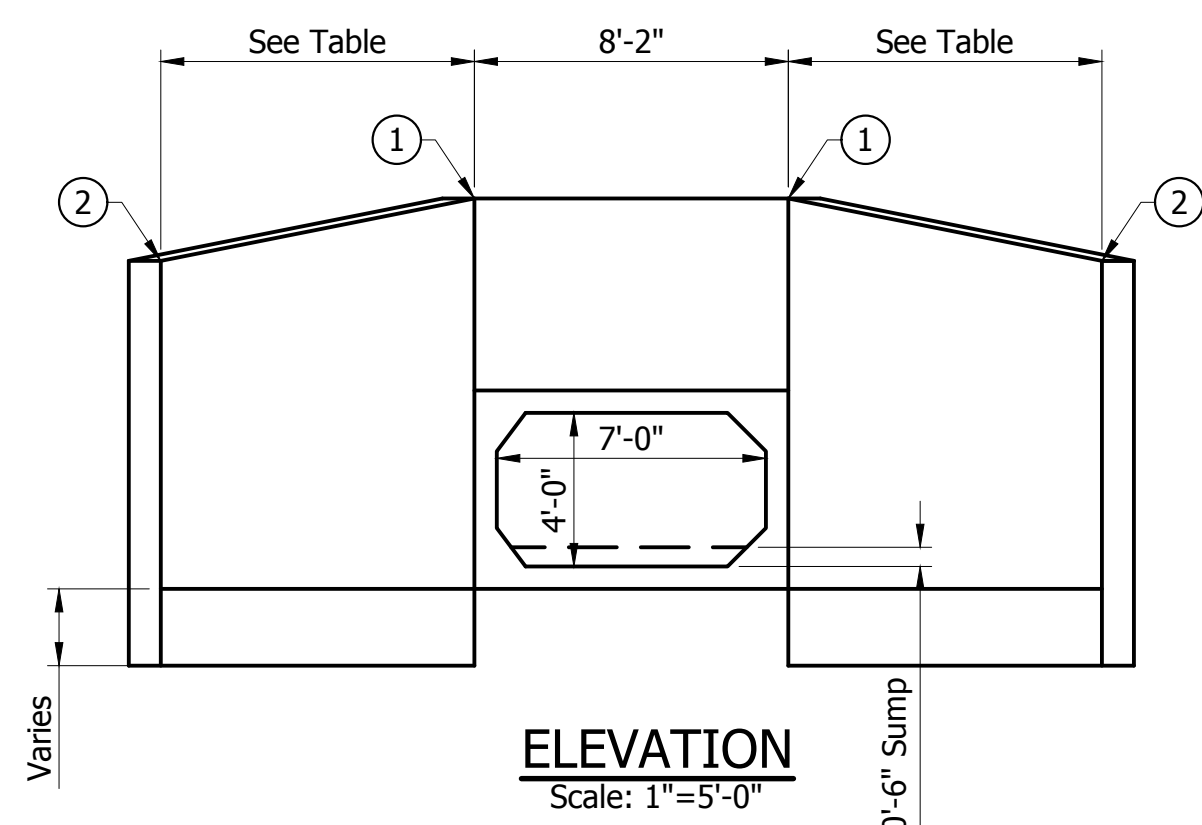
INDIANA
 DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAIL
 S.R. 58

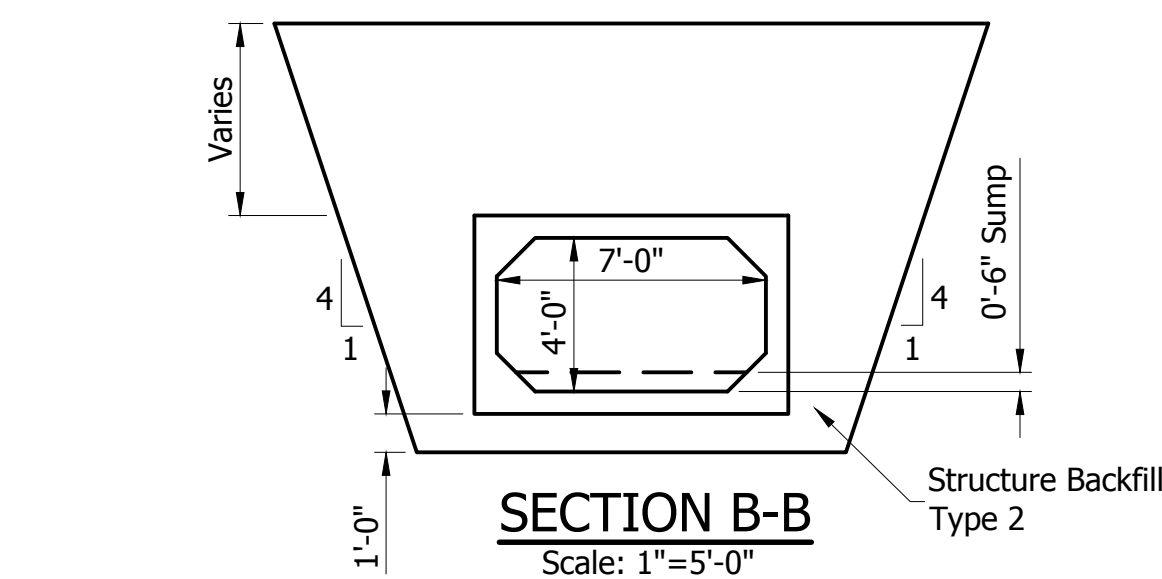
HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE 1" = 20'	DESIGNATION 1900321
SURVEY BOOK	SHEETS 9 of 29
CONTRACT B-42313	PROJECT 1900321



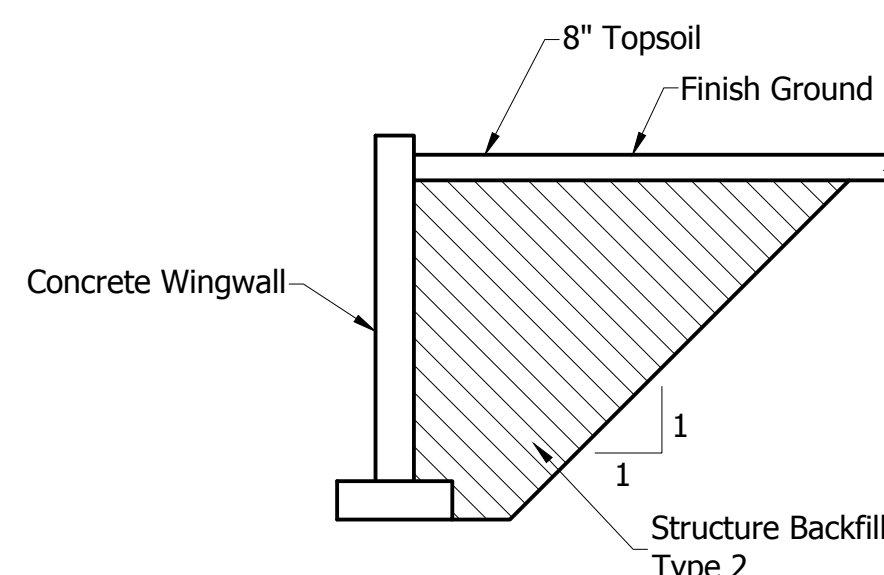
SECTION C-C
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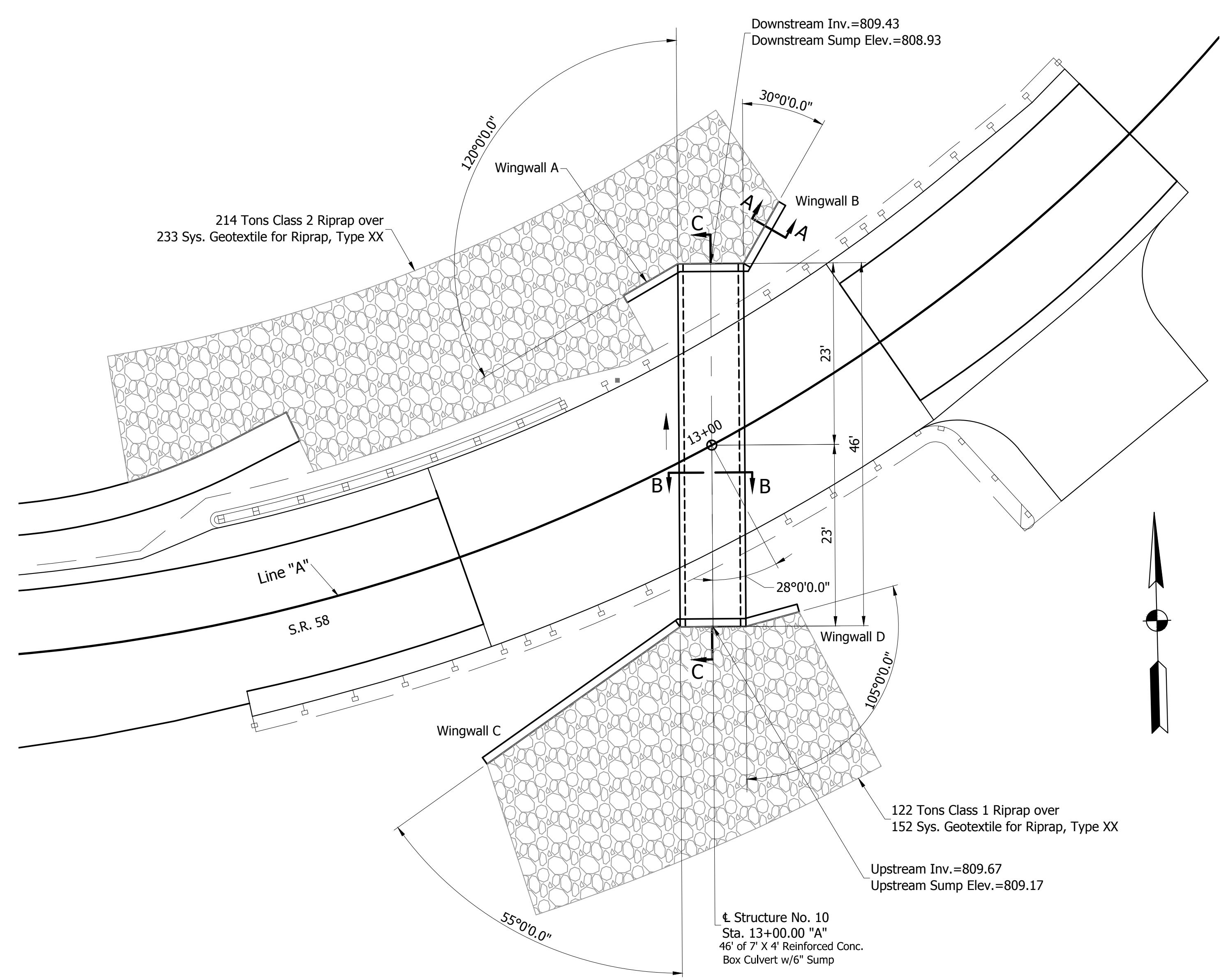
ELEVATION
Scale: 1"=5'-0"



SECTION B-B
Scale: 1"=5'-0"



SECTION A-A
Scale: 1"=5'-0"



PLAN VIEW
Scale: 1" = 10'

HYDRAULIC DATA

Drainage Area: 26.4 Acres
Q100: 62.0 cfs
Q100 Elev.: 812.12 ft.

DESCRIPTION

V100 through Structure
Backwater: 1.23 ft.
Waterway Area Provided Below Q100: 7.87 sq. ft.
Low Structure Elevation: 812.93 ft.
Flowline Elevation Upstream: 809.67 ft.
Flowline Elevation Downstream: 809.43 ft.

Proposed Structure

5.82 ft./s.
1.23 ft.
7.87 sq. ft.
812.93 ft.
809.67 ft.
809.43 ft.

- Notes: 1. Contractor shall verify the existing flowline elevation to set the appropriate sump depth.
2. Wingwall foundations to be 4' min. below the flow line of the creek.

HEADWALL TABLE			
Adjoining Wingwalls	Top of Headwall Elevation ①	Length	Headwall Area
"A" & "B"	816.76'	8'-4"	20.8 Sft.
"C" & "D"	820.67'	8'-4"	56.9 Sft.

CULVERT ASSETS	
DESIGNATION NO.	CULVERT ASSET I.D.
1900321	CV 058-036-096.15

WINGWALL TABLE						
Designation	Top of Wingwall Elevation ①	Height of Wingwall ①	Top of Wingwall Elevation ②	Height of Wingwall ②	Length	Wingwall Area
"A"	816.76'	12'-3"	816.43'	11'-11"	8'-0"	96.8 Sft.
"B"	816.76'	14'-3"	813.43'	10'-11"	9'-0"	113.5 Sft.
"C"	820.67'	15'-0"	820.17'	14'-6"	30'-0"	444.7 Sft.
"D"	820.67'	15'-0"	816.67'	11'-0"	7'-0"	91.0 Sft.

NOT FOR CONSTRUCTION

DESIGNED: JGP	DRAWN: JGP
CHECKED: WAH	CHECKED: WAH

INDIANA DEPARTMENT OF TRANSPORTATION

STRUCTURE DETAILS

S.R. 58

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	
VERTICAL SCALE	DESIGNATION
AS SHOWN	1900321
SURVEY BOOK	SHEETS
	10 of 29
CONTRACT	PROJECT
B-42313	1900321

DES 1900321

Appendix C

Early Coordination

And

Bat Habitat Assessment



Note to Reader: the maps and photos in Appendix B were sent with this sample early coordination letter.

December 31, 2020

RE: DES 1900321, Small Structure Replacement on SR 58, 7.09 miles East of SR 446, Jackson County

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intends to proceed with a project involving the replacement of a small structure in Jackson County. 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 numbers and description in your reply. We will incorporate your comments into a study of the project's environmental impacts.

This project is located on SR 58, 7.09 miles East of SR 446, in Jackson County. This section of SR 58 is classified as a Rural Major Collector. The existing SR 58 consists of two, 9-foot travel lanes with a three (3) foot usable shoulder. The existing structure, CV 058-36-96.15, is a 5.7 foot by 2.7 foot reinforced concrete box. The structure is bordered on either side by heavily wooded or forested land. Guardrail exists on both sides of the structure. Very minimal ditching exists on the north side of the roadway through the curve, which has begun to cause erosion and deterioration of the roadway edge near the structure. Existing right of way is approximately 10 feet from the edge of existing pavement.

The current proposed project would replace the existing structure with a reinforced concrete box culvert. The project will require approximately 0.63 acre of right of way. Proposed right of way would be approximately 45 feet from the north edge of pavement and approximately 50 feet from the south edge of pavement. Some tree removal will be required. The project will be approximately 0.06 mile in length. Maintenance of traffic is anticipated to be a short-term closure of SR 58 and to utilize SR 135, US 50, and SR 446. The detour length is approximately 22 miles. Construction is anticipated to begin in Summer 2022.

Land use in the vicinity of the project is primarily wooded. A Waters of the US Determination/Wetland Delineation Report will be completed to identify any ecological resources that may be present. This project qualifies for the application of the USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat and project information will be submitted through USFWS's Information for Planning and Consultation (IPaC) portal separately. An archaeological investigation will be completed for any areas of new right-of-way.

Please respond with comments, questions, and concerns within thirty (30) calendar days from the date of this letter; if no response is received, it will be assumed that your agency feels that there are no adverse effects incurred as a result of this proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon

request. If you have any questions regarding this matter, please feel free to contact Jessica Parrish at SJCA Inc at jparrish@sjcainc.com or 317-566-0629, or INDOT Project Manager, Terry Summers at tsummers@indot.IN.gov or 317-467-3963. Thank you in advance for your input on this project.

Sincerely,

Jessica Parrish, NEPA Preparer
SJCA Inc

Enclosures:

Mailing List
Project Maps
Ground Level Photographs



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

PHONE: (317) 233-6795

Eric J. Holcomb, Governor
Joe McGuinness, Commissioner

Federal Highway Administration Federal Office Building
575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204
Erica Tait – Seymour District
erica.tait@dot.gov

Indiana Geological and Water Survey
611 North Walnut Grove
Bloomington, IN 47405
<https://igws.indiana.edu/eAssessment>

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

Regional Environmental Coordinator Midwest Regional Office National Park Service
601 Riverfront Drive
Omaha, Nebraska 68102
Mwro_Compliance@nps.gov

Indiana Department of Environmental Management
<https://www.in.gov/idem/5284.htm>

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

Indiana Department of Transportation
David Dye- Seymour District
Ddye@indot.in.gov

Field Supervisor US Fish and Wildlife Service
Bloomington Indiana Field Office
620 South Walker Street
Bloomington, Indiana 47403-2121
robin_mcwilliams@fws.gov

Ms. Deborah Snyder
US Army Corps of Engineers, Louisville District, Indianapolis Regulatory Office, Indianapolis, IN 46216
RegulatoryApplicationsLRL@usace.army.mil

Forest Supervisor Hoosier National Forest US Forest Service 811 Constitution Avenue
Bedford, Indiana 47421
kamick@fs.fed.us

Jackson County Highway Department
Jerry Ault- Highway Superintendent
jault@jacksoncounty.in.gov

Jackson County Commissioners
Drew Markel
drew@drewmarkel.com

Indiana Department of Transportation
Terry Summers- Project Manager
tsummers@indot.IN.gov

Organization and Project Information

Project ID:
Des. ID: DES 1900321
Project Title: SR 58 Small Structure Replacement
Name of Organization: SJCA Inc
Requested by: Jessica Parrish

Environmental Assessment Report

1. Geological Hazards:
 - None documented in the area
2. Mineral Resources:
 - Bedrock Resource: High Potential
 - Sand and Gravel Resource: None documented in the area
3. Active or abandoned mineral resources extraction sites:
 - None documented in the area

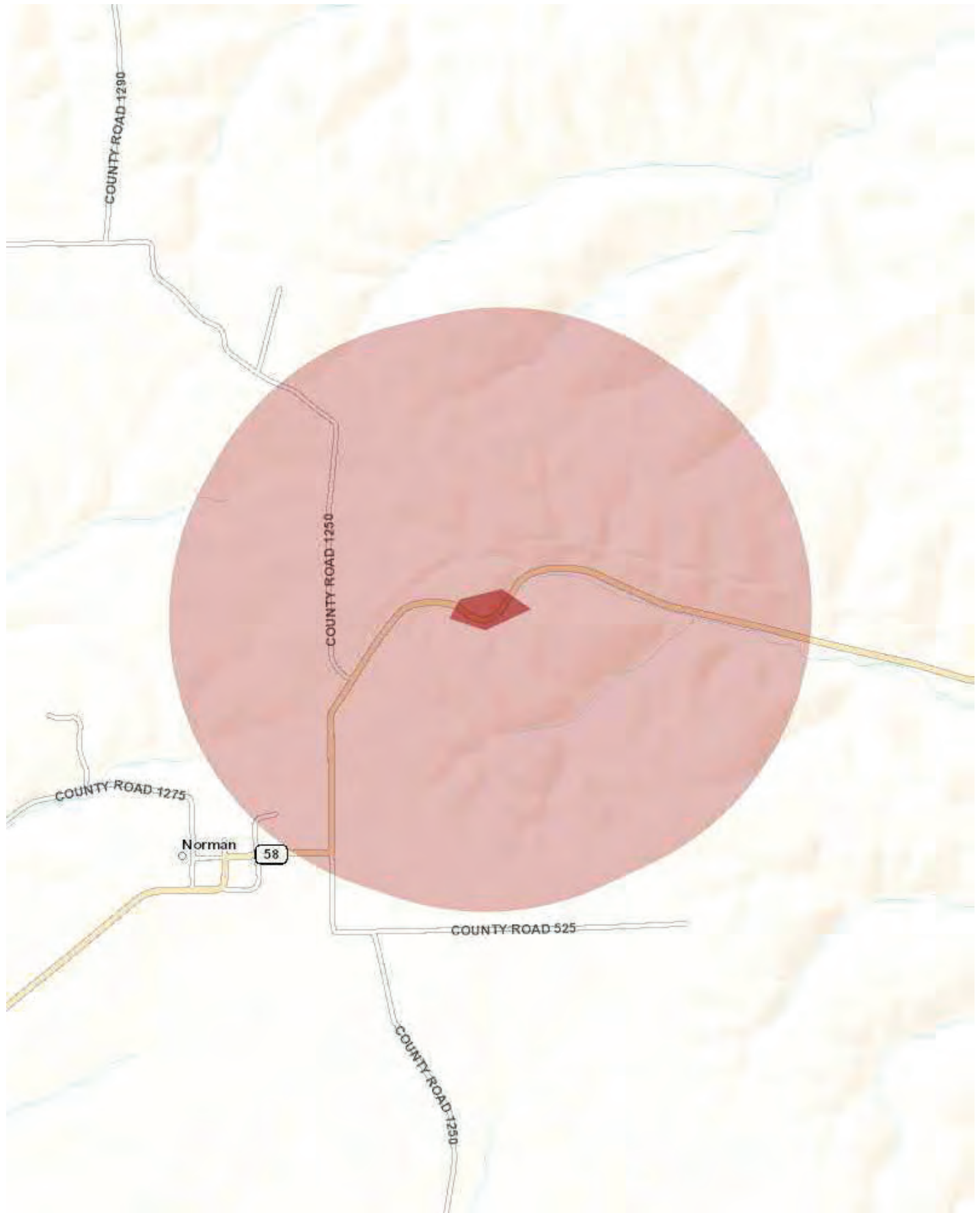
*All map layers from Indiana Map (maps.indiana.edu)

DISCLAIMER:

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

This information was furnished by Indiana Geological Survey
Address: 420 N. Walnut St., Bloomington, IN 47404
Email: IGSEnvir@indiana.edu
Phone: 812 855-7428

Date: December 31, 2020



Metadata:

- https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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

INDOT

SJCA Inc

, IN
Date

1104 Prospect St
Indianapolis , IN 46203

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: DES 1900321. This project is located on SR 58, 7.09 miles East of SR 446, in Jackson County. The current proposed project would replace the existing structure with a reinforced concrete box culvert. The project with require approximately 0.63 acre of right of way. Proposed right of way would be approximately 45 feet from the north edge of pavement and approximately 50 feet from the south edge of pavement. Some tree removal will be required. The project will be approximately 0.06 mile in length. Maintenance of traffic is anticipated to be a short-term closure of SR 58 and to utilize SR 135, US 50, and SR 446. The detour length is approximately 22 miles. Construction is anticipated to begin in Summer 2022.

This letter from the Indiana Department of Environmental Management (IDEM) serves as a standardized response to enquiries inviting IDEM comments on roadway construction, reconstruction, or other improvement projects within existing roadway corridors when the proposed scope of the project is beneath the threshold requiring a formal National Environmental Policy Act-mandated Environmental Assessment or Environmental Impact Statement. As the letter attempts to address all roadway-related environmental topics of potential concern, it is possible that not every topic addressed in the letter will be applicable to your particular roadway project.

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer questions not fully addressed in this letter. Also please be mindful that some environmental requirements may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: <http://www.in.gov/idem/5283.htm> (<http://www.in.gov/idem/5283.htm>).

To ensure that all environmentally-related issues are adequately addressed, IDEM recommends that you read this letter in its entirety, and consider each of the following issues as you move forward with the planning of your proposed roadway construction, reconstruction, or improvement project:

WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are

disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE Permits and Public Notices (<http://www.lrl.usace.army.mil/orf/default.asp>) (<http://www.lrl.usace.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm> (<http://www.in.gov/idem/4396.htm>). IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality Wetlands Program. To learn more about the Wetlands Program, visit: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>).
3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.
4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>) for the appropriate staff contact to further discuss your project.
5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the following statutes:
 - o IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - o IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
 - o IC 14-28-1 Flood Control Act 310 IAC 6-1
 - o IC 14-29-1 Navigable Waterways Act 312 IAC 6
 - o IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6

- IC 14-29-4 Construction of Channels Act No related code

For information on these Indiana (statutory) Code and Indiana Administrative Code citations, see the DNR Web site at: <http://www.in.gov/dnr/water/9451.htm> (<http://www.in.gov/dnr/water/9451.htm>) . Contact the DNR Division of Water at 317-232-4160 for further information.

The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.

6. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
 - <http://www.in.gov/idem/4902.htm> (<http://www.in.gov/idem/4902.htm>)

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constreq> (<http://www.in.gov/idem/4917.htm#constreq>)), and as described in 327 IAC 15-5-6.5 (<http://www.in.gov/legislative/iac/T03270/A00150> [PDF] (<http://www.in.gov/legislative/iac/T03270/A00150.PDF>), pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html> (<http://www.in.gov/isda/soil/contacts/map.html>)).

Upon receipt of the construction plan, personnel of the SWCD or the Indiana Department of Environmental Management will review the plan to determine if it meets the requirements of 327 IAC 15-5. Plans that are deemed deficient will require re-submittal. If the plan is sufficient you will be notified and instructed to submit the verification to IDEM as part of the Rule 5 Notice of Intent (NOI) submittal. Once construction begins, staff of the SWCD or Indiana Department of Environmental Management will perform inspections of activities at the site for compliance with the regulation.

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm> (<http://www.in.gov/idem/4900.htm>).

If your project is located in an IDEM-approved MS4 area, please contact the local MS4 program about meeting their storm water requirements. Once the MS4 approves the plan, the NOI can be submitted to IDEM.

Regardless of the size of your project, or which agency you work with to meet storm water requirements, IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.

7. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317/232-4080) for addition project input.
8. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
9. For projects involving effluent discharges to waters of the State of Indiana , contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
10. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

AIR QUALITY

The above-noted project should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed (<http://www.in.gov/idem/4148.htm> (<http://www.in.gov/idem/4148.htm>)) under specific conditions. You also can seek an open burning variance from IDEM.

However, IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on site (you must register with IDEM if more than 2,000 pounds is to be composted; contact 317/232-0066). The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) onsite, although burying large quantities of such material can lead to subsidence problems, later on.

Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.

Additionally, if construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for 3-5 years precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for 3-5 years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at (317) 233-7272.

2. The U.S. EPA and the Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. (For a county-by-county map of predicted radon levels in Indiana, visit: <http://www.in.gov/idem/4145.htm> (<http://www.in.gov/idem/4145.htm>).)

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation

of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit: http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf (http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf.) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure visit:

<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm> (<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>), <http://www.in.gov/idem/4145.htm> (<http://www.in.gov/idem/4145.htm>), or <http://www.epa.gov/radon/index.html> (<http://www.epa.gov/radon/index.html>).

3. With respect to asbestos removal: all facilities slated for renovation or demolition (except residential buildings that have (4) four or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.

For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.

However, in all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at <http://www.in.gov/icpr/webfile/formsdiv/44593.pdf> (<http://www.in.gov/icpr/webfile/formsdiv/44593.pdf>).

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. All notification remitters will be billed on a quarterly basis.

For more information about IDEM policy regarding asbestos removal and disposal, visit: <http://www.in.gov/idem/4983.htm> (<http://www.in.gov/idem/4983.htm>).

4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: <http://www.in.gov/isdh/19131.htm> (<http://www.in.gov/isdh/19131.htm>).
5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule

(<http://www.ai.org/legislative/iac/T03260/A00080.PDF>
(<http://www.ai.org/legislative/iac/T03260/A00080.PDF>)).

6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: www.ai.org/legislative/iac/t03260/a00020.pdf (<http://www.ai.org/legislative/iac/t03260/a00020.pdf>)). New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm> (<http://www.in.gov/idem/4223.htm>), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or OAMPROD at adem.state.in.us.

LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm> (<http://www.in.gov/idem/4998.htm>).
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If PCBs are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes (Asbestos removal is addressed above, under Air Quality).
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: <http://www.in.gov/idem/4999.htm> (<http://www.in.gov/idem/4999.htm>).

FINAL REMARKS

Should you need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that you notify all adjoining property owners and/or occupants within ten days your submittal of each permit application. However, if you are seeking multiple permits, you can still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Should the scope of the proposed project be expanded to the extent that a National Environmental Policy Act Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required, IDEM will actively participate in any early interagency coordination review of the project.

Meanwhile, please note that this letter does not constitute a permit, license, endorsement or any other form of approval on the part of the Indiana Department of Environmental Management regarding any project for which a copy of this letter is used. Also note that it is the responsibility of the project engineer or consultant using this letter to ensure that the most current draft of this document, which is located at <http://www.in.gov/idem/5284.htm> (<http://www.in.gov/idem/5284.htm>), is used.

Signature(s) of the Applicant

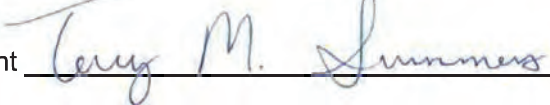
I acknowledge that the following proposed roadway project will be financed in part, or in whole, by public monies.

Project Description

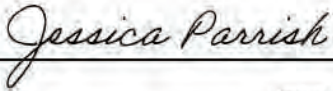
DES 1900321. This project is located on SR 58, 7.09 miles East of SR 446, in Jackson County. The current proposed project would replace the existing structure with a reinforced concrete box culvert. The project will require approximately 0.63 acre of right of way. Proposed right of way would be approximately 45 feet from the north edge of pavement and approximately 50 feet from the south edge of pavement. Some tree removal will be required. The project will be approximately 0.06 mile in length. Maintenance of traffic is anticipated to be a short-term closure of SR 58 and to utilize SR 135, US 50, and SR 446. The detour length is approximately 22 miles. Construction is anticipated to begin in Summer 2022.

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environment that appears directly above. In addition, I understand that in order to complete that project in which I am interested, with a minimum of impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Date: 3/26/2021

Signature of the INDOT
Project Engineer or Other Responsible Agent 

Date: 3/26/2021

Signature of the
For Hire Consultant 
Jessica Parrish

From: [McWilliams, Robin](#)
To: [Jessica Parrish](#)
Subject: Re: [EXTERNAL] DES 1900321 SR 58
Date: Wednesday, January 27, 2021 10:54:44 AM
Attachments: [image001.png](#)

Dear Jessica,

This responds to your recent letter requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and should follow the new Indiana bat/northern long-eared bat programmatic consultation process, if applicable (i.e. a federal transportation nexus is established). The Service has 14 days after a "Not Likely to Adversely Affect" determination letter is generated to review the project and provide additional comments or request additional information; if you do not receive a response from us within 14 days, we have no additional comments.

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no other comments on the project as currently proposed. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinstate consultation. Standard recommendations are provided below.

We appreciate the opportunity to comment at this early stage of project planning. If you have any questions about our recommendations, please call (812) 334-4261 x. 207.

Sincerely,
Robin McWilliams Munson

Standard Recommendations:

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.)**
2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering

techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.

5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.

6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams.

7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing

Robin McWilliams Munson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, IN 46142
812-334-4261

[Mon-Tues 8-3:30p](#)

[Wed-Thurs 8:30-3p Telework](#)

From: Jessica Parrish <jparrish@sjcainc.com>

Sent: Thursday, December 31, 2020 10:40 AM

To: erica.tait@dot.gov <erica.tait@dot.gov>; DNR Environmental Review <environmentalreview@dnr.IN.gov>; MWRO Compliance, NPS <MWRO_Compliance@nps.gov>; Melanie.h.castillo@hud.gov <Melanie.h.castillo@hud.gov>; RegulatoryApplicationsLRL@usace.army.mil <RegulatoryApplicationsLRL@usace.army.mil>; kamick@fs.fed.us <kamick@fs.fed.us>; jault@jacksoncounty.in.gov <jault@jacksoncounty.in.gov>; drew@drewmarkel.com <drew@drewmarkel.com>; auditor@jacksoncounty.in.gov <auditor@jacksoncounty.in.gov>; tsummers@indot.IN.gov <tsummers@indot.IN.gov>; Dye, David <DDYE@indot.IN.gov>; McWilliams, Robin <robin_mcwilliams@fws.gov>

Subject: [EXTERNAL] DES 1900321 SR 58

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

Good morning,

Attached is the early coordination packet for SR 58 Small Structure Replacement in Jackson County, Indiana. Your comments are requested in thirty (30) days.

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

DNR #: ER-23320

Request Received: December 31, 2020

Requestor: SJCA Inc
Jessica Parrish
1104 Prospect Street
Indianapolis, IN 46203

Project: SR 58 small structure (CV 058-36-96.15) replacement, 7.09 miles east of SR 446; Des #1900321

County/Site info: Jackson

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

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

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

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. However, Hoosier National Forest is located within 1/2 mile northeast of the project area.

Fish & 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:

1) Crossing Structure:

For purposes of maintaining fish and wildlife passage through a crossing structure, the Environmental Unit recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. If box or pipe culverts are used, the bottoms should be buried a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the OHWM width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width / length) of 0.25; and have stream depth, channel width, and water velocities during low-flow conditions that are approximate to those in the natural stream channel.

2) Bank Stabilization & Wildlife Passage:

The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to current conditions. Minimize the use of riprap and use alternative erosion protection materials whenever possible. Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Where riprap must be used, we recommend placing only enough riprap to

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

provide stream bank toe protection, such as from the toe of the bank up to the ordinary high water mark (OHWM). 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 the area and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

Where hard armoring is needed, wildlife passage can be facilitated by using a smooth-surfaced material instead of riprap, such as articulated concrete block mats, fabric-formed concrete mats or other similar smooth-surfaced materials as these materials will not impair wildlife movement.

Information about bioengineering techniques can be found at <http://www.in.gov/legislative/iac/20120404-IR-312120154NRA.xml.pdf>. Also, the following is a USDA/NRCS document that outlines many different bioengineering and other bank stabilization techniques: <http://directives.sc.egov.usda.gov/17553.wba>.

3) Riparian Habitat:

We recommend a mitigation plan be developed for any unavoidable habitat impacts that will occur. The mitigation site should be located in the floodway preferably as close to the impact site as possible and adjacent to existing forested riparian habitat. The DNR's Habitat Mitigation guidelines (and plant lists) can be found online at: <http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf>.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

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 with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs if any woody plants are disturbed during construction as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants, including prohibited invasive species (see 312 IAC 18-3-25).
2. Minimize and contain within the project limits inchannel 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 (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.
6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
7. Use minimum average 6 inch graded riprap stone extended below the normal water

THIS IS NOT A PERMIT

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

level to provide habitat for aquatic organisms in the voids.

8. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.

9. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

10. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife

Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer

Date: January 29, 2021

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife

Subject: RE: Des 1900321 SR 58 Small Structure Replacement Source Water Area
Date: Wednesday, June 9, 2021 at 9:53:35 AM Eastern Daylight Time
From: Turnbow, Alisha
To: Erin Mulryan
CC: Blazey, Samuel
Attachments: image017.png, image018.png, image019.png, image020.png, image021.png, image022.png, image023.png, image024.png, image025.png, image026.png, image027.png, image028.png, image029.png, image030.png, image031.png, image032.png, image033.png, image034.png, image035.png, image036.png, image037.png, image038.png, image039.png, image040.png, image041.png, image042.png, image043.png, image044.png, image045.png, image046.png

Hi Erin,

The project Des No 1900321 is located in Salt Creek Services, Inc. and the City of Bloomington Utilities Source Water Assessment Area. The contact for Salt Creek Services, Inc. is Adam Hershberger and they can be reached at ahershberger@bynumfanyo.com and 812-332-8030. The contact for City of Bloomington Utilities is Tyler Steury and they can be reached at steuryt@bloomington.in.gov and 812-361-7774. Let me know what questions you have.

Sincerely,



Alisha Turnbow
Environmental Manager
Office of Water Quality
Drinking Water Branch, Groundwater Section
(317) 233-9158 • aturnbow@idem.IN.gov

Indiana Department of Environmental Management

| | |

COVID-19 Resources:

- **Indiana State Dept. of Health (ISDH) COVID-19 Call Center:** Call 877-826-0011 (available 8:00 am-5:00 pm daily).
- **Anthem NurseLine:** Call 800-337-4770 or visit the [Anthem NurseLine](#) online for a FREE symptom screening. Available to anyone with an Anthem health plan (this includes State of IN employees)
- **Anthem Employee Assistance Program (EAP):** Available to full-time state employees and their household members regardless of health plan participation. Call 800-223-7723 or visit anthem.eap.com (enter State of Indiana) for crisis counseling, help finding child/elder care, legal/financial consultation and much more.

From: Erin Mulryan <emulryan@sjcainc.com>
Sent: Tuesday, June 08, 2021 5:01 PM
To: Turnbow, Alisha <ATurnbow@idem.IN.gov>
Subject: FW: Des 1900321 SR 58 Small Structure Replacement Source Water Area

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.753Ä:4145;4Ä8-4,-78Ä57Ä:4-<6-+9-,Ä-3*02 ÄÄÄÄÄ

Subject: Re: Des 1900321 SR 58 Small Structure Replacement Jackson Co Source Water Area
Date: Wednesday, June 9, 2021 at 1:07:53 PM Eastern Daylight Time
From: Tyler Steury
To: Erin Mulryan
Attachments: image613069.png, image020234.png, image341040.png, image263223.png, image324503.png, image421046.png, image034359.png, image141910.png, image147694.png, image051110.png, image887332.png, image990435.png, image077895.png, image637916.png, image966467.png, image398079.png, image339388.png

We don't have any comments about this project, thank you.



On Wed, Jun 9, 2021 at 12:13 PM Erin Mulryan <emulryan@sjcainc.com> wrote:

Hello, IDEM gave me your contact information for the Salt Creek Services Inc. source water assessment area that is located in this project. Attached is the early coordination packet that was sent in December that has project information. Two small updates to the project scope since this was sent to environmental review agencies include the proposed acquisition of 0.027 acre of temp right of way and the removal of 7.5 feet of the existing 24-inch pipe that outfalls on the north side of the project structure for riprap installation.

Because the project is located in a SWAA, I am contacting you to get input regarding project impacts. Due to the project's tight schedule, your response is kindly requested as soon as possible. If you have any questions regarding the project please feel free to email or call me at 317-525-1192. Thanks!

Erin Mulryan
Director of Environmental Services

SJCA Inc.
1104 Prospect Street
Indianapolis, IN 46203

Subject: Re: Des 1900321 SR 58 Small Structure Replacement Jackson Co Source Water Area
Date: Wednesday, June 9, 2021 at 1:09:57 PM Eastern Daylight Time
From: Adam Hershberger
To: Erin Mulryan
Attachments: image613069.png, image020234.png, image341040.png, image263223.png, image324503.png, image421046.png, image034359.png, image141910.png, image147694.png, image051110.png, image887332.png, image990435.png, image077895.png, image637916.png, image966467.png, image398079.png, image339388.png

Good afternoon Erin,

Thanks for reaching out. None of our clients, including Salt Creek Services, have any facilities in the area of the proposed project.

Thanks,

Adam Hershberger
Bynum Fanyo Utilities, Inc.
812-360-8033

From: Erin Mulryan <emulryan@sjcainc.com>
Sent: Wednesday, June 9, 2021 12:13 PM
To: Adam Hershberger <ahershberger@bynumfanyo.com>; steuryt@bloomington.in.gov <steuryt@bloomington.in.gov>
Subject: Des 1900321 SR 58 Small Structure Replacement Jackson Co Source Water Area

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From: [Dye, David](#)
To: [Jessica Parrish](#)
Subject: RE: DES 1802993 SR 258 IPaC Record Locator: 067-98396651
Date: Tuesday, February 16, 2021 2:08:20 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
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[image021.png](#)

I have reviewed and submitted this determination to USFWS for their 14-day review period.

Let me know if you have any additional questions.

David Dye

Environmental Section Manager

185 Agrico Lane

Seymour, IN 47274

Office: (812) 524-3723

Email: ddye@indot.in.gov



From: Jessica Parrish <jparrish@sjcainc.com>
Sent: Wednesday, February 10, 2021 11:01 AM
To: Dye, David <DDYE@indot.IN.gov>
Subject: RE: DES 1802993 SR 258 IPaC Record Locator: 067-98396651

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

Hello David,

I made the recommended changes to 1802993. I had filled out 1900321 correctly and they are ready for your review.

Thank you,



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

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>

In Reply Refer To:

February 16, 2021

Consultation code: 03E12000-2021-I-0484

Event Code: 03E12000-2021-E-03708

Project Name: DES 1900321 SR 58 Small Structure Replacement Project

Subject: Concurrence verification letter for the 'DES 1900321 SR 58 Small Structure Replacement Project' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **DES 1900321 SR 58 Small Structure Replacement Project** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion 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, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*).

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/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted 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. 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.

Project Description

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

Name

DES 1900321 SR 58 Small Structure Replacement Project

Description

This project involves the replacement of structure CV 058-036-096.15 on SR 58, 7.09 miles east of SR 446 in Jackson County, Indiana. This section of SR 58 is classified as a Rural Major Collector. The existing SR 58 consists of two, 9-foot travel lanes with a three (3) foot usable shoulder. The existing structure, CV 058-36-96.15, is a 5.7 foot by 2.7 foot reinforced concrete box. The structure is bordered on either side by heavily wooded or forested land. Guardrail exists on both sides of the structure. The existing headwalls have failed, there is spalling and cracking in the abutments, and scour along the channel bank. Very minimal ditching exists on the north side of the roadway through the curve, which has begun to cause erosion and deterioration of the roadway edge near the structure. Existing right of way is approximately 10 feet from the edge of existing pavement. The preferred alternative for this project is to replace the existing structure with a seven (7) foot by four (4) foot reinforced concrete box. A paved side ditch is proposed along the north side of the roadway to reinforce the roadside ditch and protect the roadway from erosion or undermining. The placement of Riprap at both the inlet and the outlet of the structure is anticipated. The project will be approximately 310 feet in length and require approximately 0.63 acre of right of way. It is anticipated that 0.27 acre of trees will be removed for access to the structure and space for riprap placement. Suitable summer habitat is located adjacent to the project area, with stands of trees with diameter larger than 3 inches, and individual trees within 1000 feet of the structure. A review of the USFWS database on October 7, 2020 by INDOT, did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. A site visit on August 25, 2020 by SJCA, Inc staff found no indication or presence of bats in the structure. Temporary lightning may be used during construction but no permanent lighting is planned. Construction is anticipated to begin Summer of 2022. Temporary lightning may be used but no permanent lighting will be used.

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 threatened 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 revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion 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

Yes

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 [national consultation FAQs](#).

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. Does the project include activities **within documented NLEB 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

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

Yes

17. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

B) During the inactive season

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

Yes

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

No

20. Are *all* trees that are being removed clearly demarcated?
Yes
21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?
No
22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?
No
23. Does the project include slash pile burning?
No
24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?
Yes
25. 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

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

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

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

Yes

SUBMITTED DOCUMENTS

- *Des 1900321_Bat Check IPaC_11.13.2020.pdf* <https://ecos.fws.gov/ipac/project/FO2ZQB4UURBNDPODEL4LFHHOTU/projectDocuments/98395518>

27. 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

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

No

29. 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

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

Yes

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

Yes

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

No

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

No

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 are not associated with habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

Automatically answered

Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

37. 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.

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 NLEB'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 1**

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

Yes

Project Questionnaire

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

No

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

No

3. 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.

0.18

4. Please describe the proposed bridge work:
Replace existing large culvert that has failed
5. Please state the timing of all proposed bridge work:
Summer 2022
6. Please enter the date of the bridge assessment:

8/26/20

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.

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 December 29, 2020. 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 threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion 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.



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

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>

In Reply Refer To:

June 03, 2021

Consultation Code: 03E12000-2021-SLI-0484

Event Code: 03E12000-2021-E-06476

Project Name: DES 1900321 SR 58 Small Structure Replacement Project

Subject: Updated 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 attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project “may affect” listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

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.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html> to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number 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

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

Consultation Code: 03E12000-2021-SLI-0484

Event Code: 03E12000-2021-E-06476

Project Name: DES 1900321 SR 58 Small Structure Replacement Project

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: This project involves the replacement of structure CV 058-036-096.15 on SR 58, 7.09 miles east of SR 446 in Jackson County, Indiana. This section of SR 58 is classified as a Rural Major Collector. The existing SR 58 consists of two, 9-foot travel lanes with a three (3) foot usable shoulder. The existing structure, CV 058-36-96.15, is a 5.7 foot by 2.7 foot reinforced concrete box. The structure is bordered on either side by heavily wooded or forested land. Guardrail exists on both sides of the structure. The existing headwalls have failed, there is spalling and cracking in the abutments, and scour along the channel bank. Very minimal ditching exists on the north side of the roadway through the curve, which has begun to cause erosion and deterioration of the roadway edge near the structure. Existing right of way is approximately 10 feet from the edge of existing pavement. The preferred alternative for this project is to replace the existing structure with a seven (7) foot by four (4) foot reinforced concrete box. A paved side ditch is proposed along the north side of the roadway to reinforce the roadside ditch and protect the roadway from erosion or undermining. The placement of Riprap at both the inlet and the outlet of the structure is anticipated. The project will be approximately 310 feet in length and require approximately 0.63 acre of right of way. It is anticipated that 0.27 acre of trees will be removed for access to the structure and space for riprap placement. Suitable summer habitat is located adjacent to the project area, with stands of trees with diameter larger than 3 inches, and individual trees within 1000 feet of the structure. A review of the USFWS database on October 7, 2020 by INDOT, did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. A site visit on August 25, 2020 by SJCA, Inc staff found no indication or presence of bats in the structure. Temporary lightning may be used during construction but no permanent lighting is planned. Construction is anticipated to begin Summer of 2022. Temporary lighting may be used but no permanent lighting will be used.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.95866542923466,-86.2649200877737,14z>



Counties: Jackson County, Indiana

Endangered Species Act Species

There is a total of 2 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. Note that 1 of these species should be considered only under certain conditions.

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. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Incidental take of the NLEB is not prohibited here. Federal agencies may consult using the 4(d) rule streamlined process. Transportation projects may consult using the programmatic process. See www.fws.gov/midwest/endangered/mammals/nleb/index.html Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

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

DES 1900321

Appendix D

Section 106 of the DHPA

Scott Henley (Jeffrey Scott)

From: Miller, Shaun (INDOT) <smiller@indot.IN.gov>
Sent: Wednesday, February 3, 2021 11:24 AM
To: Chris Jackson; Scott Henley (Jeffrey Scott)
Cc: Karen Wood; Summers, Terry; Dye, David; Carpenter, Patrick A
Subject: RE: FHWA; INDOT Project; Des. No. 1900321, SR 58 Small Structure Replacement Project, Jackson County, MPPA Section 1 Form Submission
Attachments: MPPA Determination Form_B-9_Des 1900321.pdf

Hi Chris,

Thank you for submitting the revised archaeological report and project related materials for our review under the MPPA. We have determined that this project falls under Category B-9 of the Minor Projects PA, thus concluding the Section 106 process. The determination form is attached for use in the CE document.

Please submit both electronic and paper copies of the approved archaeology report to DHPA, indicating in the cover letter that the project qualified as a Minor Project and therefore the report is for their records only and no formal review is required under Section 106. In addition, we ask that a copy of the DHPA submittal letter be sent to INDOT CRO c/o Shaun Miller during the time of submission and that the archaeological report be posted to IN SCOPE.

Please keep in mind that if the scope of the project or project limits should change, our office will need to re-examine the information to determine whether the MPPA still applies. Please don't hesitate to contact us should you have any questions or need additional information.

Thanks again,

Shaun Miller
INDOT, Cultural Resources Office
Archaeology Team Lead
(317)416-0876

From: Chris Jackson <cjackson@sjcainc.com>
Sent: Monday, February 1, 2021 4:28 PM
To: Miller, Shaun (INDOT) <smiller@indot.IN.gov>; Scott Henley (Jeffrey Scott) <shenley@sjcainc.com>
Cc: Karen Wood <kwood@sjcainc.com>; Summers, Terry <TSUMMERS@indot.IN.gov>; Dye, David <DDYE@indot.IN.gov>; Carpenter, Patrick A <PACarpenter@indot.IN.gov>
Subject: RE: FHWA; INDOT Project; Des. No. 1900321, SR 58 Small Structure Replacement Project, Jackson County, MPPA Section 1 Form Submission

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

Shaun----

Attached is the revised report that addresses your comments.

If you have any questions pertaining to the revised report, please let me now.

Thanks.

Minor Projects PA Project Assessment Form

Date: 2/1/21

Project Designation Number: 1900321

Route Number: SR 58

Project Description: Small Structure Replacement, 7.09 miles east of SR 446

The purpose of this project is to restore structural and hydraulic functionality to the culvert structure. The need for this project is driven by the poor rating of the existing structure (Culvert Rating: 4, poor), due to failed headwalls, spalling and cracking in the abutments, and scour along the channel bank.

The project would replace the existing small structure (5.7-foot x 2.7-foot RCB) with a new structure that meets the necessary structural and hydraulic requirements. The proposed improvements will replace the structure with a 7-foot x 4-foot RCB with 6-inch sump and increase the length from 40 feet to 49 feet. Also, revetment riprap will be placed at the outlet with Class 1 riprap at the inlet. The guardrail will be updated and replaced through the project limits. A Class B paved ditch is proposed to be installed along the north side of the roadway to reinforce the roadside ditch and protect the roadway from further erosion and undermining.

Approximately 0.63 acres are expected to be acquired.

Feature crossed (if applicable):

City/Township: Owen Township

County: Jackson County

Information reviewed (please check all that apply):

- General project location map USGS map Aerial photograph Interim Report
 Written description of project area General project area photos Soil survey data
 Previously completed historic property reports Previously completed archaeology reports
 Bridge Inspection Information SHAARD SHAARD GIS Streetview Imagery

Other (please specify): Bridge Inspection Application System (BIAS); Indiana State Historic Architectural and Archaeological Research Database (SHAARD); Indiana Buildings, Bridges, and Cemeteries Map website; Arc Map GIS; Lake County GIS (accessed via <https://portico.mygisonline.com/html5/?viewer=lakeinsurveyor>); online street-view imagery; MPPA application (including maps and photographs) sent by Metric Environmental, LLC, dated October 14th, 2020 and on file at Cultural Resources Office (CRO).

Jackson, Christopher

2021 Phase Ia Archaeological Literature Review and Reconnaissance Survey for the Proposed SR 58 Small Structure Replacement over an Unnamed Ditch that is 7.09 miles east of the junction of SR 446 and SR 58 (Des 1900321), Owen Township, Jackson County, Indiana. Report on file, Indiana Department of Transportation, Cultural Resources Office, Indianapolis, In.

Does the project fall under the Minor Projects PA? yes no

If yes, please specify categories and condition(s) (conditions that are applicable are highlighted):

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

Minor Projects PA Project Assessment Form

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

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

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

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

Minor Projects PA Project Assessment Form

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

Additional Comments:

Above-ground Resources

With regard to above-ground resources, an INDOT Cultural Resources historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 first performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Jackson County. No listed resources are present within 0.25 mile of the project area, a distance that would serve as an adequate area of potential effects (APE) given the scope of the project and the surrounding terrain.

The project occurs in a wooded area with no structures close to the small structure. A check of the Indiana Historic Buildings, Bridges, and Cemeteries (IHBBC) map does not show any surveyed properties within a 0.25 mile of the project area. The culvert was not included in the Indiana Historic Bridge Inventory.

Due to masonry features on the culvert, including stone abutments, additional documentation was submitted by a Qualified Professional with SJCA (Henley: SJCA). Please see a below excerpt from that documentation:

CV# 058-036-096.15 is a 5.7-foot x 2.7-foot Masonry Box Culvert with a slab top located along SR 58 in Salt Creek Township, Jackson County, Indiana. The culvert carries an unnamed ditch underneath SR 58 with openings on the north and south sides of the road. The 1932 "State Highway System of Indiana" map shows a county road that follows the general course of SR 58 and is listed as "IMPROVED: Gravel, Stone, etc." The 1940 "State Highway System of Indiana" map shows SR 58 on its current course and it is listed as an "Intermediate Type: Mulch, Stabilized, Road Oil Mat." At some point between 1932 and 1940, the State Highway Commission took responsibility for the road, therefore the culvert was likely built in the mid to late 1930s. This timeframe estimate is bolstered by developments in the Indiana State Highway System during the Great Depression. Counties in Indiana often gave up maintenance of highways and bridges to the state when local dollars became much more needed for local relief efforts during the Great Depression. The growth in state highways coincided with greater federal spending under the New Deal for unemployment relief in construction projects. Because of emphasis on hand labor projects that involved WPA programs, road construction, along with bridge and culvert building, relied on more traditional and locally sourced materials such as stone and timber.¹

The Culvert Inspection Reports dated 8/4/2017, 8/14/2019, and 6/12/2020 – accessed via the Bridge Inspection Application System (BIAS) – do not state a construction date nor do they note the specific materials used in the construction of the culvert. The enclosed photographs show stacked stone in the abutments of the culvert and the inspection reports note the abutments are sloping in with spalls and cracks in the abutments. The inspection reports also note the headwalls have failed and any nonmodern wood, stone, or brick structure has lost all architectural integrity. As noted in the inspection reports, the failure of the headwalls is affecting the roadway and the slab is sagging on both ends. While this culvert exhibits non-modern wood, stone, or brick structures or parts therein, it no longer exhibits sufficient architectural integrity due to the continuing deterioration of the structure. It also lacks content that suggests it has engineering or historical significance associated with the time in which it was likely constructed. It cannot be determined that this culvert is associated with the early development of using stone in culvert construction nor is it a good example of its type, method, or construction due to its deteriorated state.

¹ Indiana Bridges Historic Context Study, 1830s-1965, INDOT CC No. 050108, report prepared for Indiana Department of Transportation (M & H Architecture Inc., 2007), 82.

Minor Projects PA Project Assessment Form

Based on the documentation submitted by the consultant and INDOT-CRO's own desktop survey, it does not appear that this small structure would be National Register eligible.

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

Based on the available information, as summarized above, no above-ground concerns exist.

Archaeological Resources

An INDOT Cultural Resources Office (CRO) archaeologist, who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61, reviewed the archaeology short report prepared by SJCA (Jackson 2021) and identified no archaeological concerns. The archaeological record check determined that the project area has not been previously investigated for archaeological resources and that no sites have been recorded in or adjacent to its boundaries. A 1.45-acre survey area was investigated through the excavation of nine shovel probes and visual inspection of disturbed or sloped areas at 10m intervals. No archaeological sites were identified, and no further work was recommended. The archaeological report has been reviewed by INDOT Cultural Resources personnel who meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61. It is our opinion that the report is acceptable, and we concur with recommendations made by Jackson (2021).

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction within 100 feet of the discovery will be stopped, and the INDOT Cultural Resources Office and the Division of Historic Preservation and Archaeology will be notified immediately.

INDOT Cultural Resources staff reviewer(s): Patrick Carpenter and Shaun Miller

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

DES 1900321

Appendix E

Red Flag Investigation



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

PHONE: (317) 232-5113
FAX: (317) 233-4929

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

Date: February 17, 2021

To: Site Assessment & Management
Environmental Policy Office - Environmental Services Division
Indiana Department of Transportation
100 N Senate Avenue, Room N642
Indianapolis, IN 46204

From: Ty Gallahan
Seymour District
1104 Prospect St.
Indianapolis, Indiana
Tgallahan@sjcainc.com

Re: RED FLAG INVESTIGATION
DES 1900321, State Project
Small Structure Project
SR 58 over UNT, 7.09 Miles East of SR 446
Jackson County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT) intend to proceed with a small structure project at SR 58 over UNT, approximately 7.09 miles East of SR 446. The existing structure is a 5.7-foot by 2.7-foot reinforced concrete box with a length of 40 feet. The proposed alternative is to replace the structure with a 7-foot by 4-foot Reinforced Concrete Box with a length of 49 feet and a 6-inch sump. Headwalls and wingwalls are anticipated to be placed at the inlet and out of the new structure due to eroding soil conditions located west of the structure. Riprap will be placed east and west of the inlet, at the inlet, and at the outlet of the new structure to protect against erosion. A paved ditch is proposed for the north side of the roadway to reinforce the roadside ditch and to prevent erosion and undermining of the roadway. The existing guardrail will be updated and replaced through the project limits.

Bridge and/or Culvert Project: Yes No Structure # CV 058-36-096.15

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

Proposed right of way: Temporary # Acres Less Than 0.5 acres, Permanent # Acres Over 0.5 acres, Not Applicable

Type of excavation: Excavation will occur for riprap placement, structure replacement, and guardrail replacement. The maximum depth of excavation is anticipated to be approximately 13 feet below grade surface.

Maintenance of traffic: Anticipated MOT is a full closure with a detour utilizing SR 446, US 50, and SR 135.

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			
Religious Facilities	N/A	Recreational Facilities	N/A
Airports ¹	N/A	Pipelines	1
Cemeteries	N/A	Railroads	N/A
Hospitals	N/A	Trails	1
Schools	N/A	Managed Lands	1

Pipelines: One (1) pipeline is located within the 0.5 mile search radius. The nearest segment, associated with Texas Gas Transmission Corp., is located 0.49 mile southeast of the project area. No impact is expected.

Trails: One (1) trail is located within the 0.5 mile search radius. Hickory Ridge Trail 16 (Open) is located 0.36 mile northeast of the project area. No impact is expected.

Managed Lands: One (1) managed land is located within the 0.5 mile search radius. Hoosier National Forest is located 0.24 mile northeast of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
NWI - Points	1	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	11
Canal Structures – Historic	N/A	Lakes	4
NPS NRI Listed	N/A	Floodplain - DFIRM	N/A
NWI-Lines	N/A	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	5	Sinkhole Areas	N/A
Rivers and Streams	5	Sinking-Stream Basins	N/A

Explanation:

NWI-Point: One (1) NWI-Point is located within the 0.5 mile search radius. The nearest NWI-Point is located 0.35 mile to the northwest of the project area. No impact is expected.

IDEM 303d Listed Streams and Lakes (Impaired): Five (5) impaired stream segments are located within the 0.5 mile search radius. The nearest IDEM 303d Listed Stream is located 0.10 mile northeast of the project area. No impact is expected.

Rivers and Streams: Five (5) stream segments are located within the 0.5 mile search radius. The nearest stream is located 0.10 mile northeast of the project area. No impact is expected.

NWI-Wetlands: Eleven (11) NWI-wetlands are located within the 0.5 mile search radius. The nearest mapped wetland is located 0.25 mile northeast of the project area. No impact is expected.

Lakes: Four (4) lakes are located within the 0.5 mile search radius. The nearest mapped lake is located 0.28 mile southwest of the project area. No impact is expected.

Due to the presence of a structure, it is likely that additional water resources, such as unnamed tributaries, regulated drains, wetlands, and roadside ditches are located in the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Explanation: No mining and mineral resources were identified within the 0.5 mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	N/A	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	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

Explanation: No hazardous material concerns were identified within the 0.5 mile search radius.

ECOLOGICAL INFORMATION SUMMARY

The Jackson County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did not indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by woods. The February 1, 2021 inspection report for CV 058-036-096.15 states that no evidence of bats was seen or heard in the culvert. The range-wide programmatic consultation for the Indiana bat and Northern long-eared bat will be completed according to the most recent “Using the USFWS’s IPaC System for Listed Bat Consultation for INDOT Projects.”

RECOMMENDATIONS SECTION

INFRASTRUCTURE: N/A

MINING AND MINERAL: N/A

HAZARDOUS MATERIALS CONCERNS: N/A

WATER RESOURCES: Due to the presence of a structure, it is likely that additional water resources, such as unnamed tributaries, regulated drains, wetlands, and roadside ditches are located in the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology Water Permitting will occur.

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

INDOT Environmental Services concurrence: Marlene Mathas Digitally signed by Marlene Mathas
Date: 2021.02.22 11:27:25 -05'00' (Signature)

Prepared by:
Ty Gallahan
GIS Admin
SJCA, Inc.

Graphics:

SITE LOCATION: YES

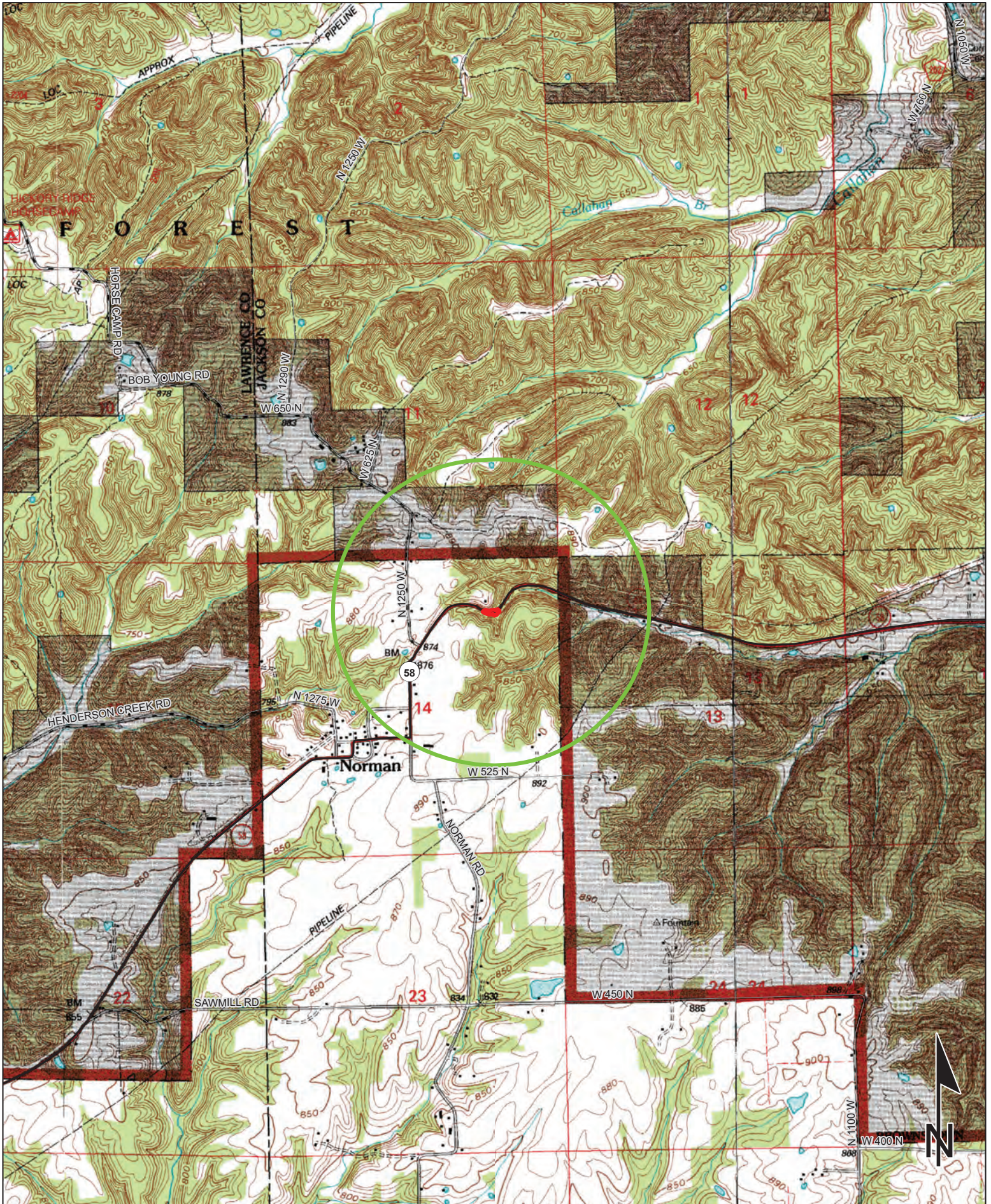
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

Red Flag Investigation - Site Location
 SR 58 over UNT, 7.09 Miles East of SR 446
 Des. No. 1900321, Small Structure Project
 Jackson County, Indiana



Sources: 0.35 0.17 0 0.35 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.

**NORMAN QUADRANGLE
 INDIANA
 7.5 MINUTE SERIES
 (TOPOGRAPHIC)**

Red Flag Investigation - Infrastructure
 SR 58 over UNT, 7.09 Miles East of SR 446
 Des. No. 1900321, Small Structure Project
 Jackson County, Indiana



Sources: 0.1 0.05 0 0.1 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

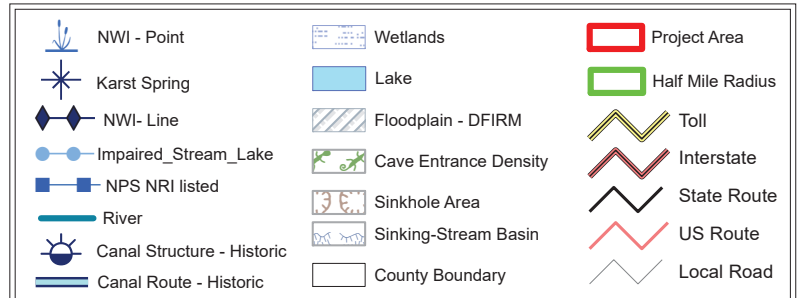
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

	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 58 over UNT, 7.09 Miles East of SR 446
 Des. No. 1900321, Small Structure Project
 Jackson County, Indiana



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



Indiana County Endangered, Threatened and Rare Species List

County: Jackson



Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
<i>Cyprogenia stegaria</i>	Eastern Fanshell Pearlymussel	LE	SE	G1Q	S1
<i>Epioblasma torulosa</i>	Tubercled Blossom	LE	SX	GX	SX
<i>Lampsilis fasciola</i>	Wavyrayed Lampmussel		SSC	G5	S3
<i>Obovaria subrotunda</i>	Round Hickorynut	C	SE	G4	S1
<i>Pleurobema clava</i>	Clubshell	LE	SE	G1G2	S1
<i>Pleurobema cordatum</i>	Ohio Pigtoe		SSC	G4	S2
<i>Pleurobema plenum</i>	Rough Pigtoe	LE	SE	G1	S1
<i>Pleurobema rubrum</i>	Pyramid Pigtoe		SX	G2G3	SX
<i>Ptychobranchnus fasciolaris</i>	Kidneyshell		SSC	G4G5	S2
<i>Theliderma cylindrica</i>	Rabbitsfoot	LT	SE	G3G4	S1
<i>Villosa lienosa</i>	Little Spectaclecase		SSC	G5	S3
Insect: Lepidoptera (Butterflies & Moths)					
<i>Pieris virginiensis</i>	West Virginia white		ST	G3?	S3
Insect: Odonata (Dragonflies & Damselflies)					
<i>Epiptera canis</i>	Beaverpond Baskettail		SE	G5	S1
<i>Rhionaeschna mutata</i>	Spatterdock Darner		ST	G4	S2S3
Fish					
<i>Notropis ariommus</i>	Popeye Shiner			G3	SX
Amphibian					
<i>Acris blanchardi</i>	Blanchard's Cricket Frog		SSC	G5	S4
<i>Hemidactylium scutatum</i>	Four-toed Salamander		SSC	G5	S2
Reptile					
<i>Clonophis kirtlandii</i>	Kirtland's Snake		SE	G2	S2
<i>Crotalus horridus</i>	Timber Rattlesnake		SE	G4	S2
<i>Kinosternon subrubrum subrubrum</i>	Eastern Mud Turtle		SE	G5T5	S2
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	C	SE	G3G4	SH
<i>Nerodia erythrogaster neglecta</i>	Copperbelly Water Snake	PS:LT	SE	G5T3	S2
<i>Opheodrys aestivus</i>	Rough Green Snake		SSC	G5	S3
<i>Terrapene carolina carolina</i>	Eastern Box Turtle		SSC	G5T5	S3
Bird					
<i>Accipiter striatus</i>	Sharp-shinned Hawk		SSC	G5	S2B
<i>Aimophila aestivalis</i>	Bachman's Sparrow			G3	SXB
<i>Ammodramus henslowii</i>	Henslow's Sparrow		SE	G4	S3B
<i>Ardea alba</i>	Great Egret		SSC	G5	S1B
<i>Bartramia longicauda</i>	Upland Sandpiper		SE	G5	S3B
<i>Buteo platypterus</i>	Broad-winged Hawk		SSC	G5	S3B
<i>Certhia americana</i>	Brown Creeper			G5	S2B
<i>Cistothorus palustris</i>	Marsh Wren		SE	G5	S3B

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Indiana County Endangered, Threatened and Rare Species List

County: Jackson



Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Cistothorus platensis</i>	Sedge Wren		SE	G5	S3B
<i>Haliaeetus leucocephalus</i>	Bald Eagle		SSC	G5	S2
<i>Helmitheros vermivorus</i>	Worm-eating Warbler		SSC	G5	S3B
<i>Ixobrychus exilis</i>	Least Bittern		SE	G4G5	S3B
<i>Lanius ludovicianus</i>	Loggerhead Shrike		SE	G4	S3B
<i>Mniotilta varia</i>	Black-and-white Warbler		SSC	G5	S1S2B
<i>Nyctanassa violacea</i>	Yellow-crowned Night-heron		SE	G5	S2B
<i>Pandion haliaetus</i>	Osprey		SSC	G5	S1B
<i>Rallus elegans</i>	King Rail		SE	G4	S1B
<i>Setophaga cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Setophaga citrina</i>	Hooded Warbler		SSC	G5	S3B
<i>Tyto alba</i>	Barn Owl		SE	G5	S2
Mammal					
<i>Myotis sodalis</i>	Indiana Bat	LE	SE	G2	S1
<i>Nycticeius humeralis</i>	Evening Bat		SE	G5	S1
<i>Sorex hoyi</i>	Pygmy Shrew		SSC	G5	S2
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
Vascular Plant					
<i>Acalypha deamii</i>	Deam's two-seeded mercury		WL	G4?	S3
<i>Carex atlantica ssp. atlantica</i>	Atlantic sedge		SE	G5T5	S1
<i>Carex seorsa</i>	weak stellate sedge		ST	G5	S3
<i>Carex straminea</i>	straw sedge		ST	G5	S2
<i>Chelone obliqua var. speciosa</i>	rose turtlehead		WL	G4T3	S3
<i>Cyperus acuminatus</i>	short-point flatsedge		WL	G5	S3
<i>Dichanthelium bicknellii</i>	panic-grass		SE	G4?Q	S1
<i>Hydrastis canadensis</i>	golden seal		WL	G3G4	S3
<i>Juglans cinerea</i>	butternut		ST	G3	S2
<i>Magnolia acuminata</i>	cucumber magnolia		SE	G5	S1
<i>Mikania scandens</i>	climbing hempweed		SE	G5	S1
<i>Najas gracillima</i>	thread-like naiad		ST	G5?	S3
<i>Panax quinquefolius</i>	American ginseng		WL	G3G4	S3
<i>Platanthera flava var. flava</i>	southern rein orchid		SE	G4?T4?Q	S1
<i>Poa paludigena</i>	bog bluegrass		ST	G3G4	S3
<i>Rubus odoratus</i>	purple flowering raspberry		ST	G5	S2
<i>Tsuga canadensis</i>	eastern hemlock		WL	G5	S3
High Quality Natural Community					
<i>Barrens - bedrock siltstone</i>	Siltstone Glade		SG	G2	S2
<i>Forest - floodplain mesic</i>	Mesic Floodplain Forest		SG	G3?	S1
<i>Forest - floodplain wet</i>	Wet Floodplain Forest		SG	G3?	S3
<i>Forest - floodplain wet-mesic</i>	Wet-mesic Floodplain Forest		SG	G3?	S3

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 State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
 GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
 SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Indiana County Endangered, Threatened and Rare Species List

County: Jackson



Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Forest - upland dry-mesic Highland Rim</i>	Highland Rim Dry-mesic Upland Forest		SG	GNR	S3
<i>Forest - upland mesic Bluegrass</i>	Bluegrass Mesic Upland Forest		SG	GNR	S3
<i>Forest - upland mesic Highland Rim</i>	Highland Rim Mesic Upland Forest		SG	GNR	S3
<i>Wetland - seep acid</i>	Acid Seep		SG	GU	S1
Other Significant Feature					
<i>Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade</i>	Water Fall and Cascade			GNR	SNR

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