

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

Road No./County:	State Road (SR) 58, Lawrence County
Designation Number(s):	1900296
Project Description/Termini:	Slide Correction Project on SR 58, 3.56 Miles West of SR 446 Jct.


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

 _____	9/15/2022 _____
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:

Holly Hume - Lochmueller Group

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

Part I – Public Involvement

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

Does the project have a historic bridge processed under the Historic Bridges PA*?	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 November 3, 2020 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, page 1.

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

Public Controversy on Environmental Grounds

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

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

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

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

Local Name of the Facility: SR 58

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

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

PURPOSE AND NEED:

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

Des. No. 1900296 is located on SR 58, 3.56 miles west of the SR 446 junction in Lawrence County, Indiana. According to the July 28, 2022 Abbreviated Engineer's Assessment, the need for the project stems from the erosional slide occurring in a meandering stream, Unnamed Tributary (UNT) 2 to Leatherwood Creek, adjacent to the westbound lane of SR 58. The erosion from the stream is causing the edge of the pavement and roadside embankment to deteriorate and fail in multiple locations. Maintenance has re-established the pavement; however, the stream continues to erode the existing foreslope along the westbound lane, causing additional pavement issues.

This is page 2 of 21 Project name: SR 58 Slide Correction Project Date: September 8, 2022

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The purpose of the project is to correct the erosional slide along the section of roadway affected by the slide, resulting in improved mobility along SR 58.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Lawrence Municipality: N/A

Limits of Proposed Work: 3.68 Miles West of SR 446 Jct. to 3.44 Miles West of SR 446 Jct.

Total Work Length: 0.237 Mile(s) Total Work Area: 1.71 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
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Date: <input style="width: 100%;" type="text"/>	

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

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

The Federal Highway Administration (FHWA) and INDOT intend to proceed with a slide correction project on SR 58 in Lawrence County (Des. No. 1900296).

The proposed project is located on SR 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County. Specifically, the project is located in Section 34, Township 6 N, Range 1 E in Pleasant Run Township and Section 3, Township 5 N, Range 1 E in Shawswick Township as depicted on the Barlettsville U.S. Geological Survey 1:24,000 scale quadrangle (Appendix B, page 2).

Within the project area, SR 58 is functionally classified as a rural major collector. The typical cross section consists of two 10-foot travel lanes (one lane in each direction). No shoulder, median, or guardrail are present. Culverts CV 058-047-85.70 and CV 058-047-85.36, along with two unnamed corrugated metal pipes (CMPs), 18-inches and 24-inches in diameter, are present within the project area. The stream adjacent to the SR 58 is eroding the roadway, resulting in pavement deterioration and failure.

The preferred alternative will reconstruct the existing UNT 2 to Leatherwood Creek in various locations that have eroded the existing roadside embankment and shoulder. The reconstructed stream will generally consist of a 2:1 foreslope, 4-foot ditch bottom, and 2:1 backslope and consist of Class 1 Riprap. This corrective measure will be implemented in six locations along the westbound shoulder. UNT 2 will remain in place with no work required outside of those limits. The shoulder will be reconstructed to a 6-foot width and consist of aggregate throughout the construction limits. The existing roadway surface will be milled and overlaid with HMA pavement throughout the construction limits. There will be 50-100 feet of incidental construction on both ends of the project to ensure proper tie-ins into the existing road shoulder and UNT 2. Pavement patching will also be included as a result of excavation occurring along the edge of the pavement where previous patching has occurred by maintenance.

There are two existing culverts that cross SR 58 within the project area, depicted on the maps and plan sheets as Structure 11 and Structure 12. Structure 11 is a 24-inch diameter CMP. To accommodate the widened shoulder, it is proposed to extend the existing pipe on the outlet end by 7 feet. Approximately 18 feet of UNT 3 to Leatherwood Creek will be reconstructed to tie-in the extended pipe to the stream.

Structure 12 is an 18-inch diameter CMP. To accommodate the widened shoulder, it is proposed to extend the existing pipe 6 feet.

The project is anticipated to impact approximately 1,221 linear feet of streams and 0.1 acre of tree clearing as a result of the project. Avoidance and minimization measures (AMMs) will be required for the project and will include tree removal and hibernacula AMMs. Every effort to avoid, minimize, and/or mitigate project impacts will be made.

Please refer to Appendix B for maps of the project area (pages 1-4), photographs of the project area (pages 5-9), and Preliminary Design Plans (pages 10-19).

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The maintenance of traffic (MOT) plan for the project includes road closure with an official detour (Appendix B, page 15). Please refer to the Maintenance of Traffic (MOT) During Construction section of this document for details.

The project will meet the objectives of its purpose and need by repairing the failed slope and restoring the section of SR 58 that was damaged by the landslide activity, thereby improving safety and mobility along this section of SR 58.

The project is not dependent upon the completion of any other project to meet the objectives of its purpose and need; therefore, the project exhibits independent utility. The project termini are logical because they only include the section of SR 58 needed to repair the slope, landslide damage, stream, and resulting pavement failure.

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.

No Build:

This alternative would not have repaired the roadway or landslide areas throughout the project area. While this alternative would have eliminated cost and any environmental impacts, it would not have met the objectives of the purpose and need of the project. Therefore, this alternative was discarded from further consideration.

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

It would not correct existing capacity deficiencies;

It would not correct existing safety hazards;

It would not correct the existing roadway geometric deficiencies;

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

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

Other (Describe):

X

ROADWAY CHARACTER:

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

Name of Roadway	<u>SR 58</u>			
Functional Classification:	<u>Major Collector</u>			
Current ADT:	<u>602</u>	VPD (2024)	Design Year ADT:	<u>602</u>
				VPD (2044)
Design Hour Volume (DHV):	<u>85</u>	Truck Percentage (%)	<u>3.84</u>	
Designed Speed (mph):	<u>45</u>	Legal Speed (mph):	<u>45</u>	

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	through		through	
Pavement Width:	18-20	ft.	18-20	ft.
Shoulder Width:	0	ft.	0-6	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting:	<input type="checkbox"/> Urban	<input type="checkbox"/> Suburban	<input checked="" type="checkbox"/> Rural
Topography:	<input type="checkbox"/> Level	<input checked="" type="checkbox"/> Rolling	<input type="checkbox"/> 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 058-047-85.70 and CV 058-047-85.36 Sufficiency Rating: N/A
 (Rating, Source of Information)

	Existing	Proposed
Bridge/Structure Type:		
Number of Spans:		
Weight Restrictions:	ton	ton
Height Restrictions:	ft.	ft.
Curb to Curb Width:	ft.	ft.
Outside to Outside Width:	ft.	ft.
Shoulder Width:	ft.	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.

Four culverts are present in the project area (Appendix B, page 3). None of the structures have any historic value. CV 058-047-85.70 is a twin, 40-foot long, 8-foot x 6-foot CMP located near the northern terminus of the project area. CV 058-047-85.70 carries UNT 1 to Leatherwood Creek. No work is planned for this structure; therefore, no impact is expected.

CV 058-047-85.36 is a 40-foot long, 6-foot x 6-foot CMP located in the southern portion of the project area. CV 058-047-85.36 carries UNT 2 beneath SR 58. No work is planned for this structure; therefore, no impact is expected.

Structure 11 is a 43-foot long, 24-inch diameter CMP located in the south-central portion of the project area. Structure 11 carries UNT 3 to Leatherwood Creek beneath SR 58. To accommodate the widened shoulder, it is proposed that Structure 11 be extended on the outlet end by 7 feet. Approximately 18 feet of UNT 3 to Leatherwood Creek will be reconstructed to tie the extended pipe in to the existing stream. The pipe extension, regrading, and stream reconstruction will result in approximately 32 linear feet of permanent impacts to this stream.

Structure 12 is a 41-foot long, 18-inch diameter CMP located in the center of the project area. Structure 12 carries UNT 4 to Leatherwood Creek beneath SR 58. Due to proposed regrading of the slope, Structure 12 will be extended by 6 feet, resulting in the encapsulation of approximately 6 feet of UNT 4 to Leatherwood Creek.

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 type="checkbox"/>	<input checked="" type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input type="checkbox"/>	<input checked="" 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"/>
Will the project require a sidewalk, curb ramp, and/or bicycle lane closure? (describe below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Provisions will be made for access by pedestrians and/or bicyclist and so posted (describe below).	<input type="checkbox"/>	<input type="checkbox"/>

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

The MOT for the project will require a road closure with an official detour. The detour will utilize SR 37, US 50, and SR 446 (Appendix B, page 15). The detour length is approximately 15.2 miles and is anticipated to be in place for approximately 8 months. There are no known through-traffic dependent businesses or local special events or festivals requiring any provisions as a result of the detour.

The closure 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.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 437,226* (2022) Right-of-Way: \$ 51,000* (2023) Construction: \$ 12,789,556* (2024)

*This includes the cost for all projects bundled under contract R-42199, lead Des. No. 1900300.

Anticipated Start Date of Construction: Spring 2024

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0.10	0
Commercial	0	0
Agricultural	0	0
Forest	0.66	0
Wetlands	0	0
Other: Maintained Roadside	0.73	0
Other:	0	0
TOTAL	1.49 acres	0.00

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

The existing right-of-way (ROW) in the project area is the SR 58 roadway, which is approximately 20 feet from pavement edge to pavement edge.

The project requires approximately 1.49 acres of permanent ROW along the westbound lane of SR 58 consisting of residential and forested areas, as well as maintained roadside. Following acquisition, the typical ROW along the westbound lane will reach a maximum of approximately 62 feet southwest of the edge of pavement. ROW along the eastbound lane will remain at the edge of the SR 58 pavement. The project is not anticipated to require any temporary ROW.

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.

Early coordination letters were sent on November 12, 2021 (Appendix C, pages 1-3).

<u>Agency</u>	<u>Date Sent</u>	<u>Date Response Received</u>	<u>Appendix</u>
FHWA - Indiana Division	November 12, 2021	N/A	
Indiana Geological and Water Survey (IGWS)	November 12, 2021	November 12, 2021 (autogenerated)	Appendix C, pages 47-49
Indiana Department of Natural Resources - Division of Fish and Wildlife (IDNR DFW)	November 12, 2021	December 10, 2021	Appendix C, pages 51-52
Indiana Department of Environmental Management (IDEM)	November 12, 2021	November 12, 2021 (autogenerated)	Appendix C, pages 39-46
National Park Service	November 12, 2021	N/A	
IDEM Groundwater Section	November 12, 2021	November 12, 2021	Appendix C, page 38
U.S. Housing and Urban Development	November 12, 2021	N/A	
INDOT, Vincennes District	November 12, 2021	November 15, 2021	Appendix C, page 50
Hoosier National Forest	November 12, 2021	N/A	
Natural Resources Conservation Service (NRCS)	November 12, 2021	December 10, 2021	Appendix C, page 53
U.S. Army Corps of Engineers (USACE)	November 12, 2021	N/A	
Lawrence County Board of Commissioners	November 12, 2021	N/A	
Lawrence County Surveyor's Office	November 12, 2021	N/A	
Lawrence County Highway Department	November 12, 2021	N/A	
Lawrence County Council	November 12, 2021	N/A	
Lawrence County Sheriff's Department	November 12, 2021	N/A	
Lawrence County Emergency Management Agency; Floodplain Administrator	November 12, 2021	N/A	
North Lawrence Community Schools	November 12, 2021	N/A	
Shawswick Volunteer Firefighters Association Station 2	November 12, 2021	N/A	
Pleasant Run Volunteer Fire Department Station 1	November 12, 2021	N/A	

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

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	

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Total stream(s) in project area: 2,377 Linear feet Total impacted stream(s): 1,221 Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
UNT 1 to Leatherwood Creek	Perennial	94	0	UNT 1 to Leatherwood Creek is located in the north end of the project area and flows east to west beneath SR 58 via CV 058-047-85.70 (Appendix B, page 3). UNT 1 to Leatherwood Creek is considered a Water of the US.
UNT 2 to Leatherwood Creek	Intermittent	2,150	1,183	UNT 2 to Leatherwood Creek enters the southern portion of the project area from the northeast side of SR 58, flows beneath SR 58 via CV 058-047-85.36, then flows northwest along the westbound lane throughout the remainder of the project area (Appendix B, page 3). UNT 2 to Leatherwood Creek is considered a Water of the US.
UNT 3 to Leatherwood Creek	Ephemeral	80	32	UNT 3 to Leatherwood Creek enters the survey area from the north, is conveyed under SR 58 by Structure 11, and flows into UNT 2 to Leatherwood Creek (Appendix B, page 3). UNT 3 to Leatherwood Creek is considered a Water of the US.
UNT 4 to Leatherwood Creek	Ephemeral	53	6	UNT 4 to Leatherwood Creek enters the survey area from the north, is conveyed under SR 58 via Structure 12, and flows south into UNT 2 to Leatherwood Creek (Appendix B, page 3). UNT 4 to Leatherwood Creek is considered a Water of the US.

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

Based on a desktop review, the aerial map of the project (Appendix B, page 3), and the RFI report (Appendix E, page 8), there are 13 streams, rivers, watercourses, or other jurisdictional features within the 0.5 mile search radius. That number could not be confirmed or updated, as the field work for the project did not encompass the entire 0.5 mile search radius. The site visit on September 30, 2021 by Lochmueller Group identified four streams within the project area.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on March 9, 2022. Please refer to Appendix F, pages 2-18 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that four streams are present within the project area. The USACE makes all final determinations regarding jurisdiction.

UNT 1 to Leatherwood Creek is a perennial stream which has flowing water year-round from a groundwater source. UNT 1 to Leatherwood Creek is considered to exhibit average quality based on substrate consistency and morphology. The ordinary high water mark (OHWM) at the survey area boundary was measured at 10 feet wide and 2 feet deep. UNT 1 to Leatherwood Creek is considered to be a relatively permanent waterway (RPW) with a connection to a traditionally navigable waterway (TNW), East Fork White River, via Leatherwood Creek. Therefore, UNT 1 to Leatherwood Creek is subject to USACE jurisdiction under Section 404 of the Clean Water Act. UNT 1 to Leatherwood Creek is listed as impaired for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate personal protective equipment (PPE), observe proper hygiene procedures, including regular handwashing, and limit personal exposure. This is included as a firm commitment in the Environmental Commitments section of this document. UNT 1 to Leatherwood Creek is located entirely outside the construction limits for the project; therefore, no impacts are expected.

UNT 2 to Leatherwood Creek is an intermittent stream that has flowing water intermittently, when groundwater provides water for stream flow. UNT 2 to Leatherwood Creek is considered to exhibit average quality based on substrate consistency and morphology. The OHWM at the survey area boundary was measured at 2.5 feet wide and 1 foot deep. UNT 2 to Leatherwood Creek is considered to be a RPW with a connection to a TNW, East Fork White River, via UNT 1 to Leatherwood Creek and Leatherwood Creek. Therefore, UNT 2 to Leatherwood Creek is subject to USACE jurisdiction under Section 404 of the Clean Water Act. The corrective measure will be implemented in six locations along this stream, resulting in approximately 1,183 linear feet of permanent impacts as a result of reconstruction and placement of Class 1 riprap (Appendix B, pages 17-19).

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UNT 3 to Leatherwood Creek is an ephemeral stream which receives flow from storm water runoff. UNT 3 to Leatherwood Creek is considered to exhibit poor quality based on stream flow and morphology. The OHWM at the survey area boundary was measured at 2 feet wide and 0.7 feet deep. Due to the regraded foreslope, a 7-foot pipe extension will be necessary. A portion of UNT 3 will be reconstructed so that the extended pipe can tie into the existing ditch (Appendix B, page 17). This work will result in approximately 32 linear feet of permanent impacts to UNT 3 to Leatherwood Creek.

UNT 4 to Leatherwood Creek is an ephemeral stream which receives storm water runoff. UNT 4 to Leatherwood Creek is considered to exhibit poor quality based on stream flow and morphology. The OHWM at the survey area boundary was measured at 5 feet wide and 0.4 feet deep. Due to the regraded ditch foreslope, a 6-foot pipe extension will be necessary which will cause approximately 6 linear feet of permanent impacts to UNT 4 to Leatherwood Creek (Appendix B, page 17).

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

A total of 1,221 feet of permanent stream impacts are anticipated as a result of this project. A USACE Section 404 Regional General Permit (RGP) and IDEM 401 Individual Permit will likely be required due to these stream impacts. Mitigation will likely be required and will be determined during permitting.

IDNR DFW responded on December 10, 2021 with recommendations to refrain from excavating in the low flow area except for placement of piers, foundations, and riprap, or removal of the old structure; refrain from constructing any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds; and to use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids (Appendix C, pages 51-52). 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"/>

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 8), there are four open water features located within the 0.5 mile search radius. That number could not be confirmed or updated, as the field work for the project did not encompass the entire 0.5 mile search radius. The site visit on September 30, 2021 by Lochmueller Group identified no open water features within or adjacent to the project area. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT EWPO on March 9, 2022. Please refer to Appendix F, pages 2-18 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that no open water features are present within the project area. The USACE makes all final determinations regarding jurisdiction.

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

Wetlands

Total wetland area: 0.0 Acre(s) Total wetland area impacted: 0.0 Acre(s)

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

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

Wetlands (Mark all that apply)

- Wetland Determination
- Wetland Delineation
- USACE Isolated Waters Determination

Documentation

ESD Approval Dates

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

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

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

Based on the desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 8), there are twenty-one wetlands within the 0.5 mile search radius. That number could not be confirmed or updated, as the field work for the project did not encompass the entire 0.5 mile search radius. The site visit on September 30, 2021 by Lochmueller Group identified no wetlands within or adjacent to the project area. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT EWPO on March 9, 2022. Please refer to Appendix F, pages 2-18 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that no wetlands are present within the project area. The USACE makes all final determinations regarding jurisdiction.

Terrestrial Habitat

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

Total terrestrial habitat in project area: 4.12 Acre(s) Total tree clearing: 0.10 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 September 30, 2021, and the aerial map of the project area (Appendix B, page 3), there are forested and lawn habitats within the project area. Dominant species within the forested habitat include sugar maple (*Acer saccharum*), slippery elm (*Ulmus rubra*), American sycamore (*Platanus occidentalis*), black walnut (*Juglans nigra*), white oak (*Quercus alba*), yellow foxtail (*Setaria pumila*), hairy crabgrass (*Digitaria sanguinalis*), fall panic grass (*Panicum dichotomiflorum*), and jewelweed (*Impatiens capensis*). Approximately 1.06 acres of impacts to terrestrial habitats, including 0.10 acre of tree clearing,

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are anticipated as a result of this project. The construction limits for the project have been minimized to the greatest extent possible. Mitigation is not anticipated.

IDNR DFW responded on December 10, 2021 with recommendations to mitigate for any unavoidable habitat impacts, revegetate bare and disturbed areas, minimize tree and brush clearing, and use appropriately designed measures for erosion and sediment control (Appendix C, pages 51-52). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Protected Species

Federally Listed Bats

Information for Planning and Consultation (IPaC) determination key completed	Yes		No
Section 7 informal consultation completed (IPaC cannot be completed)	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Section 7 formal consultation Biological Assessment (BA) required	<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)	Yes		No
State species (not bird) found in project area (based upon consultation with IDNR)	<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)	Yes		No
State bird species based upon coordination with IDNR	<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, page 4), completed by Lochmueller Group, Inc. on February 18, 2022, the IDNR Lawrence County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR DFW early coordination response letter dated December 10, 2021, the Natural Heritage Program's Database has been checked and 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. An INDOT 0.5-mile bat review occurred on August 5, 2021. The review did not indicate the presence of endangered bat species in or within 0.5 mile of the project area.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages 4-9). 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 identified in the IPaC species list other than the Indiana bat and NLEB.

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. Culvert inspections occurred on September 30, 2021 and no evidence of bats or birds using the structures was found (Appendix C, pages 25-26 and 29-36). An effect determination key was completed on November 9, 2021 and based on the responses provided, it was found that the project "may affect, but is not likely to adversely affect (NLAA)" the Indiana bat and/or the NLEB (Appendix C, pages 10-22). INDOT reviewed and verified the effect finding on November 9, 2021 and requested USFWS's review of the finding (Appendix C, page 37). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Tree Removal AMMs 1-4, General AMM 1, and Hibernacula AMM 1 will be implemented for this project. AMMs are included as firm commitments in the Environmental Commitments section of this document.

Culvert inspections for CV 058-047-85.36, CV 058-047-85.70, an 18-inch CMP located at 38.9056° N, -86.40025° W, and a 24-inch CMP located at 38.903072° N, -86.3396515° W occurred on September 30, 2021 and no signs of bats using the structure were found. USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after September 30, 2023, an inspection of each 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. This firm

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commitment is included in the Environmental Commitments section of this document.

Structure CV 058-047-85.36, CV 058-047-85.70, an 18-inch CMP located at 38.9056° N, -86.40025° W, a 24-inch CMP located at 38.903072° N, -86.3396515° W, and the project's surrounding habitat are conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1), the structures must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection, avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 - April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 - September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP/RSP. This is included as a firm commitment in the Environmental Commitments section of this document.

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

Geological and Mineral Resources

- Project located within the Indiana Karst Region
- Karst features identified within or adjacent to the project area
- Oil/gas or exploration/abandoned wells identified in the project area

Yes	No
X	
X	
	X

Date Karst Evaluation reviewed by INDOT EWPO (if applicable): April 8, 2022

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

Based on a desktop review and the Indiana Karst Region map, the project is located in the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topo map of the project area (Appendix B, page 2), the RFI report (Appendix E, page 8), and the Karst Report (Appendix I, pages 1-11), one karst feature was identified adjacent to the project area. A karst spring is located adjacent to the southern terminus of the project area. The feature will not be impacted as it is outside the construction limits for the project. However, it was recommended that in the event that a bedrock void, karst flow path or troglobitic species is encountered during construction, a karst qualified geologist should be contacted immediately to determine if additional karst investigations and/or coordination are needed relative to the *Protection of Karst Features during Project Development and Construction* document (July 15, 2021). This is included as a firm commitment in the Environmental Commitments section of this document.

In the early coordination letter response dated November 12, 2021, the IGWS indicated that karst features may be present in the project area (Appendix C, pages 47-49). The response also indicated a 1% annual chance flood hazard, high potential for encountering bedrock resources, and the potential for active or abandoned petroleum exploration wells. The response from IGWS was communicated to the designer on November 12, 2021.

SECTION C – OTHER RESOURCES

Drinking Water Resources

- Wellhead Protection Area(s)
- Source Water Protection Area(s)
- Water Well(s)
- Urbanized Area Boundary
- Public Water System(s)

<u>Presence</u>	<u>Impacts</u>	
	Yes	No
X		X
X		X

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Is the project located in the St. Joseph Sole Source Aquifer (SSA):
 If Yes, is the FHWA/EPA SSA MOU Applicable?
 If Yes, is a Groundwater Assessment Required?

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

The project is located in Lawrence 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)/INDOT Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project, a detailed groundwater assessment is not needed, and no impacts are expected.

The IDEM Wellhead Proximity Determinator website (<https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-program/source-water-proximity-determination-tool/>) was accessed on November 12, 2021 by Lochmueller Group. In an early coordination letter dated November 12, 2021, IDEM stated that the project is located within Bedford City Utilities' Wellhead Protection Area (Appendix C, page 38). Coordination emails were sent to Bedford City Utilities on February 16, 2022 and August 17, 2022. A telephone call to Bedford City Utilities on August 22, 2022 went unanswered. No response has been received to date; therefore, no impacts are anticipated.

The IDNR Water Well Record Database website (<https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=4b4f37e1d44ce865e1be4d157ac93>) was accessed on August 2, 2022 by Lochmueller Group. No wells are located near this project. Therefore, no impacts are expected.

Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) by Lochmueller Group on August 2, 2022, this project is not located in an Urban Area Boundary. No impacts are expected.

Based on a desktop review, a site visit on September 30, 2021, and the aerial map of the project area (Appendix B, page 3), this project is located where there is a public water system. The public water system will not be affected because the water line crosses beneath SR 58 approximately 150 feet northwest of the construction limits for the project. Utility coordination is being carried out as part of the design process.

Floodplains	Presence	Impacts	
		Yes	No
Project located within a regulated floodplain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Longitudinal encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transverse encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Homes located in floodplain within 1000' up/downstream from project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If applicable, indicate the Floodplain Level?

Level 1 Level 2 Level 3 Level 4 Level 5

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

Based on a desktop review of the IDNR Indiana Floodway Information Portal website (<https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e>) by Lochmueller Group on August 1, 2022 and the RFI report, a portion of this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, page 1). An early coordination letter was sent on November 12, 2021 to the local floodplain administrator. The floodplain administrator did not respond within the 30-day timeframe. The project qualifies as a Category 1 per the current INDOT CE Manual, which state although this project involves work within the horizontal limits of the 100-year floodplain, no work is being performed below the 100-year flood elevation and as a result this project does not encroach upon the base floodplain.

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Farmland	Presence	Impacts	
Agricultural Lands	<input checked="" type="checkbox"/>	Yes	No
Prime Farmland (per NRCS)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Total Points (from Section VII of CPA-106/AD-1006*)	<u>N/A</u>		
<i>*If 160 or greater, see CE Manual for guidance.</i>			

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 September 30, 2021 by Lochmueller Group, and the aerial map of the project area (Appendix B, page 3), there is farmland as defined by the Farmland Protection Policy Act (FPPA) adjacent to the project. The project will not convert any prime farmland as the proposed permanent ROW is a strip of land adjacent to the westbound lane of SR 58. The proposed ROW area primarily consists of maintained roadside and UNT 2 to Leatherwood Creek. An early coordination letter was sent on November 12, 2021 to NRCS. The NRCS responded on December 10, 2021 stating that the project will not cause a conversion of prime farmland. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

Minor Projects PA	Category(ies) and Type(s) <input type="text" value="B-10"/>	INDOT Approval Date(s) <input type="text" value="March 11, 2022"/>	N/A <input type="text"/>
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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"/>	<input type="text"/>	<input type="text"/>
800.11 Documentation	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Historic Properties Report or Short Report	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Archaeological Records Check and Assessment	<input checked="" type="checkbox"/>	March 11, 2022	N/A
Archaeological Phase Ia Survey Report	<input checked="" type="checkbox"/>	March 11, 2022	N/A
Archaeological Phase Ic Survey Report	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Other:	<input type="text"/>	<input type="text"/>	<input type="text"/>

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 March 11, 2022 the INDOT Cultural Resources Office (CRO) determined that this project falls within the guidelines of Category B, Type 10 under the Minor Projects Programmatic Agreement (Appendix D, pages 1-3). Category B-10 covers slide corrections, slope repairs, and other erosion control measures. An archaeological survey was required for the project due to work in undisturbed soils. No archaeological sites were recorded as a result of the survey and no further work was recommended. No further

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

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

	<u>Presence</u>	<u>Use</u>	
		<u>Yes</u>	<u>No</u>
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</u>			
<u>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 NRHP eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 7), there are no potential 4(f) resources located within the 0.5 mile search radius. According to additional research and the site visit on September 30, 2021 by Lochmueller Group, there are no Section 4(f) resources within or adjacent to the project area. Therefore, no use is expected.

Section 6(f) Involvement

Presence

Use

Section 6(f) Property

Yes

No

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

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

A review of 6(f) properties on the INDOT ESD website revealed a total of 13 properties in Lawrence County (Appendix I, page 12). 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?
- Is the project located in an MPO Area?
- Is the project in an air quality non-attainment or maintenance area?
- If Yes, then:
 - Is the project in the most current MPO TIP?
 - Is the project exempt from conformity?
- If No, then:
 - Is the project in the Transportation Plan (TP)?
 - Is a hot spot analysis required (CO/PM)?

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

Location in STIP: Pages 168 (R-41469) and 260 (R-42199)
 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.

The Fiscal Year (FY) 2022-2026 Statewide Transportation Improvement Program (STIP) is listed based on the lead Des No. in the contract. The lead Des No. for this contract is 1900300. The FY 2022-2026 STIP includes Des No. 1900296 by reference with the contract number (R-42199) (Appendix H, page 1). However, this project has been moved from contract number R-42199 to R-41469. Contract number R-41469 is also included in the 2022-2026 STIP under lead Des No. 1593092 (Appendix H, page 2).

This project is located in Lawrence County which is currently in attainment for all criteria pollutants according to the EPA Green Book website (<https://www.epa.gov/green-book>). Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

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

SECTION G - NOISE

Noise **Yes** **No**

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

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

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

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

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SECTION H – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

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

The project will ultimately be beneficial to local businesses and properties due to improvements of deteriorating roadway conditions. Overall, the negative impacts to property owners and local businesses within the project area will be minimal and will consist primarily of short-term construction impacts due to the road closure and resulting detour. No relocations are expected. Property owners will be provided access throughout the duration of the project to reduce impacts as much as possible. The project is not anticipated to result in substantial impacts to community cohesion because it will not change access to properties within the area. The proposed project is not expected to impact the surrounding community or cause economic impacts to the surrounding area. Therefore, this project will have minimal or no negative impacts to the community or local economy.

According to the Fairs and Festivals website (<https://www.fairsandfestivals.net/>), accessed on August 3, 2022 by Lochmueller Group, there are no fairs or festivals scheduled within 10 miles of the project. The MOT may pose delays and temporary inconveniences to traveling motorists (including school buses and emergency services); however, all inconveniences will cease upon project completion. The MOT for the project is not anticipated to impact access to community events. The project sponsor will be responsible for contacting school districts and emergency services at least two weeks prior to any construction activities that would limit access, this is included as a commitment in the Environmental Commitments section of this CE document.

Lawrence County has an approved Americans with Disabilities (ADA) transition plan. The project will comply with the published ADA transition plan and will not create any additional barriers for access.

Public Facilities and Services

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), the RFI report (Appendix E, page 7), and utility coordination for the project, there is one railroad within the 0.5 mile search radius. There are no public facilities within or adjacent to the project area, which was confirmed by the site visit on September 30, 2021. Therefore, no impacts are expected. Access to all properties will be maintained during construction.

AT&T and Jackson REMC have overhead lines throughout the project area. Relocations may be necessary. Coordination with AT&T and Jackson REMC is ongoing as part of the design process.

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

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

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

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

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

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. The project will not result in any relocations; however, 1.49 acres of permanent ROW will be required. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exist and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Lawrence County. The community that overlaps the project area is called the affected community (AC). In this project, the ACs are Census Tracts 9504 (AC 1) and 9505 (AC 2). 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 American Community Survey 2020 5-Year Estimates was obtained from the US Census Bureau Website (<https://www.census.gov/data.html>) on April 28, 2022 by Lochmueller Group. The data collected for minority and low-income populations within the AC are summarized in the below table.

Table: Minority and Low-Income Data (2020 American Community Survey 5-Year Estimates)

	COC: Lawrence County, Indiana	AC 1: Census Tract 9504, Lawrence County, Indiana	AC 2: Census Tract 9505, Lawrence County, Indiana
Percent Minority	4.96%	4.71%	3.47%
125% of COC	6.20%	AC<125% COC	AC<125% COC
EJ Population of Concern		No	No
Percent Low-Income	11.06%	6.02%	7.44%
125% of COC	13.82%	AC<125% COC	AC<125% COC
EJ Population of Concern		No	No

AC 1, Census Tract 9504, has a percent minority of 4.71% which is below 50% and is below the 125% COC threshold. AC 2, Census Tract 9505, has a percent minority of 3.47% which is below 50% and is below the 125% COC threshold. Therefore, neither AC contains a minority population of EJ concern.

AC 1, Census Tract 9504, has a percent low-income of 6.02% which is below 50% and is below the 125% COC threshold. AC 2, Census Tract 9505, has a percent low-income of 7.44% which is below 50% and is below the 125% COC threshold. Therefore, neither AC contains a low-income population of EJ concern.

The census data sheets, map, and calculations can be found in Appendix I, pages 13-18. No EJ populations of concern were identified. No further environmental justice analysis is warranted.

Relocation of People, Businesses or Farms

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

Yes	No
<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, business, or farms will take place as a result of this project.

Indiana Department of Transportation

County Lawrence

Route SR 58

Des. No. 1900296

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 18, 2022

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

Based on a review of GIS and available public records, the RFI was completed on February 18, 2022 and INDOT Site Assessment and Management (SAM) provided their concurrence on February 18, 2022 (Appendix E, pages 1-9). No sites with hazardous material concerns (hazmat sites) or sites involved with regulated substances were identified in or within 0.5 mile of the project area. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

Army Corps of Engineers (404/Section10 Permit)

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

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."

A total of 1,221 linear feet of permanent stream impacts, including 1,183 linear feet of impacts to UNT 2 to Leatherwood Creek, 32 linear feet of impacts to UNT 3 to Leatherwood Creek, and 6 linear feet of impacts to UNT 4 to Leatherwood Creek are anticipated as a result of this project. Impacts will be limited to the portion of the streams within the construction limits of the project. A USACE

Indiana Department of Transportation

County Lawrence

Route SR 58

Des. No. 1900296

Section 404 RGP and IDEM 401 Individual Permit will likely be required due to these stream impacts. Mitigation will likely be required and will be determined during permitting.

The project may disturb more than one acre of land; therefore, an IDEM Construction Stormwater General Permit may be necessary.

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

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

ENVIRONMENTAL COMMITMENTS

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

Firm:

1. If the scope of work or permanent or temporary ROW amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT Vincennes 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. Tree Removal AMM 2: Apply time of year restrictions (October 1 - March 31) for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with **no bats observed**. (USFWS and IDNR)
4. 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)
5. Tree Removal AMM 4: Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 mile of roosts, or **documented foraging** habitat any time of year. (USFWS)
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. Hibernacula AMM 1: For projects located within karst areas, on-site personnel will use best management practices, secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography. (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. Culvert inspections for CV 058-047-85.36, CV 058-047-85.70, an 18-inch CMP located at 38.9056° N, -86.40025° W, and a 24-inch CMP located at 38.903072° N, -86.3396515° W occurred on September 30, 2021 and no signs of bats using the structure were found. USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after September 30, 2023, an inspection of each 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)
10. Structure CV 058-047-85.36, CV 058-047-85.70, an 18-inch CMP located at 38.9056° N, -86.40025° W, a 24-inch CMP located at 38.903072° N, -86.3396515° W, and the project's surrounding habitat are conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1), the structures must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection, avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 - April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 - September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP/RSP. (INDOT)

Indiana Department of Transportation

County Lawrence

Route SR 58

Des. No. 1900296

11. In the event that a bedrock void, karst flow path or troglobitic species is encountered during construction, a karst qualified geologist should be contacted immediately to determine if additional karst investigations and/or coordination are needed relative to the *Protection of Karst Features during Project Development and Construction* document (July 15, 2021). (INDOT EWPO)
12. UNT 1 to Leatherwood Creek is located within the project area. UNT 1 to Leatherwood Creek is listed as impaired for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate personal protective equipment (PPE), observe proper hygiene procedures, including regular handwashing, and limit personal exposure. (INDOT SAM)

For Further Consideration:

13. 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, 1 inch to 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. (IDNR DFW)
14. Impacts to the channel should first be addressed in planning through avoidance, minimization, and lastly compensatory mitigation. Mitigation for a stream channelization/relocation should include replacement of the impacted channel length with an equal length of restored channel that possesses equal or higher quality riparian and stream habitat as the impacted area. Habitat enhancement should also occur along another length of stream equal to the length impacted. Experienced professionals with backgrounds in soils, botany, ecology, fish and wildlife management, fluvial geomorphology, and engineering should design all channel relocation projects. A restrictive covenant should be used to protect the channel from future disturbance, and it should cover both the restored and enhanced stream lengths (essentially at a ratio of 2:1 or greater in linear feet of stream relocated/impacted). (IDNR DFW)
15. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR DFW)
16. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR DFW)
17. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR DFW)

Appendix A: INDOT Supporting Documentation

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

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

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

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

⁴ US Army Corps of Engineers Individual 404 Permit

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

⁶ 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.

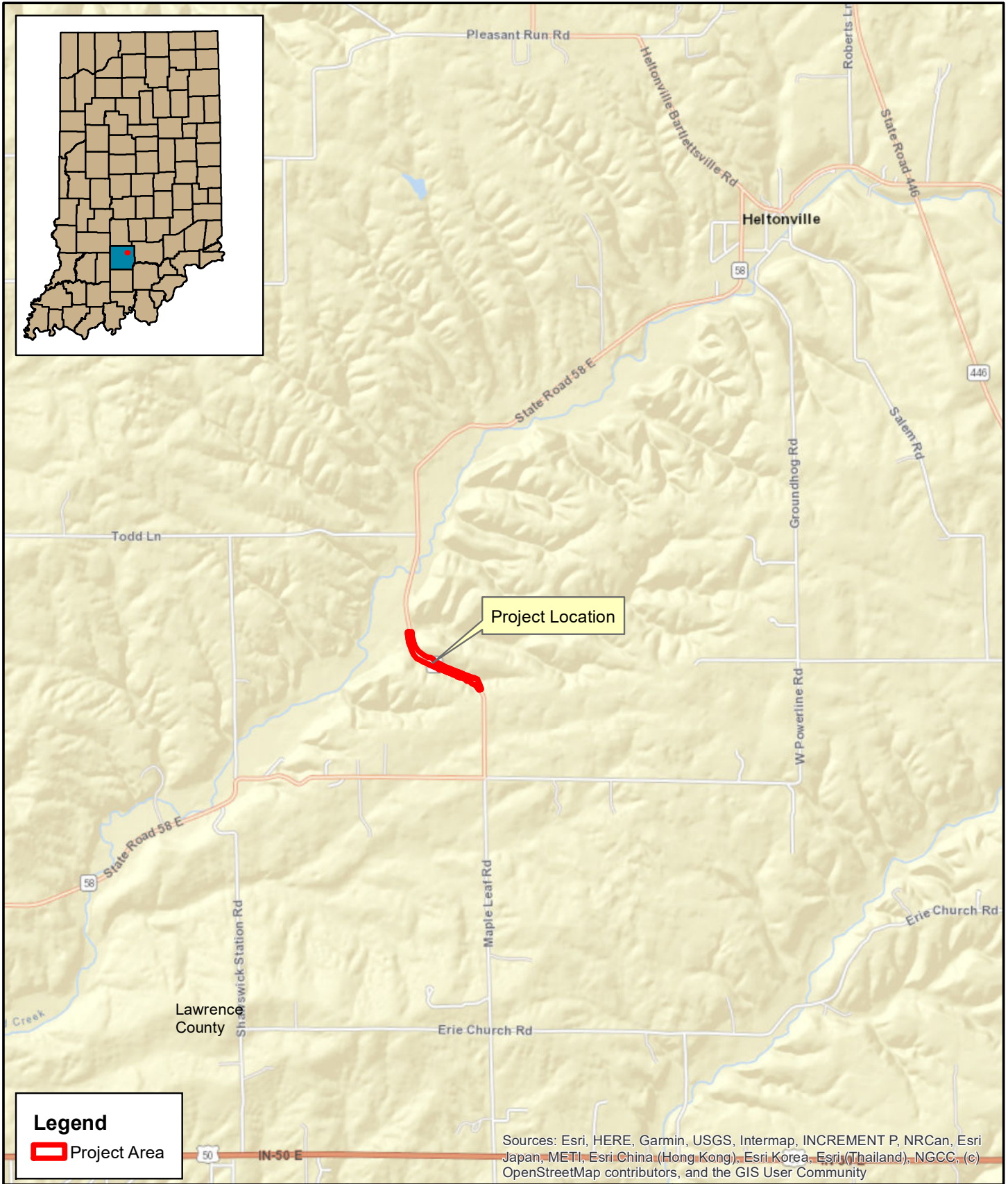
⁹ Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

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.

Categorical Exclusion
Appendix B
Graphics



Legend
 Project Area

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

6200 Vogel Road
 Evansville, IN 47715
 Phone: (812) 479-6200
 Fax: (812) 479-6262

General Location Map
 Des. No. 1900296

0 0.25 0.5 Miles

County: Lawrence
 Townships: Pleasant Run & Shawswick

SR 58, 3.56 Mi West of SR 446 Junction
 Slide Correction
 Created: 8/18/2022, H. Hume

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Copyright: © 2013 National Geographic Society, i-cubed

Legend
 Project Area

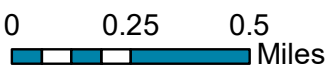
**Bartlettsville
 Quadrangle**



**LOCHMUELLER
 GROUP**
 6200 Vogel Road
 Evansville, IN 47715
 Phone: (812) 479-6200
 Fax: (812) 479-6262

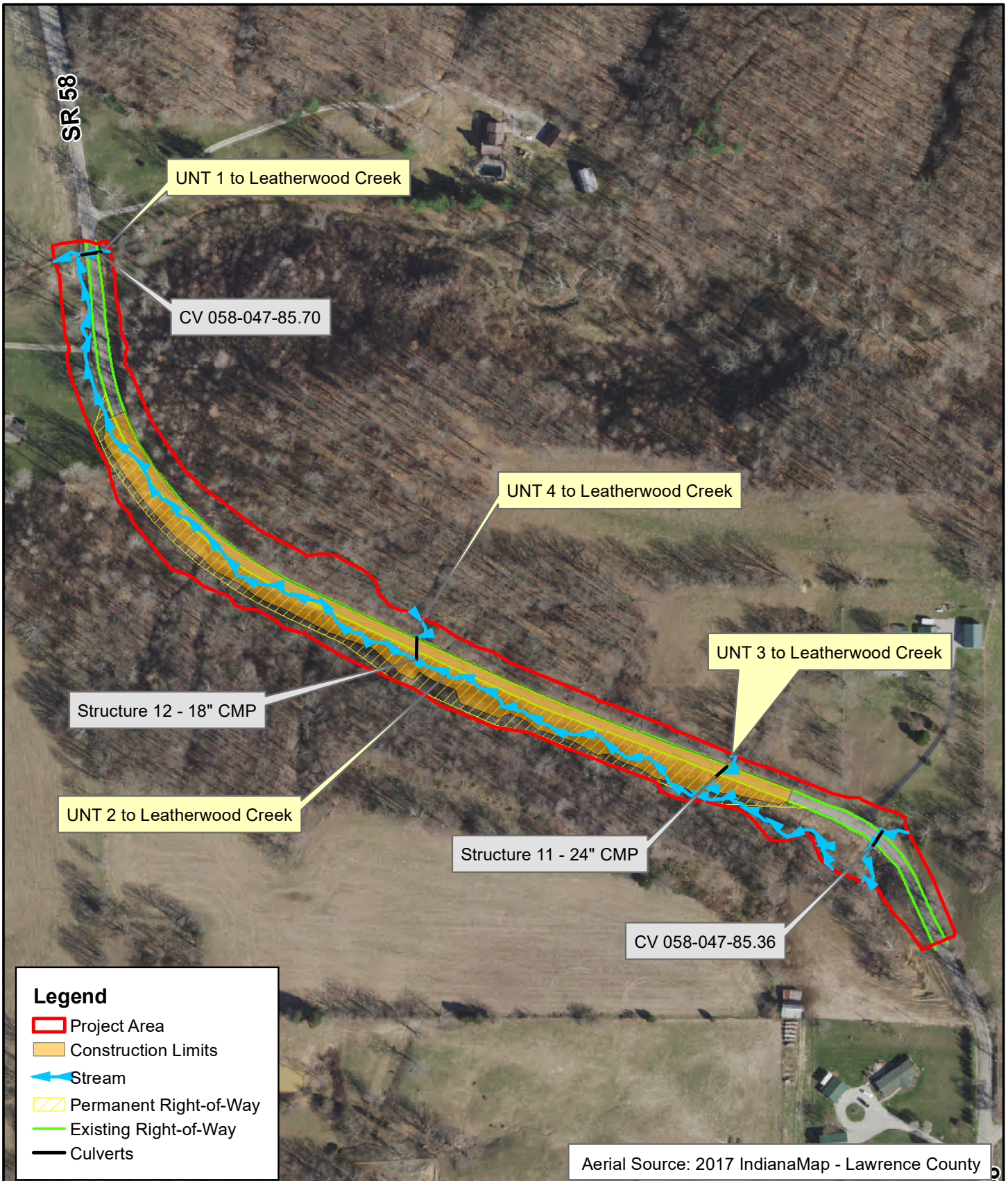
USGS Topographic Map
 Des. No. 1900296

County: Lawrence
 Townships: Pleasant Run & Shawswick



SR 58, 3.56 Mi West of SR 446 Junction
 Slide Correction
 Created: 8/18/2022, H. Hume

X:\Production\FGDB\2020\120-0008\Project\PR-J05\Working\Surface_Map\USGS TopoMap.mxd



Legend

- Project Area
- Construction Limits
- ← Stream
- Permanent Right-of-Way
- Existing Right-of-Way
- Culverts

Aerial Source: 2017 IndianaMap - Lawrence County

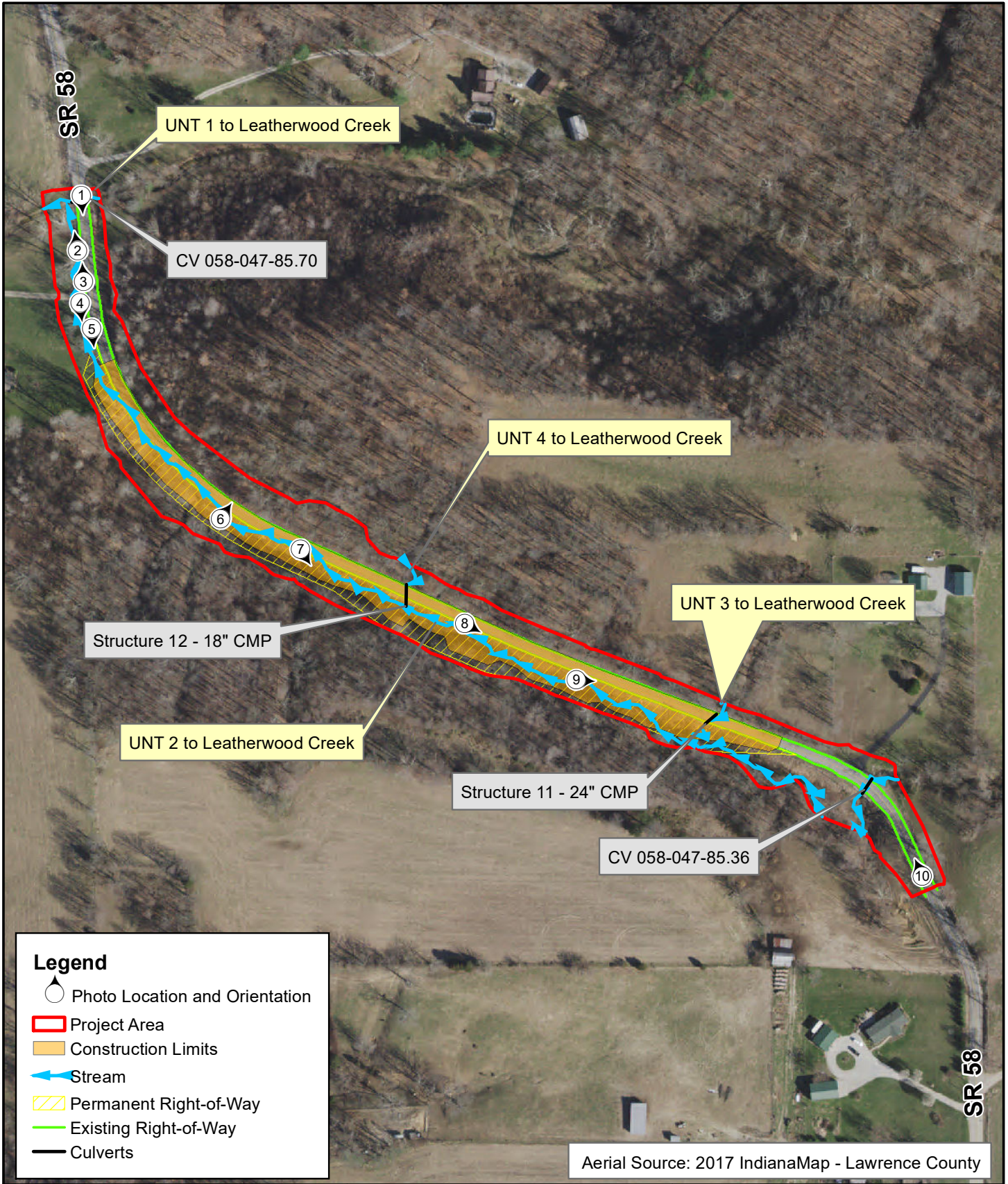
LOCHMUELLER GROUP
 6200 Vogel Road
 Evansville, IN 47715
 Phone: (812) 479-6200
 Fax: (812) 479-6262

Project Map
 Des. No. 1900296

County: Lawrence
 Townships: Pleasant Run & Shawswick



SR 58, 3.56 Mi West of SR 446 Junction
 Slide Correction
 Created: 8/18/2022, H. Hume



Legend

- Photo Location and Orientation
- Project Area
- Construction Limits
- Stream
- Permanent Right-of-Way
- Existing Right-of-Way
- Culverts

Aerial Source: 2017 IndianaMap - Lawrence County

LOCHMUELLER GROUP

6200 Vogel Road
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 Phone: (812) 479-6200
 Fax: (812) 479-6262

Photo Location Map
 Des. No. 1900296

County: Lawrence
 Townships: Pleasant Run & Shawswick

0 100 200
 Feet

SR 58, 3.56 Mi West of SR 446 Junction
 Slide Correction
 Created: 8/18/2022, H. Hume



1. Looking south along SR 58 near the western/northern end of the project area



2. Looking north along the westbound lane of SR 58



3. Looking north along SR 58 within the northern portion of the project area



4. Looking south along westbound SR 58 embankment and stream



5. Looking south from westbound shoulder at SR 58 embankment and stream



6. Looking northeast at SR 58 westbound shoulder



7. Looking southeast at shoulder, embankment, and stream along westbound SR 58



8. Looking southeast at erosion occurring along westbound SR 58



9. Looking east at SR 58 and failing embankment



10. Looking north along SR 58 from near the eastern/southern end of the project area

PROJECT	DESIGNATION
1900296	1900296
CONTRACT	BRIDGE FILE
R-42199	-

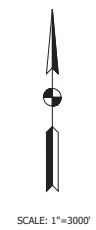
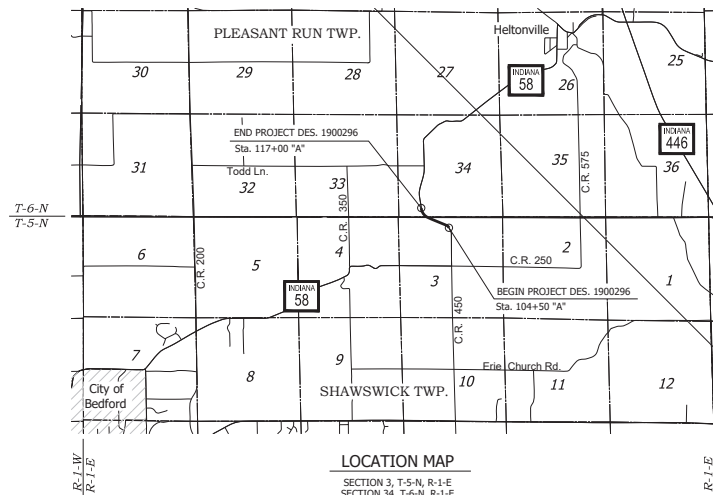
INDIANA DEPARTMENT OF TRANSPORTATION



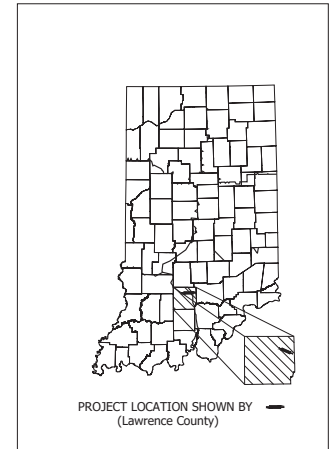
ROAD PLANS

ROUTE: S.R. 58 FROM: RP 85+35 TO: RP 85+68
 PROJECT NO. 1900296 P.E.
 1900296 R/W
 1900296 CONST.

Slide Correction & Surface Erosion Correction Located Along S.R. 58, Approximately 3.56 Miles West Of S.R. 446 Junction, In Section 3, T-5-N, R-1-E, In Shawswick Township And Section 34, T-6-N, R-1-E, In Pleasant Run Township, Lawrence County, Indiana



TRAFFIC DATA	
A.A.D.T. (2034)	603 V.P.D.
A.A.D.T. (2044)	602 V.P.D.
D.H.V. (2044)	85 V.P.H.
DIRECTIONAL DISTRIBUTION	49.5/50.5 %
TRUCKS	3.84% A.A.D.T.
	0% D.H.V.
DESIGN DATA	
DESIGN SPEED	45 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
RURAL/URBAN	RURAL
TERRAIN	ROLLING
ACCESS CONTROL	NONE



BEGINNING: LATITUDE: 37° 58' 18" LONGITUDE: 87° 33' 59"
 ENDING: LATITUDE: 37° 58' 25" LONGITUDE: 87° 32' 39"

BRIDGE LENGTH:	---	MI.
ROADWAY LENGTH:	0.237	MI.
TOTAL LENGTH:	0.237	MI.
MAX. GRADE:	9.516	%
H.U.C.:	05120208040030	

Stage 1 Plans
 Date: 8/2/22

INDIANA DEPARTMENT OF TRANSPORTATION
 STANDARD SPECIFICATIONS DATED 2022
 TO BE USED WITH THESE PLANS

Preliminary

Plans Prepared By:

LOCHMUELLER GROUP
 6200 Vogel Road
 Evansville, Indiana 47715
 Phone: 812-479-6200
 Toll Free: 800-423-7411

PLANS PREPARED BY: LOCHMUELLER GROUP, INC. (812) 479-6200
 6200 Vogel Road, Evansville, IN 47715 PHONE NUMBER

CERTIFIED BY: _____ --/--/--
 DATE

APPROVED FOR LETTING: _____
 INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
DESIGNATION	
1900296	
SURVEY BOOK	SHEET
1	of --
CONTRACT	PROJECT
R-42199	1900296

Date: Aug 04, 2022, 11:05am User Name: Tjames File: X:\Projects\Files\2021\1900296\1900296\1900296\1900296\1900296\1900296\1900296\1900296\1900296.dwg

UTILITIES

AT&T
1404 K St.
Bedford, IN 47421
Contact: Van Roberts
Email: Vr2712@att.com
Phone: 812-275-6412

East Lawrence Water
1009 Crowford Dr.
Bedford, IN 47421
Contact: Donald Apple
Email: dapwater@hotmail.com
Phone: 812-279-9562

Jackson County REMC
274 E Base Rd.
Brownstown, IN 47220
Contact: Devan Jerrell
Email: dvanj@jacksonremc.com
Phone: 812-358-4458



GENERAL NOTES

INDEX

SHEET NO.	DRAWINGS INDEX
1	TITLE
2	INDEX AND GENERAL NOTES
3-5	TYPICAL SECTIONS
6-7	PLAT 1
8	MAINTENANCE OF TRAFFIC
9-16	PLAN AND PROFILES
17-30	CROSS SECTIONS

REVISIONS

SHEET NO.	DATE	REVISED

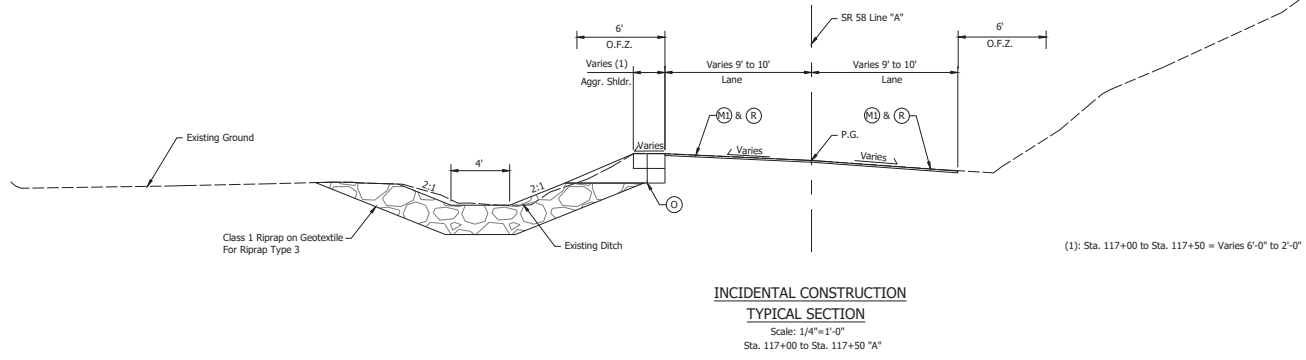
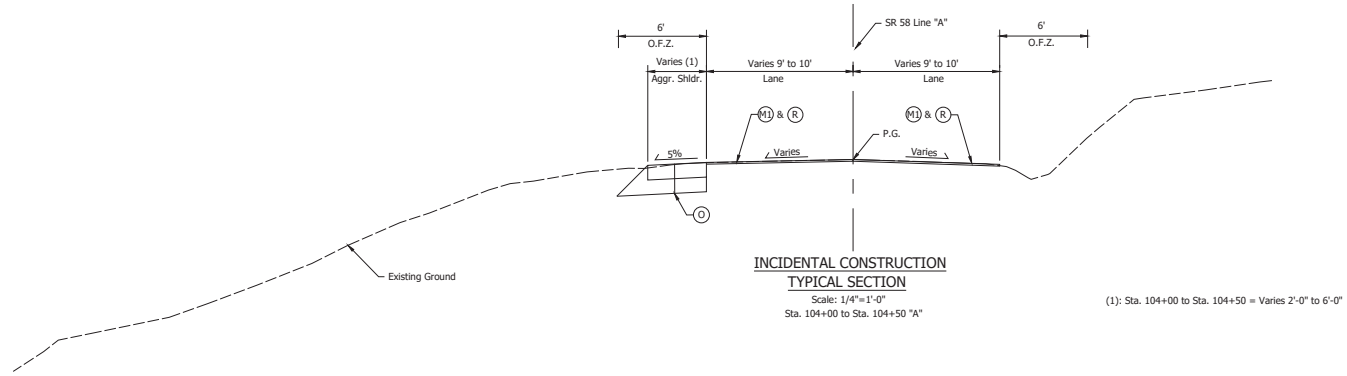
Preliminary

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			VERTICAL SCALE	DESIGNATION
			-	1900296
			SURVEY BOOK	SHEETS
				2 of --
			CONTRACT	PROJECT
			R-42199	1900296

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX SHEET

Date: Aug 04, 2022, 11:05am User: Name: T.Jones
File: X:\Projects\1900296\1900296-1900296-1900296.dwg



- LEGEND**
- (M) Milling, Transition
 - (R) 165#/SYS QC/QA-HMA, 3, 64, Surface, 9.5mm
 - (D) Compacted Aggregate No. 53, 12" on Compacted Aggregate No. 2, 12"
- O.F.Z. Obstruction Free Zone

Notes:
1) Cross Slopes Vary To Match Existing

Preliminary

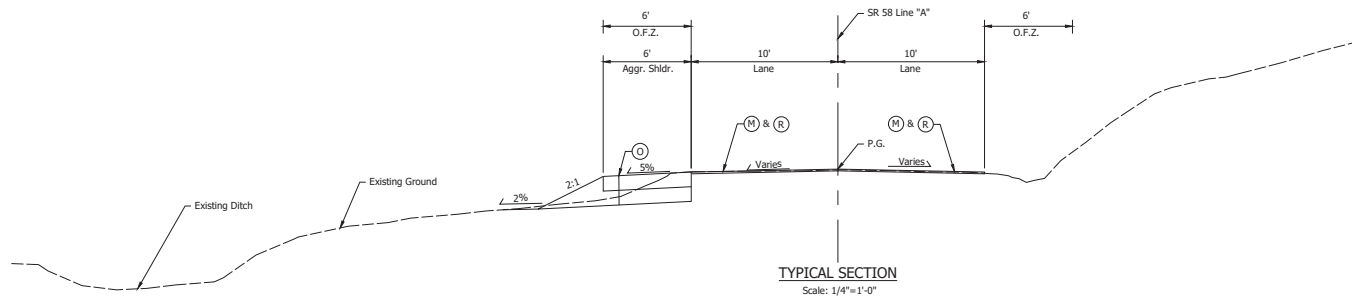
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	DESIGNED: NAW CHECKED: JAW
DRAWN: RTL CHECKED: NAW	DATE _____

**INDIANA
DEPARTMENT OF TRANSPORTATION**

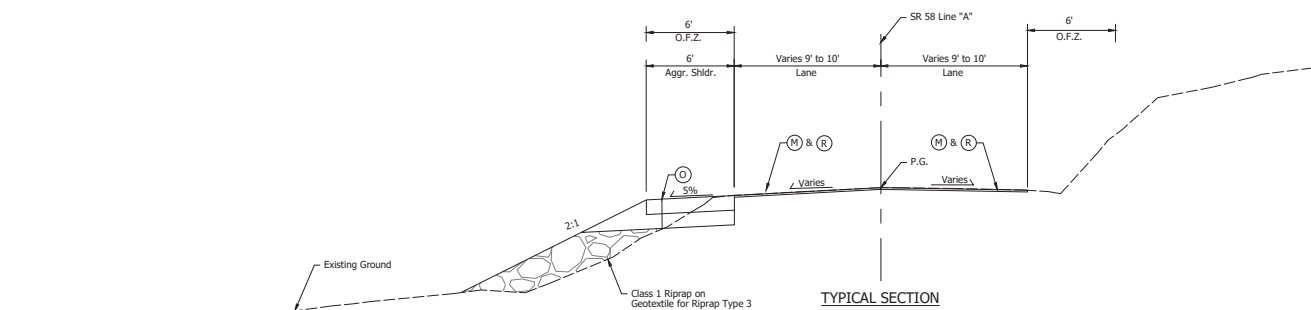
TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
As Shown	-
VERTICAL SCALE	DESIGNATION
-	1900296
SURVEY BOOK	SHEETS
3	of 11
CONTRACT	PROJECT
R-42199	1900296

Date: Aug 04, 2022, 11:05am User Name: T.Jones File: X:\Projects\1900296\1900296_1900296\1900296_Typical.dwg



TYPICAL SECTION
 Scale: 1/4"=1'-0"
 Sta. 104+50 to Sta. 105+00 "A"
 Sta. 107+70 to Sta. 108+30 "A"
 Sta. 112+00 to Sta. 112+45 "A"
 Sta. 114+00 to Sta. 114+75 "A"



TYPICAL SECTION
 Scale: 1/4"=1'-0"
 Sta. 105+00 to Sta. 106+12 "A"
 Sta. 106+69 to Sta. 107+10 "A"
 Sta. 110+25 to Sta. 110+62 "A"

- LEGEND**
- (M) Milling, Asphalt, 1.5"
 - (R) 165#/SYS QC/QA-HMA, 3, 64, Surface, 9.5mm
 - (O) Compacted Aggregate No. 53, 12" on Compacted Aggregate No. 2, 12"
- O.F.Z. Obstruction Free Zone

Notes:
 1) Cross Slopes Vary To Match Existing

Preliminary

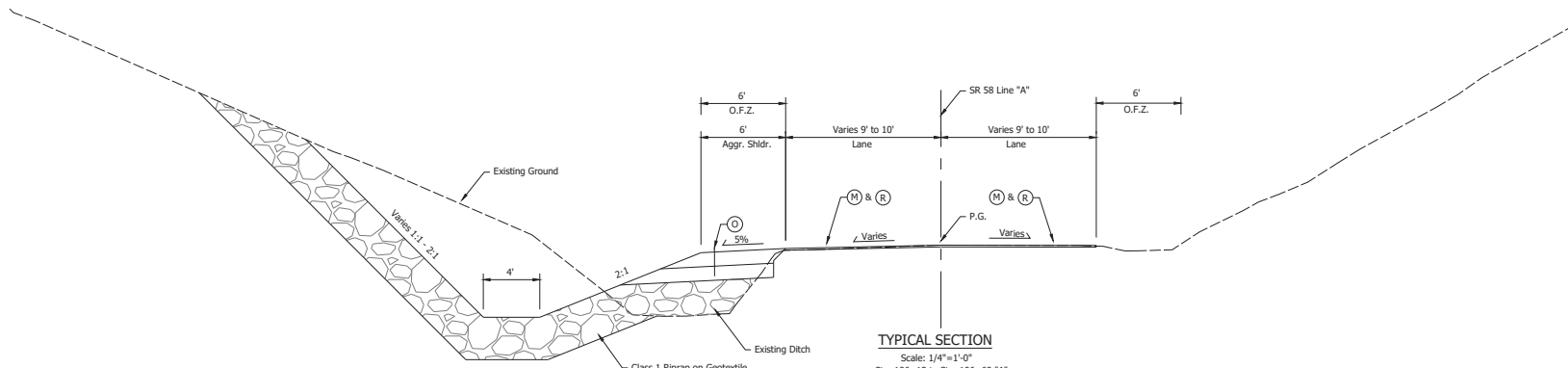
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DESIGNED: NAW	DRAWN: RTL	
CHECKED: JAW	CHECKED: NAW	

INDIANA
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
As Shown	-
VERTICAL SCALE	DESIGNATION
-	1900296
SURVEY BOOK	SHEETS
-	4 of --
CONTRACT	PROJECT
R-42199	1900296

Date: Aug 04, 2022, 11:05am User Name: Tj Jones
 File: X:\Projects\1900296\1900296_1900296_1900296\1900296_Typical.dwg



TYPICAL SECTION
 Scale: 1/4"=1'-0"
 Sta. 106+12 to Sta. 106+69 "A"
 Sta. 107+10 to Sta. 107+70 "A"
 Sta. 108+30 to Sta. 110+25 "A"
 Sta. 110+62 to Sta. 112+00 "A"
 Sta. 112+45 to Sta. 114+00 "A"
 Sta. 114+75 to Sta. 117+00 "A"

- LEGEND**
- (M) Milling, Asphalt, 1.5"
 - (R) 165#/SYS QC/QA-HMA, 3, 64, Surface, 9.5mm
 - (O) Compacted Aggregate No. 53, 12" on Compacted Aggregate No. 2, 12"
- O.F.Z. Obstruction Free Zone

Notes:
 1) Cross Slopes Vary To Match Existing

Preliminary

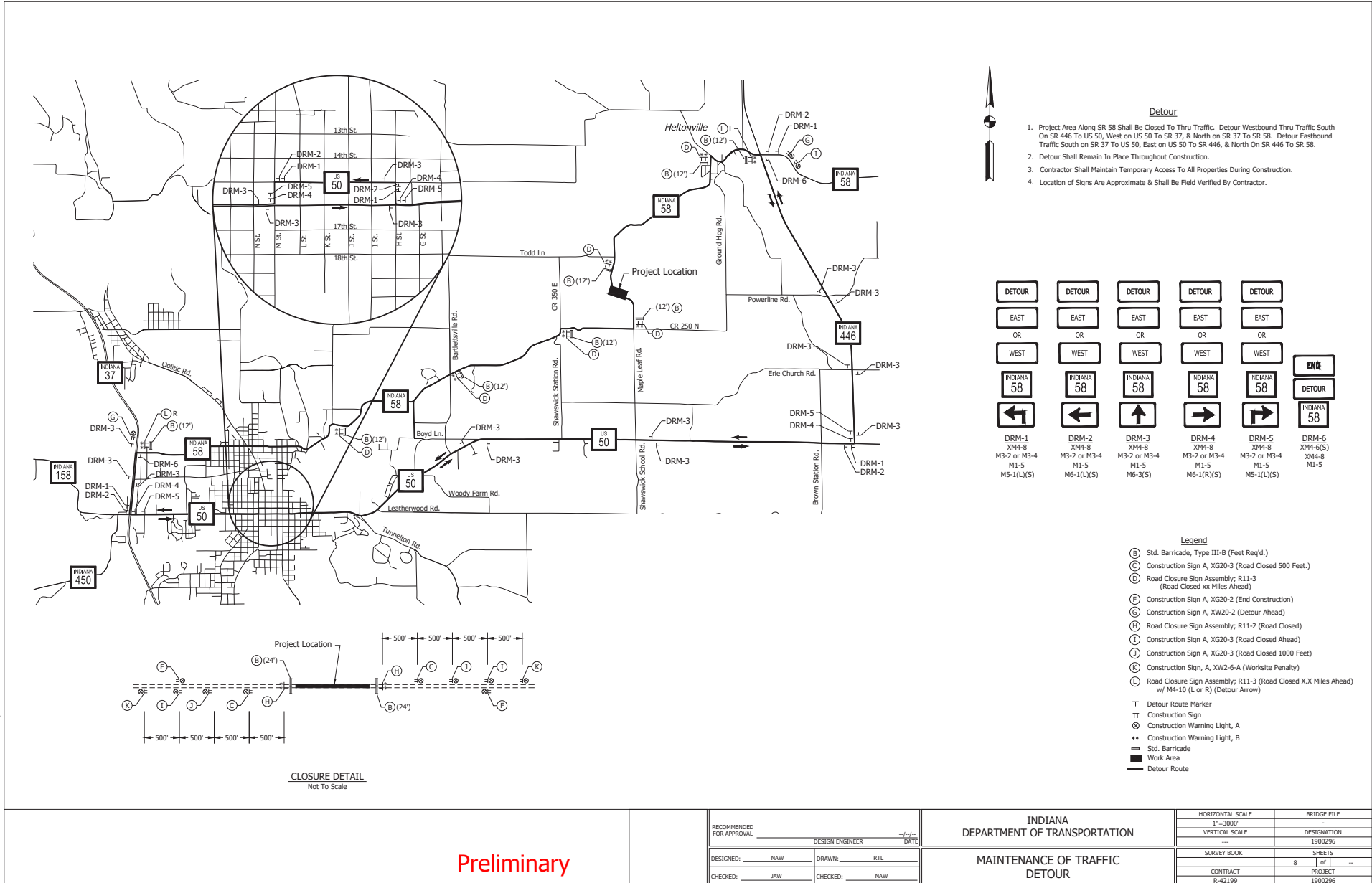
RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: NAW	DRAWN: RTL		
CHECKED: JAW	CHECKED: NAW		

**INDIANA
DEPARTMENT OF TRANSPORTATION**

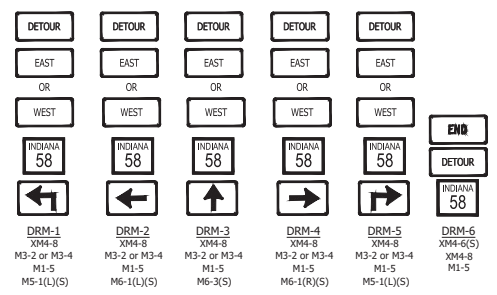
TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
As Shown	-
VERTICAL SCALE	DESIGNATION
-	1900296
SURVEY BOOK	SHEETS
-	5 of --
CONTRACT	PROJECT
R-42199	1900296

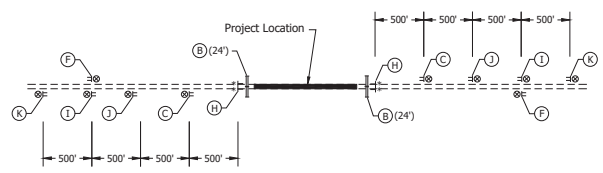
Date: Aug 04, 2022, 11:05am User Name: Tj Jones
 File: X:\Projects\1900296\1900296_1900296_1900296\1900296_Typical.dwg



- Detour**
1. Project Area Along SR 58 Shall Be Closed To Thru Traffic. Detour Westbound Thru Traffic South On SR 446 To US 50, West on US 50 To SR 37, & North on SR 37 To SR 58. Detour Eastbound Traffic South on SR 37 To US 50, East on US 50 To SR 446, & North On SR 446 To SR 58.
 2. Detour Shall Remain In Place Throughout Construction.
 3. Contractor Shall Maintain Temporary Access To All Properties During Construction.
 4. Location of Signs Are Approximate & Shall Be Field Verified By Contractor.



- Legend**
- (B) Std. Barricade, Type III-B (Feet Req'd.)
 - (C) Construction Sign A, XG20-3 (Road Closed 500 Feet.)
 - (D) Road Closure Sign Assembly; R11-3 (Road Closed xx Miles Ahead)
 - (E) Construction Sign A, XG20-2 (End Construction)
 - (G) Construction Sign A, XW20-2 (Detour Ahead)
 - (H) Road Closure Sign Assembly; R11-2 (Road Closed)
 - (I) Construction Sign A, XG20-2 (Road Closed Ahead)
 - (J) Construction Sign A, XG20-3 (Road Closed 1000 Feet)
 - (K) Construction Sign, A, XW2-6-A (Worksite Penalty)
 - (L) Road Closure Sign Assembly; R11-3 (Road Closed X.X Miles Ahead) w/ M4-10 (L or R) (Detour Arrow)
 - T Detour Route Marker
 - TT Construction Sign
 - ⊗ Construction Warning Light, A
 - ⊗ Construction Warning Light, B
 - Std. Barricade
 - Work Area
 - Detour Route

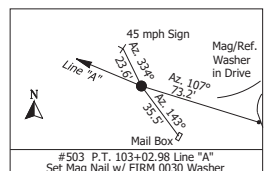
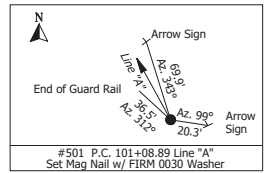
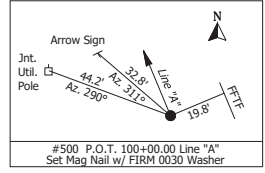
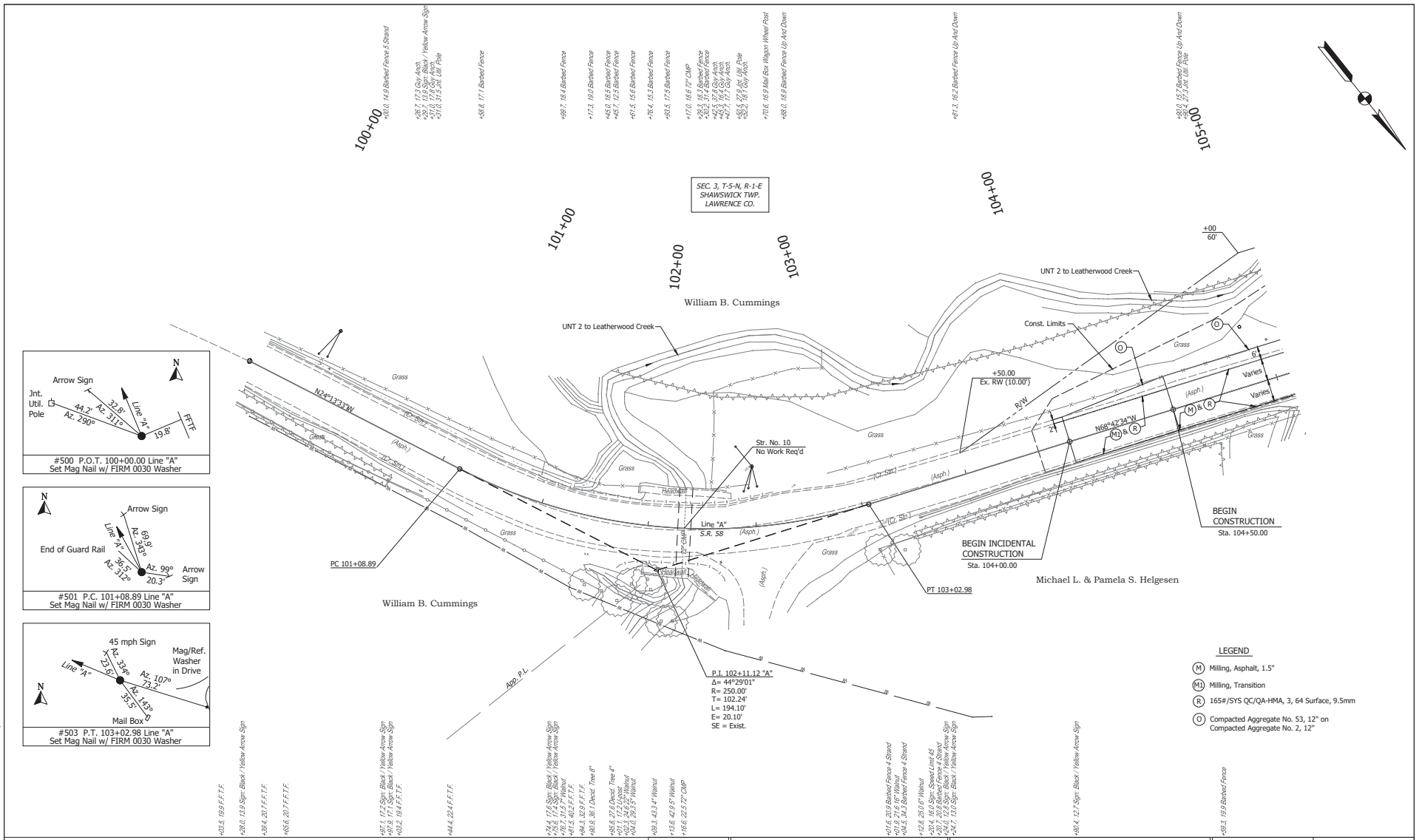


CLOSURE DETAIL
Not To Scale

Preliminary

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: NAW DRAWN: RTL CHECKED: JAW CHECKED: NAW	INDIANA DEPARTMENT OF TRANSPORTATION MAINTENANCE OF TRAFFIC DETOUR	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">HORIZONTAL SCALE</td> <td style="width: 50%;">BRIDGE FILE</td> </tr> <tr> <td style="text-align: center;">1"=300'</td> <td style="text-align: center;">---</td> </tr> <tr> <td style="text-align: center;">VERTICAL SCALE</td> <td style="text-align: center;">DESIGNATION</td> </tr> <tr> <td style="text-align: center;">---</td> <td style="text-align: center;">1900296</td> </tr> <tr> <td style="text-align: center;">SURVEY BOOK</td> <td style="text-align: center;">SHEETS</td> </tr> <tr> <td style="text-align: center;">---</td> <td style="text-align: center;">8 of ---</td> </tr> <tr> <td style="text-align: center;">CONTRACT</td> <td style="text-align: center;">PROJECT</td> </tr> <tr> <td style="text-align: center;">R-42199</td> <td style="text-align: center;">1900296</td> </tr> </table>	HORIZONTAL SCALE	BRIDGE FILE	1"=300'	---	VERTICAL SCALE	DESIGNATION	---	1900296	SURVEY BOOK	SHEETS	---	8 of ---	CONTRACT	PROJECT	R-42199	1900296
HORIZONTAL SCALE	BRIDGE FILE																	
1"=300'	---																	
VERTICAL SCALE	DESIGNATION																	
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---	8 of ---																	
CONTRACT	PROJECT																	
R-42199	1900296																	

Date: Aug 04, 2022, 11:03am User Name: Tj Wines
 File: X:\Projects\1900296\1900296.dwg



- Notes:
- 1) Station/Offset Topnotes, Benchmarks, & Right-of-Way Described from Line "A".
 - 2) All Stationing off of Line "A" Unless Otherwise Noted.

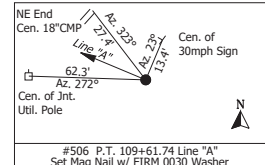
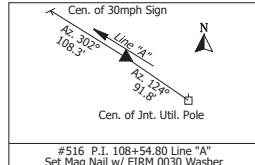
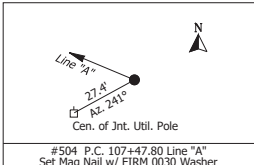
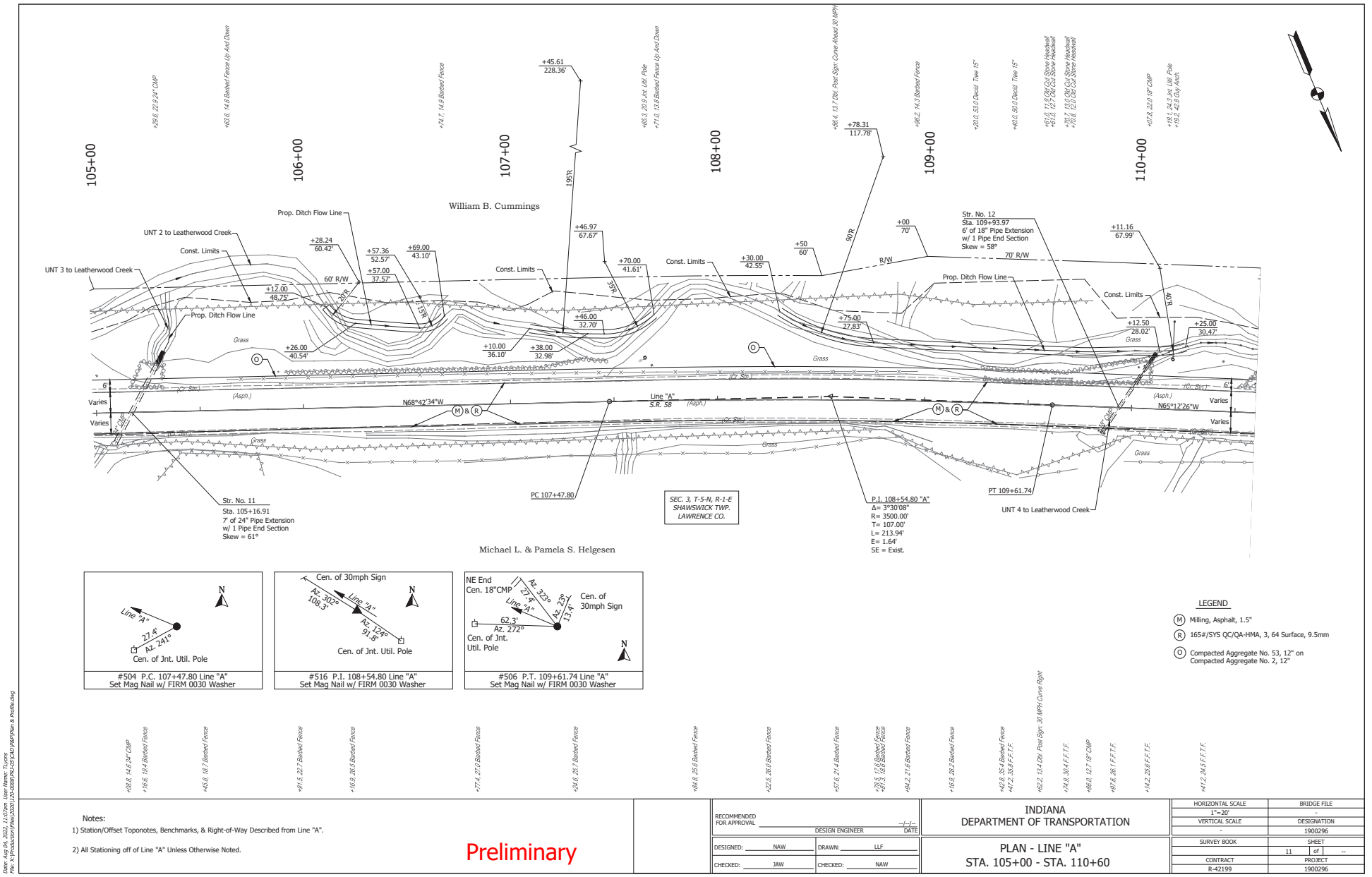
Preliminary

RECOMMENDED FOR APPROVAL		DATE	
DESIGNED: NAW		DRAWN: LLF	
CHECKED: JAW		CHECKED: MAW	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN - LINE "A"
STA. 100+00 - STA. 105+00

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	-
VERTICAL SCALE	DESIGNATION
-	1900296
SURVEY BOOK	SHEET
-	9 of --
CONTRACT	PROJECT
R-42199	1900296



LEGEND

(M)	Milling, Asphalt, 1.5"
(R)	165#/SYS QCA/QA-HMA, 3, 64 Surface, 9.5mm
(C)	Compacted Aggregate No. 53, 12" on Compacted Aggregate No. 2, 12"

- Notes:**
- Station/Offset Toponotes, Benchmarks, & Right-of-Way Described from Line "A".
 - All Stationing off of Line "A" Unless Otherwise Noted.

Preliminary

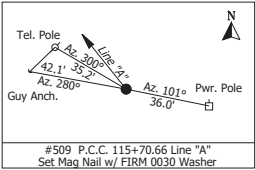
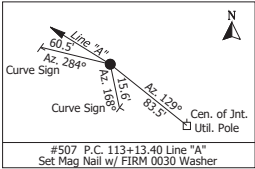
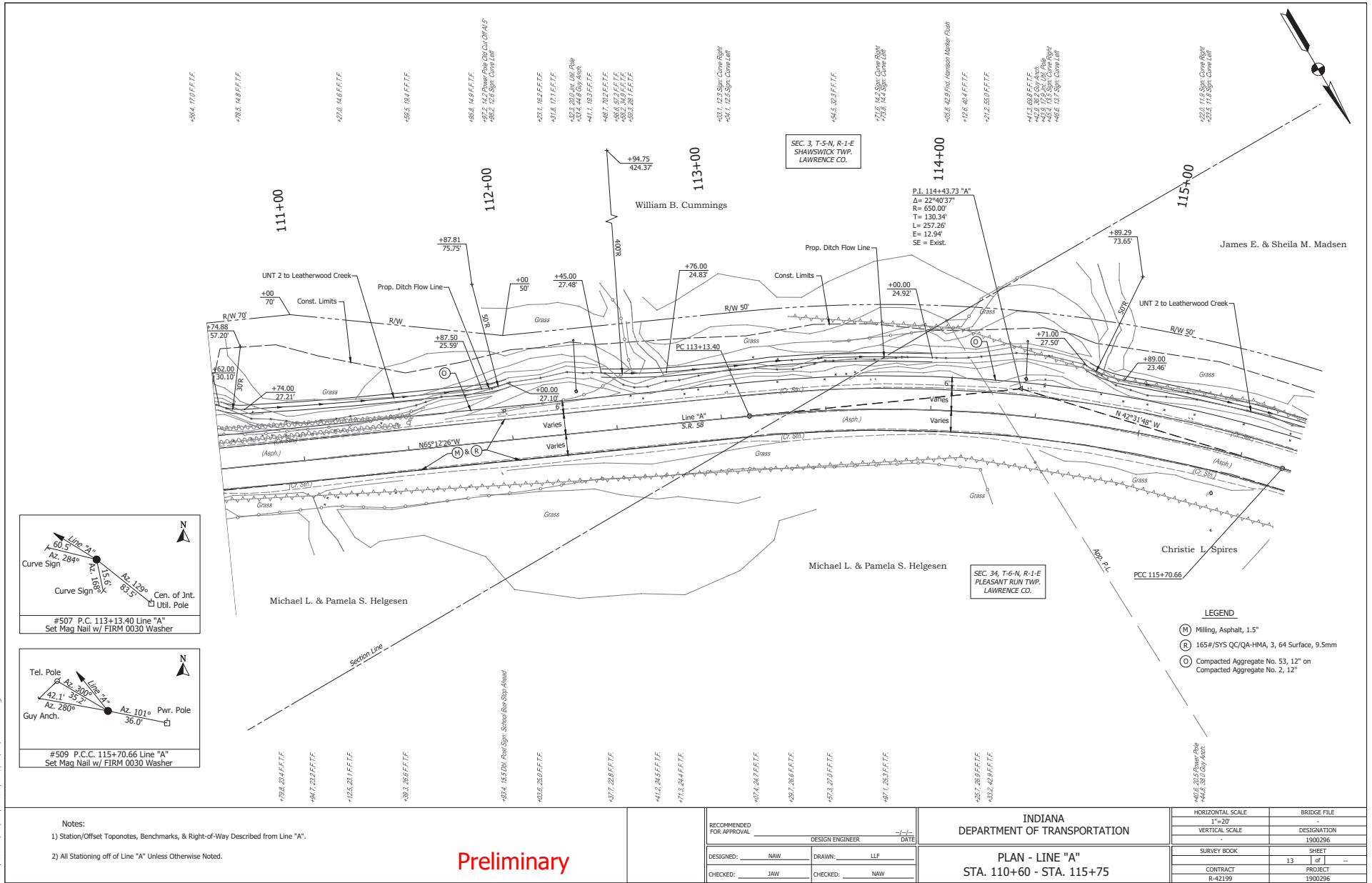
DESIGNED: NAW	DRAWN: LLF
CHECKED: JAW	CHECKED: NAW

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN - LINE "A"
STA. 105+00 - STA. 110+60

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
	1900296
SURVEY BOOK	SHEET
	11 of --
CONTRACT	PROJECT
R-42199	1900296

Date: Aug 04, 2022 11:00am User Name: TJC
 File: X:\Projects\1900296\1900296.dwg



- Notes:
- 1) Station/Offset Toponotes, Benchmarks, & Right-of-Way Described from Line "A".
 - 2) All Stationing off of Line "A" Unless Otherwise Noted.

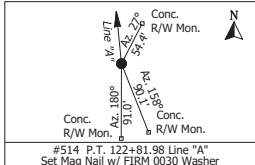
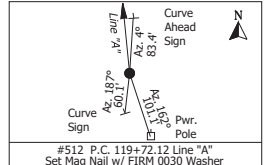
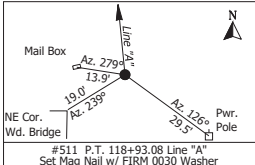
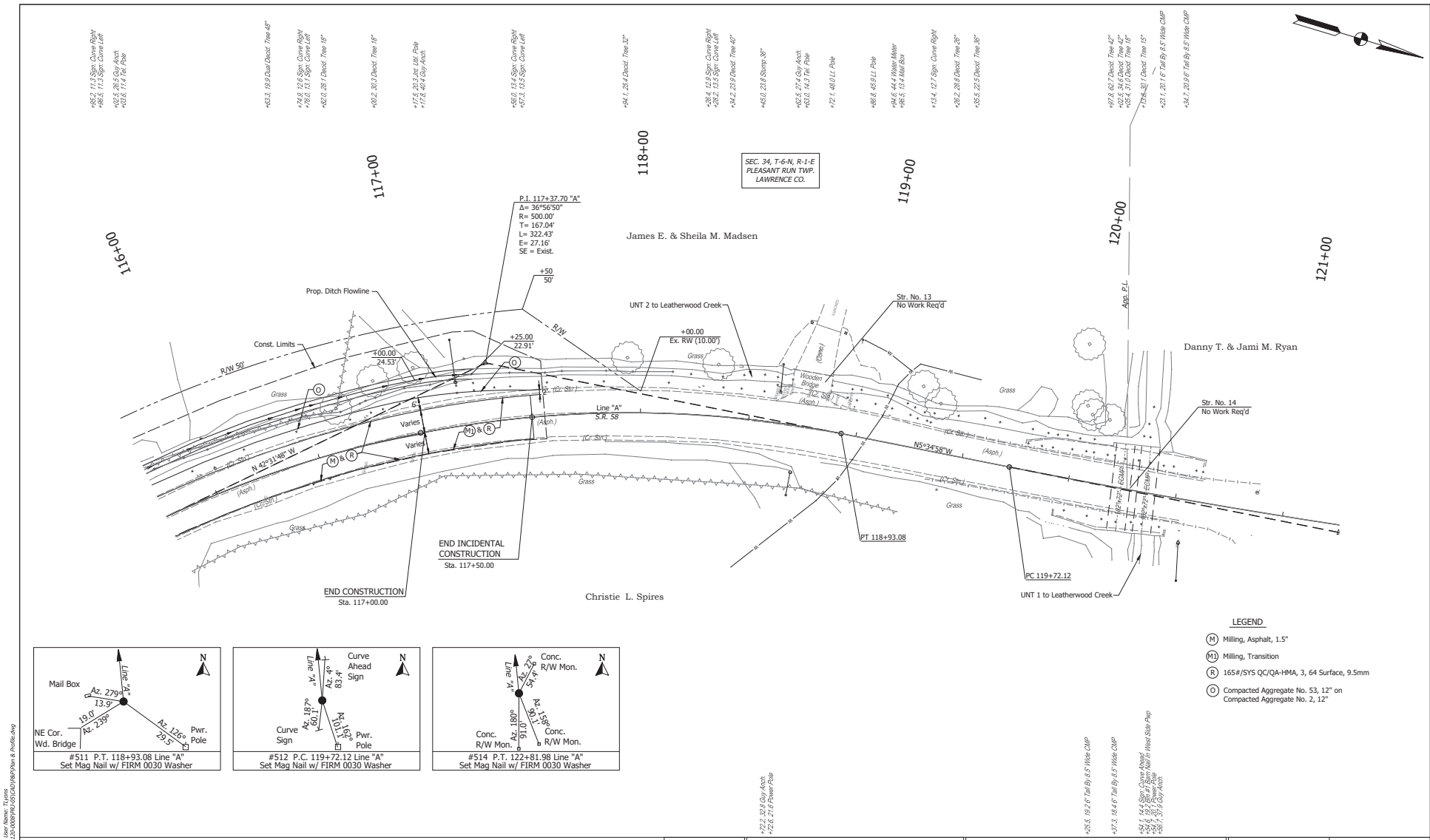
Preliminary

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NAW	DRAWN: LFF	
CHECKED: JAW	CHECKED: NAW	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN - LINE "A"
STA. 110+60 - STA. 115+75

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
	1900296
SURVEY BOOK	SHEET
	13 of --
CONTRACT	PROJECT
R-42199	1900296



- LEGEND**
- (M) Milling, Asphalt, 1.5"
 - (M) Milling, Transition
 - (R) 165#/SYS QC/QA-HMA, 3, 64 Surface, 9.5mm
 - (C) Compacted Aggregate No. 53, 12" on Compacted Aggregate No. 2, 12"

- Notes:**
- 1) Station/Offset Topnotes, Benchmarks, & Right-of-Way Described from Line "A".
 - 2) All Stationing off of Line "A" Unless Otherwise Noted.

Preliminary

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MAW	DRAWN: LLF	
CHECKED: JAW	CHECKED: MAW	

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN - LINE "A"

STA. 115+75 - STA. 121+00

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
	1900296
SURVEY BOOK	SHEET
	15 of --
CONTRACT	PROJECT
R-42199	1900296

Categorical Exclusion
Appendix C
Early Coordination



INDIANA DEPARTMENT OF TRANSPORTATION

November 12, 2021

«Name»

«Title»

«Address1»

«Address2»

«City», «State» «Zip»

Sample Early Coordination Letter

Re: Des. No.: 1900296
Slide Correction Project
State Project
State Road (SR) 58, 3.56 Miles West of SR 446 Junction
Lawrence County, Indiana

Dear «Salu»:

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) intend to proceed with a slide correction project on SR 58 in Lawrence County (Des. No. 1900296).

This letter is part of the early coordination phase of the environmental review. At this time, we are requesting comments from your area of expertise regarding any possible environmental effects (social and natural) associated with this project. **Please use the above Des. No. and project description in your reply.** Your comments will be incorporated into the formal environmental study. Your cooperation in this endeavor is appreciated.

Project Location and Existing Conditions

The proposed project is located on SR 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County. Specifically, the project is located in Section 34, Township 6 N, Range 1 E in Pleasant Run Township and Section 3, Township 5 N, Range 1 E in Shawswick Township as depicted on the Bartlettsville U.S. Geological Survey 1:24,000 scale quadrangle. Adjacent land use consists of mature forests, riparian corridors, agricultural fields, and scattered residences.

Within the project area, SR 58 is functionally classified as a rural major collector. The typical cross section consists of two 10-foot travel lanes (one lane in each direction). No shoulder, median, or guardrail are present. Culverts, CV 058-047-85.70 and CV 058-047-85.36, along with two unnamed corrugated metal pipes (CMPs), 18-inches and 24-inches in diameter, are present within the project area. Please see attachments for maps and photographs of the proposed project area.

Draft Purpose and Need

The need for the project stems from the erosion occurring along the westbound lane of SR 58 causing the edge of the roadway to deteriorate and fail. The stream adjacent to the road has caused this erosion. The purpose of the project is to correct the stream erosion and pavement failure along this section of SR 58, resulting in improved mobility along SR 58.

Proposed Project

The erosional slide is occurring along the westbound lane of SR 58 in multiple locations within a 1,700-foot length of the roadway. These locations are generally where the stream, UNT to Leatherwood Creek, meanders close to the road and has caused erosion of the partially shale/sandstone lined waterway. Based off the preliminary scope, INDOT hydraulic review, and a field review it appears there could be up to approximately 500 feet of stream/roadway in need of repair. Stream mitigation may be necessary due to the length of stream that may be impacted by this project. Additionally, the stream being located near the roadway introduces inherent roadside safety design issues. It is proposed to construct a widened shoulder to provide an appropriate obstruction free zone. Approximately 0.1 acre of tree clearing is anticipated as part of the project.

The proposed maintenance of traffic (MOT) includes road closure with an official detour.

Construction is anticipated to begin in Spring 2024.

Right-of-Way (ROW)

This project is anticipated to require approximately 1.0 acre of permanent right-of-way (ROW). No temporary ROW is anticipated.

Environmental Resources

A Red Flag Investigation (RFI) was performed for a 0.5-mile radius of the project area. Several “Red Flags” were identified within the 0.5-mile search radius; however, not all will impact the proposed project. One NWI-Line segment and one stream segment, associated with an unnamed stream, are present within the project area. The unnamed stream segment is listed as impaired for *E. coli*. The project is located within a floodplain. One sinkhole area polygon is located within 0.5 mile of the project area.

Section 106

It is anticipated that the proposed project will fall within the guidelines of Category B under the Minor Projects Programmatic Agreement (MPPA).

Range-wide Informal Programmatic Consultation

Land use in the vicinity of the project is primarily mature forests, riparian corridors, agricultural fields, and scattered residences. Lawrence County is within the range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). A determination key has been completed using the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) portal and the project received a finding of “May Affect - Not Likely to Adversely Affect”.

Early Coordination

This letter is part of the early coordination review process. You are asked to review this information and provide any comments you may have relative to anticipated impacts of the project on areas in which you have jurisdiction or special expertise. We will incorporate your comments into a study of the project’s environmental impacts. To facilitate the development of this project, you are asked to reply within **30 calendar days** of receipt of this letter. However, should you find that an extension to the response time is needed, a reasonable amount may be granted upon request.

If you have any questions regarding this project, please feel free to contact me at (812) 759-4107 or at hhume@lochgroup.com. Additionally, should you want to contact the sponsor of this project, the INDOT-Vincennes District, please contact the Project Manager, Emily Sprinkle, at (812) 489-3828 or at esprinkle@indot.in.gov.

Thank you in advance for your input.

Sincerely,



Holly Hume
Environmental Department
Lochmueller Group, Inc.

Attachments:

- General Location Map
- USGS Topographic Map
- Red Flag Investigation Maps
- Photographs
- Preliminary Typical Section

Note: Attachments have been removed to avoid duplication and reduce file size.

Distribution List:

- FHWA – Indiana Division (electronic submission)
- Indiana Geological and Water Survey (online submission)
- IDNR, Division of Fish and Wildlife (electronic submission)
- IDEM (online submission)
- National Park Service (electronic submission)
- IDEM Groundwater (online submission)
- U.S. Housing and Urban Development (electronic submission)
- INDOT, Vincennes District (electronic submission)
- Hoosier National Forest, U.S. Forest Service (electronic submission)
- Natural Resources Conservation Service, Indianapolis Office (electronic submission)
- U.S. Army Corps of Engineers, Louisville District (electronic submission)
- Lawrence County Board of Commissioners
- Lawrence County Surveyor's Office
- Lawrence County Highway Department
- Lawrence County Council
- Lawrence County Sheriff's Department
- Lawrence County Emergency Management Agency; Floodplain Administrator
- North Lawrence Community Schools
- Shawswick Volunteer Firefighters Association Station 2
- Pleasant Run Volunteer Fire Department Station 1



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:

November 05, 2021

Consultation Code: 03E12000-2022-SLI-0283

Event Code: 03E12000-2022-E-01193

Project Name: Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County

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: 03E12000-2022-SLI-0283
 Event Code: Some(03E12000-2022-E-01193)
 Project Name: Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County
 Project Type: TRANSPORTATION
 Project Description: Des 1900296 is located on State Road (SR) 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County, Indiana. An erosional slide is occurring in multiple locations within a 1,700-foot length of the roadway. These locations are generally where the stream, Unnamed Tributary (UNT) to Leatherwood Creek, meanders close to the road and has caused erosion of the partially shale/sandstone lined waterway. Up to 500 feet of stream/roadway is in need of repair. The project includes a 6-foot aggregate shoulder and a riprap lined channel. Pavement patching may be required in locations where erosion has caused pavement failure at the edge of the asphalt. Mill and overlay of the existing roadway are also anticipated. Two unnamed corrugated metal pipes (CMPs), 18-inches and 24-inches in diameter, are present in the project area and are anticipated to need to be extended. Two additional culverts, CV 058-047-85.70 and CV 058-047-85.36, and a private bridge are also present within the project area but are not anticipated to require any work. No bridges are present in the project area.

The project is located in a rural area surrounded by mature forests, riparian corridors, agricultural fields, and scattered residences. The riparian corridors, forests, and adjacent edges of agricultural fields would be considered suitable summer habitat for the Indiana bat and the northern long-eared bat. Approximately 0.1 acre of tree removal is anticipated. Dominant species within the tree removal area include sugar maple (*Acer saccharum*), slippery elm (*Ulmus rubra*), American sycamore (*Platanus occidentalis*), black walnut (*Juglans nigra*), and white oak (*Quercus alba*). All tree removal will be within 100 feet of the existing roadway and will occur during the inactive bat season (October 1 to March 31). Mitigation is not anticipated.

A review of the USFWS database by Vincennes District environmental staff on August 5, 2021 did not indicate the presence of endangered bat species in or within 0.5-mile of the project area. The March 9, 2021 Culvert Inspection Reports for CV 058-047-85.36 and CV 058-047-85.70 stated that no bats were seen or heard in the structures. Bridge/Structure Bat Assessment Forms were completed for CV 058-047-85.36 and CV 058-047-85.70, the 18- and 24-inch CMPs, and the private bridge on September 30, 2021. No evidence of bats was identified. Work is anticipated to extend from Spring 2024 to Spring 2025. No temporary or permanent lighting are anticipated.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.9039979,-86.39895465564678,14z>



Counties: Lawrence County, Indiana

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

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

Insects

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

Critical habitats

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



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:

November 09, 2021

Consultation code: 03E12000-2022-I-0283

Event Code: 03E12000-2022-E-01289

Project Name: Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County

Subject: Concurrence verification letter for the 'Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County' 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 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County** (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.

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

- Monarch Butterfly *Danaus plexippus* Candidate

Project Description

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

Name

Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County

Description

Des 1900296 is located on State Road (SR) 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County, Indiana. An erosional slide is occurring in multiple locations within a 1,700-foot length of the roadway. These locations are generally where the stream, Unnamed Tributary (UNT) to Leatherwood Creek, meanders close to the road and has caused erosion of the partially shale/sandstone lined waterway. Up to 500 feet of stream/roadway is in need of repair. The project includes a 6-foot aggregate shoulder and a riprap lined channel. Pavement patching may be required in locations where erosion has caused pavement failure at the edge of the asphalt. Mill and overlay of the existing roadway are also anticipated. Two unnamed corrugated metal pipes (CMPs), 18-inches and 24-inches in diameter, are present in the project area and are anticipated to need to be extended. Two additional culverts, CV 058-047-85.70 and CV 058-047-85.36, and a private bridge are also present within the project area but are not anticipated to require any work. No bridges are present in the project area.

The project is located in a rural area surrounded by mature forests, riparian corridors, agricultural fields, and scattered residences. The riparian corridors, forests, and adjacent edges of agricultural fields would be considered suitable summer habitat for the Indiana bat and the northern long-eared bat. Approximately 0.1 acre of tree removal is anticipated. Dominant species within the tree removal area include sugar maple (*Acer saccharum*), slippery elm (*Ulmus rubra*), American sycamore (*Platanus occidentalis*), black walnut (*Juglans nigra*), and white oak (*Quercus alba*). All tree removal will be within 100 feet of the existing roadway and will occur during the inactive bat season (October 1 to March 31). Mitigation is not anticipated.

A review of the USFWS database by Vincennes District environmental staff on August 5, 2021 did not indicate the presence of endangered bat species in or within 0.5-mile of the project area. The March 9, 2021 Culvert Inspection Reports for CV 058-047-85.36 and CV 058-047-85.70 stated that no bats were seen or heard in the structures. Bridge/Structure Bat Assessment Forms were completed for CV 058-047-85.36 and CV 058-047-85.70, the 18- and 24-inch CMPs, and the private bridge on September 30, 2021. No evidence of bats was identified.

Work is anticipated to extend from Spring 2024 to Spring 2025. No temporary or permanent lighting are anticipated.

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?

Yes

8. Will the project include *any* type of activity that could impact a **known** hibernaculum^[1], or impact a karst feature (e.g., sinkhole, losing stream, or spring) that could result in effects to a **known** hibernaculum?

[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

9. 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

10. 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

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

No

12. 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

13. 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 triangulation/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

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

Yes

15. 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

16. 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 triangulation/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

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

Yes

18. 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

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

Yes

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

No

21. Are *all* trees that are being removed clearly demarcated?
Yes
22. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?
No
23. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?
No
24. Does the project include slash pile burning?
No
25. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?
Yes
26. 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

27. 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 1900296 Bat Assessments.pdf* <https://ecos.fws.gov/ipac/project/SL7RIWJUARGSTLD23N5HQNG55E/projectDocuments/107211162>

28. 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

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

No

30. 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

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

No

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?

Yes

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

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

No

35. 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

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

No

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

Automatically answered

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

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

Automatically answered

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

39. Is the 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.

40. 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

41. **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

42. **Hibernacula AMM 1**

Will the project ensure that on-site personnel will use best management practices^[1], secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula?

[1] Coordinate with the appropriate Service Field Office on recommended best management practices for karst in your state.

Yes

43. **Hibernacula AMM 1**

Will the project ensure that, where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography?

Yes

44. **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

45. **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

46. **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 triangulation/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

Project Questionnaire

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

N/A

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

N/A

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.

0.1

4. Please describe the proposed bridge work:

Two unnamed corrugated metal pipes (CMPs), 18-inches and 24-inches in diameter, are present in the project area and are anticipated to need to be extended.

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

Spring 2024 to Spring 2025

6. Please enter the date of the bridge assessment:

September 30, 2021

Avoidance And Minimization Measures (AMMs)

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

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.

HIBERNACULA AMM 1

For projects located within karst areas, on-site personnel will use best management practices, secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography.

TREE REMOVAL AMM 1

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

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on April 22, 2021. 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.

Culvert Inspection Report

CV 058-047-85.36

SR 58

over

UNT



Inspection Date: 03/09/2021

Inspected By: James Hefferman

Inspection Type(s): Culvert

Paint: * Indicate if paint present , year painted & condition rating.

N - No Paint

Not Rated

Comments:

Endangered Species: * If yes, add one photo to the dropdown field

Bats: seen or heard under structure? * N

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

BRIDGE Culvert Geometry:

Barrel Length: 40.0

Height: 6.0

Width: 6.0

APPENDIX D: Bridge/Structure Bat Assessment Form

Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet), regardless of whether assessments have been conducted in the past. Assessments must be completed in appropriate weather conditions, suitable for the assessor to observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken during bat active season to identify the specific bat species utilizing the structure, or protected bat species presence can be assumed, in order to comply with threatened and endangered species regulations. Bat active season dates, typically between April and November, vary regionally and by species, so assessors should consult with their local USFWS Field Office for more specific active season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat¹ (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**




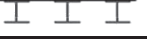





Date & Time of Assessment	DOT Project #	Route/Facility Carried	County
Federal Structure ID	Structure Coordinates (latitude and longitude)	<input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat ² Name: _____ Signature: _____	

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

¹ Refer to the USFWS’s summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

² This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

Bridge/Structure Bat Assessment Form

Date & Time of Assessment 09/30/2021 10:00am	DOT Project Number Des. 1900296	Route/Facility Carried SR 58	County Lawrence
Federal Structure ID No Federal ID Culvert #: CV 058-047-85.36	Structure Coordinates (latitude and longitude) 38.9028 N -86.39551 W	Structure Height (approximate) 6 ft	Structure Length 40 ft
Structure Type (check one)		Structure Material (check all that apply)	
Bridge Construction Style		Deck Material	Beam Material
<input type="radio"/> Cast-in-place 	<input type="radio"/> Pre-stressed Girder 	<input type="checkbox"/> Metal	<input type="checkbox"/> None
<input type="radio"/> Flat Slab/Box 	<input type="radio"/> Steel I-beam 	<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete
<input type="radio"/> Truss 	<input type="radio"/> Covered 	<input type="checkbox"/> Timber	<input type="checkbox"/> Steel
<input type="radio"/> Parallel Box Beam 	<input type="radio"/> Other:	<input type="checkbox"/> Open grid	<input type="checkbox"/> Timber
		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:
Culvert Type	Other Structure	Culvert Material	
<input type="radio"/> Box	<input type="radio"/>	<input checked="" type="checkbox"/> Metal	<input type="checkbox"/> Concrete
<input type="radio"/> Pipe/Round	<input type="radio"/>	<input type="checkbox"/> Concrete	<input type="checkbox"/> Plastic
<input type="radio"/> Other:	<input type="radio"/>	<input type="checkbox"/> Plastic	<input type="checkbox"/> Stone/Masonry
		<input type="checkbox"/> Stone/Masonry	<input type="checkbox"/> Other:
		<input type="checkbox"/> Other:	
Crossings Traversed (check all that apply)		Surrounding Habitat (check all that apply)	
<input type="checkbox"/> Bare ground	<input type="checkbox"/> Open vegetation	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Grassland
<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Closed vegetation	<input type="checkbox"/> Commercial	<input type="checkbox"/> Ranching
<input type="checkbox"/> Flowing water	<input type="checkbox"/> Railroad	<input type="checkbox"/> Residential-urban	<input type="checkbox"/> Riparian/wetland
<input type="checkbox"/> Standing water	<input type="checkbox"/> Road/trail - Type:	<input type="checkbox"/> Residential-rural	<input type="checkbox"/> Mixed use
<input type="checkbox"/> Seasonal water	<input type="checkbox"/> Other:	<input type="checkbox"/> Woodland/forested	<input type="checkbox"/> Other:
Areas Assessed (check all that apply)			
Check all areas that apply. If an area is not present in the structure, check the "not present" box.			
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.			
Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)	
<input checked="" type="checkbox"/> All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas	<input type="checkbox"/> Not present No evidence of bat presence.	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Concrete surfaces (open roosting on concrete)	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck 	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Vertical surfaces on concrete I-beams	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between walls, ceiling joists	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All guiderails	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All expansion joints	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
Name: Sean Langley		Signature: 	

Culvert Inspection Report

CV 058-047-85.70

SR 58

over

UNT



Inspection Date: 03/09/2021

Inspected By: Tony Hoover

Inspection Type(s): Culvert

Paint: * Indicate if paint present , year painted & condition rating.

N - No Paint

Not Rated

Comments:

Endangered Species: * If yes, add one photo to the dropdown field

Bats: seen or heard under structure? * N

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

BRIDGE Culvert Geometry:

Barrel Length: 40

Height: 6

Width: 19

APPENDIX D: Bridge/Structure Bat Assessment Form

Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet), regardless of whether assessments have been conducted in the past. Assessments must be completed in appropriate weather conditions, suitable for the assessor to observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken during bat active season to identify the specific bat species utilizing the structure, or protected bat species presence can be assumed, in order to comply with threatened and endangered species regulations. Bat active season dates, typically between April and November, vary regionally and by species, so assessors should consult with their local USFWS Field Office for more specific active season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat¹ (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**




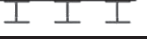





Date & Time of Assessment	DOT Project #	Route/Facility Carried	County
Federal Structure ID	Structure Coordinates (latitude and longitude)	<input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat ² Name: _____ Signature: _____	

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

¹ Refer to the USFWS’s summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

² This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

Bridge/Structure Bat Assessment Form

Date & Time of Assessment 09/30/2021 11:00am	DOT Project Number Des. 1900296	Route/Facility Carried SR 58	County Lawrence
Federal Structure ID No Federal ID Culvert #: CV 058-047-85.70	Structure Coordinates (latitude and longitude) 38.9056 N -86.40025 W	Structure Height (approximate) 6 ft	Structure Length 40 ft
Structure Type (check one)		Structure Material (check all that apply)	
Bridge Construction Style		Deck Material	Beam Material End/Back Wall Material
<input type="radio"/> Cast-in-place 	<input type="radio"/> Pre-stressed Girder 	<input type="checkbox"/> Metal	<input type="checkbox"/> None
<input type="radio"/> Flat Slab/Box 	<input type="radio"/> Steel I-beam 	<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete
<input type="radio"/> Truss 	<input type="radio"/> Covered 	<input type="checkbox"/> Timber	<input type="checkbox"/> Steel
<input type="radio"/> Parallel Box Beam 	<input type="radio"/> Other:	<input type="checkbox"/> Open grid	<input type="checkbox"/> Timber
		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:
Culvert Type	Other Structure	Culvert Material	Creosote Evidence
<input type="radio"/> Box	<input type="radio"/>	<input checked="" type="checkbox"/> Metal	<input type="radio"/> Yes <input checked="" type="radio"/> No
<input checked="" type="radio"/> Pipe/Round	<input type="radio"/>	<input type="checkbox"/> Concrete	<input type="radio"/> Unknown
<input type="radio"/> Other:	<input type="radio"/>	<input type="checkbox"/> Plastic	Notes:
		<input type="checkbox"/> Stone/Masonry	Twin Culverts
		<input type="checkbox"/> Other:	
Crossings Traversed (check all that apply)		Surrounding Habitat (check all that apply)	
<input type="checkbox"/> Bare ground	<input type="checkbox"/> Open vegetation	<input checked="" type="checkbox"/> Agricultural	<input type="checkbox"/> Grassland
<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Closed vegetation	<input type="checkbox"/> Commercial	<input type="checkbox"/> Ranching
<input checked="" type="checkbox"/> Flowing water	<input type="checkbox"/> Railroad	<input type="checkbox"/> Residential-urban	<input type="checkbox"/> Riparian/wetland
<input type="checkbox"/> Standing water	<input type="checkbox"/> Road/trail - Type:	<input checked="" type="checkbox"/> Residential-rural	<input type="checkbox"/> Mixed use
<input type="checkbox"/> Seasonal water	<input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Woodland/forested	<input type="checkbox"/> Other:
Areas Assessed (check all that apply)			
Check all areas that apply. If an area is not present in the structure, check the "not present" box.			
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.			
Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)	
<input checked="" type="checkbox"/> All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas	<input type="checkbox"/> Not present No evidence of bat presence.	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Concrete surfaces (open roosting on concrete)	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck 	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Vertical surfaces on concrete I-beams	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between walls, ceiling joists	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All guiderails	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All expansion joints	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
Name: Sean Langley		Signature: 	

APPENDIX D: Bridge/Structure Bat Assessment Form

Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet), regardless of whether assessments have been conducted in the past. Assessments must be completed in appropriate weather conditions, suitable for the assessor to observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken during bat active season to identify the specific bat species utilizing the structure, or protected bat species presence can be assumed, in order to comply with threatened and endangered species regulations. Bat active season dates, typically between April and November, vary regionally and by species, so assessors should consult with their local USFWS Field Office for more specific active season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat¹ (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**




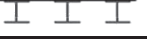





Date & Time of Assessment	DOT Project #	Route/Facility Carried	County
Federal Structure ID	Structure Coordinates (latitude and longitude)	<input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat ² Name: _____ Signature: _____	

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

¹ Refer to the USFWS’s summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

² This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

Bridge/Structure Bat Assessment Form

Date & Time of Assessment 09/30/2021 10:20am	DOT Project Number Des. 1900296	Route/Facility Carried SR 58	County Lawrence
Federal Structure ID No Federal ID unnamed culvert	Structure Coordinates (latitude and longitude) 38.9056 N -86.40025 W	Structure Height (approximate) 1.5 ft	Structure Length Unknown
Structure Type (check one)		Structure Material (check all that apply)	
Bridge Construction Style		Deck Material	Beam Material End/Back Wall Material
<input type="radio"/> Cast-in-place 	<input type="radio"/> Pre-stressed Girder 	<input type="checkbox"/> Metal	<input type="checkbox"/> None
<input type="radio"/> Flat Slab/Box 	<input type="radio"/> Steel I-beam 	<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete
<input type="radio"/> Truss 	<input type="radio"/> Covered 	<input type="checkbox"/> Timber	<input type="checkbox"/> Steel
<input type="radio"/> Parallel Box Beam 	<input type="radio"/> Other:	<input type="checkbox"/> Open grid	<input type="checkbox"/> Timber
		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:
Culvert Type	Other Structure	Culvert Material	
<input type="radio"/> Box	<input type="radio"/>	<input checked="" type="checkbox"/> Metal	<input type="checkbox"/> Concrete
<input checked="" type="radio"/> Pipe/Round	<input type="radio"/>	<input type="checkbox"/> Concrete	<input type="checkbox"/> Plastic
<input type="radio"/> Other:	<input type="radio"/>	<input type="checkbox"/> Plastic	<input type="checkbox"/> Stone/Masonry
		<input type="checkbox"/> Stone/Masonry	<input type="checkbox"/> Other:
		<input type="checkbox"/> Other:	
Crossings Traversed (check all that apply)		Surrounding Habitat (check all that apply)	
<input type="checkbox"/> Bare ground	<input type="checkbox"/> Open vegetation	<input checked="" type="checkbox"/> Agricultural	<input type="checkbox"/> Grassland
<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Closed vegetation	<input type="checkbox"/> Commercial	<input type="checkbox"/> Ranching
<input type="checkbox"/> Flowing water	<input type="checkbox"/> Railroad	<input type="checkbox"/> Residential-urban	<input checked="" type="checkbox"/> Riparian/wetland
<input type="checkbox"/> Standing water	<input type="checkbox"/> Road/trail - Type:	<input checked="" type="checkbox"/> Residential-rural	<input type="checkbox"/> Mixed use
<input checked="" type="checkbox"/> Seasonal water	<input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Woodland/forested	<input type="checkbox"/> Other:
Areas Assessed (check all that apply)			
Check all areas that apply. If an area is not present in the structure, check the "not present" box.			
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.			
Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)	
<input checked="" type="checkbox"/> All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas	<input type="checkbox"/> Not present No evidence of bat presence.	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Concrete surfaces (open roosting on concrete)	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck 	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Vertical surfaces on concrete I-beams	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between walls, ceiling joists	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All guiderails	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All expansion joints	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
Name: Sean Langley		Signature: 	

APPENDIX D: Bridge/Structure Bat Assessment Form

Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
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- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat¹ (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**




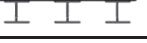





Date & Time of Assessment	DOT Project #	Route/Facility Carried	County
Federal Structure ID	Structure Coordinates (latitude and longitude)	<input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat ² Name: _____ Signature: _____	

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

¹ Refer to the USFWS’s summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

² This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

Bridge/Structure Bat Assessment Form

Date & Time of Assessment 09/30/2021 10:35am	DOT Project Number Des. 1900296	Route/Facility Carried SR 58	County Lawrence
Federal Structure ID No Federal ID unnamed culvert	Structure Coordinates (latitude and longitude) 38.903072 N -86.396515 W	Structure Height (approximate) 2 ft	Structure Length Unknown
Structure Type (check one)		Structure Material (check all that apply)	
Bridge Construction Style		Deck Material	Beam Material End/Back Wall Material
<input type="radio"/> Cast-in-place 	<input type="radio"/> Pre-stressed Girder 	<input type="checkbox"/> Metal	<input type="checkbox"/> None <input type="checkbox"/> Concrete
<input type="radio"/> Flat Slab/Box 	<input type="radio"/> Steel I-beam 	<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete
<input type="radio"/> Truss 	<input type="radio"/> Covered 	<input type="checkbox"/> Timber	<input type="checkbox"/> Steel
<input type="radio"/> Parallel Box Beam 	<input type="radio"/> Other:	<input type="checkbox"/> Open grid	<input type="checkbox"/> Timber
		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:
Culvert Type	Other Structure	Culvert Material	
<input type="radio"/> Box	<input type="radio"/>	<input checked="" type="checkbox"/> Metal	<input type="radio"/> Yes <input checked="" type="radio"/> No
<input checked="" type="radio"/> Pipe/Round	<input type="radio"/>	<input type="checkbox"/> Concrete	<input type="radio"/> Unknown
<input type="radio"/> Other:	<input type="radio"/>	<input type="checkbox"/> Plastic	Notes:
		<input type="checkbox"/> Stone/Masonry	
		<input type="checkbox"/> Other:	
Crossings Traversed (check all that apply)		Surrounding Habitat (check all that apply)	
<input type="checkbox"/> Bare ground	<input type="checkbox"/> Open vegetation	<input checked="" type="checkbox"/> Agricultural	<input type="checkbox"/> Grassland
<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Closed vegetation	<input type="checkbox"/> Commercial	<input type="checkbox"/> Ranching
<input type="checkbox"/> Flowing water	<input type="checkbox"/> Railroad	<input type="checkbox"/> Residential-urban	<input checked="" type="checkbox"/> Riparian/wetland
<input type="checkbox"/> Standing water	<input type="checkbox"/> Road/trail - Type:	<input checked="" type="checkbox"/> Residential-rural	<input type="checkbox"/> Mixed use
<input checked="" type="checkbox"/> Seasonal water	<input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Woodland/forested	<input type="checkbox"/> Other:
Areas Assessed (check all that apply)			
Check all areas that apply. If an area is not present in the structure, check the "not present" box.			
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.			
Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)	
<input checked="" type="checkbox"/> All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas	<input type="checkbox"/> Not present No evidence of bat presence.	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Concrete surfaces (open roosting on concrete)	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck 	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Vertical surfaces on concrete I-beams	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between walls, ceiling joists	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All guiderails	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All expansion joints	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live # dead #	<input type="checkbox"/> Audible Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
Name: Sean Langley		Signature: 	

APPENDIX D: Bridge/Structure Bat Assessment Form

Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet), regardless of whether assessments have been conducted in the past. Assessments must be completed in appropriate weather conditions, suitable for the assessor to observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken during bat active season to identify the specific bat species utilizing the structure, or protected bat species presence can be assumed, in order to comply with threatened and endangered species regulations. Bat active season dates, typically between April and November, vary regionally and by species, so assessors should consult with their local USFWS Field Office for more specific active season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat¹ (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**

Date & Time of Assessment	DOT Project #	Route/Facility Carried	County
Federal Structure ID	Structure Coordinates (latitude and longitude)	<input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat ² Name: _____ Signature: _____	

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

¹ Refer to the USFWS’s summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

² This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

Bridge/Structure Bat Assessment Form

Date & Time of Assessment 09/30/2021 11:30am	DOT Project Number Des. 1900296	Route/Facility Carried SR 58	County Lawrence
Federal Structure ID No Federal ID private bridge	Structure Coordinates (latitude and longitude) 38.902907 N -86.3395445 W	Structure Height (approximate) 4 ft	Structure Length Unknown
Structure Type (check one)		Structure Material (check all that apply)	
Bridge Construction Style		Deck Material	Beam Material
<input type="radio"/> Cast-in-place	<input type="radio"/> Pre-stressed Girder	<input type="checkbox"/> Metal	<input type="checkbox"/> None
<input type="radio"/> Flat Slab/Box	<input type="radio"/> Steel I-beam	<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete
<input type="radio"/> Truss	<input type="radio"/> Covered	<input checked="" type="checkbox"/> Timber	<input checked="" type="checkbox"/> Steel
<input type="radio"/> Parallel Box Beam	<input checked="" type="radio"/> Other: Wooden bridge for private drive.	<input type="checkbox"/> Open grid	<input checked="" type="checkbox"/> Timber
Culvert Type		End/Back Wall Material	
<input type="radio"/> Box	<input type="radio"/> Other Structure	<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete
<input type="radio"/> Pipe/Round		<input type="checkbox"/> Plastic	<input checked="" type="checkbox"/> Timber
<input type="radio"/> Other:		<input type="checkbox"/> Stone/Masonry	<input type="checkbox"/> Stone/Masonry
		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:
		Culvert Material	Creosote Evidence
		<input checked="" type="checkbox"/> Metal	<input type="radio"/> Yes <input checked="" type="radio"/> No
		<input type="checkbox"/> Concrete	<input type="radio"/> Unknown
		<input type="checkbox"/> Plastic	Notes:
		<input type="checkbox"/> Stone/Masonry	
		<input type="checkbox"/> Other:	
Crossings Traversed (check all that apply)		Surrounding Habitat (check all that apply)	
<input type="checkbox"/> Bare ground	<input type="checkbox"/> Open vegetation	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Grassland
<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Closed vegetation	<input type="checkbox"/> Commercial	<input type="checkbox"/> Ranching
<input checked="" type="checkbox"/> Flowing water	<input type="checkbox"/> Railroad	<input type="checkbox"/> Residential-urban	<input type="checkbox"/> Riparian/wetland
<input type="checkbox"/> Standing water	<input type="checkbox"/> Road/trail - Type:	<input checked="" type="checkbox"/> Residential-rural	<input type="checkbox"/> Mixed use
<input type="checkbox"/> Seasonal water	<input type="checkbox"/> Other:	<input type="checkbox"/> Woodland/forested	<input type="checkbox"/> Other:
Areas Assessed (check all that apply)			
Check all areas that apply. If an area is not present in the structure, check the "not present" box.			
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.			
Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)	
<input checked="" type="checkbox"/> All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas	<input type="checkbox"/> Not present No evidence of bat presence.	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
<input type="checkbox"/> Concrete surfaces (open roosting on concrete)	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Audible	<input type="checkbox"/> Species
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck 	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Photos	<input type="checkbox"/> Species
<input type="checkbox"/> Vertical surfaces on concrete I-beams	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Staining	<input type="checkbox"/> Species
<input type="checkbox"/> Spaces between walls, ceiling joists	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Audible	<input type="checkbox"/> Species
<input type="checkbox"/> All guiderails	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Odor	<input type="checkbox"/> Species
<input type="checkbox"/> All expansion joints	<input checked="" type="checkbox"/> Not present	<input type="checkbox"/> Guano	<input type="checkbox"/> Photos
		<input type="checkbox"/> Staining	<input type="checkbox"/> Species
Name: Sean Langley		Signature:	

Holly Hume

From: Falls, Ryan G <RFalls@indot.IN.gov>
Sent: Tuesday, November 9, 2021 7:25 AM
To: Holly Hume; Wright, Kristy
Cc: Daniel Townsend
Subject: RE: NLAA: Request for IPaC Finding Review - Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County

The document's finding of May Effect, NLAA-With AMMs for DES 1900296 has been deemed sufficient. It has been verified and submitted to USFWS. The Service has 14 days after the "Not Likely to Adversely Affect" determination letter is generated. They will review that information once it is received; if you do not receive a response within 14 days, they have no additional comments for the two bats covered under the programmatic. The NEPA document submittal may not occur until this review period has ended. The Official Species List, Consistency Letter, and Concurrence Verification Letter are all now immediately available for your use. It is suggested that these documents be downloaded at this time. This concludes the IPaC phase of coordination with the Vincennes environmental office.

Ryan Falls

Capital Program Management-Senior Environmental Manager Supervisor

Indiana Department of Transportation
3650 South US Highway 41
Vincennes, IN 47591

Email: rfalls@indot.IN.gov

Cell: 812-582-1387



855-463-6848

From: Holly Hume <HHume@lochgroup.com>
Sent: Friday, November 5, 2021 4:55 PM
To: Falls, Ryan G <RFalls@indot.IN.gov>; Wright, Kristy <KWright@indot.IN.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>
Subject: Request for IPaC Finding Review - Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County

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

Mr. Falls and Ms. Wright,

This email is to request your review of the completed IPaC determination of "may affect - not likely to adversely affect" for the SR 58 Slide Correction Project in Lawrence County, IN (Des 1900296). You have been added as members to the project titled "Des 1900296; SR 58, approximately 3.56 Mi W of SR 446 Jct; Slide Correction; Lawrence County" (IPaC Record Locator: 542-107211003). Please feel free to contact me with any questions or further guidance.

Thank you,
Holly

Holly Hume

From: Turnbow, Alisha <ATurnbow@idem.IN.gov>
Sent: Friday, November 12, 2021 5:51 PM
To: Holly Hume
Cc: Daniel Townsend
Subject: RE: Source Water Area - Early Coordination - Des 1900296, SR 58 Slide Correction Project, Lawrence County, Indiana

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Hi Holly,

The project Des No 1900296 is located in Bedford City Utilities' Wellhead Protection Area. The contact for Bedford City Utilities is John Eric Flinn and they can be reached at eflinn@bedford.in.us and 812-275-7173. 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



IDEM values your feedback.

Please take two minutes and complete this brief survey.



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 anthemeap.com (enter State of Indiana) for crisis counseling, help finding child/elder care, legal/financial consultation and much more.

From: Holly Hume <HHume@lochgroup.com>
Sent: Friday, November 12, 2021 1:00 PM
To: Turnbow, Alisha <ATurnbow@idem.IN.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>
Subject: Source Water Area - Early Coordination - Des 1900296, SR 58 Slide Correction Project, Lawrence County, Indiana

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Hi Alisha,

We are working on the environmental document for a slide correction project located on SR 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County, IN (Des 1900296) and the online Source Water Proximity Determination Tool (printout attached) shows that the project is within a Source Water Area.



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
Emily Sprinkle
3650 S US 41
Vincennes , IN 47591
Date

Lochmueller Group, Inc.
Holly Hume
6200 Vogel Road
Evansville , IN 47715

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) intend to proceed with a slide correction project on SR 58 in Lawrence County (Des. No. 1900296). The proposed project is located on SR 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County. Specifically, the project is located in Section 34, Township 6 N, Range 1 E in Pleasant Run Township and Section 3, Township 5 N, Range 1 E in Shawswick Township as depicted on the Bartlettsville U.S. Geological Survey 1:24,000 scale quadrangle. Adjacent land use consists of mature forests, riparian corridors, agricultural fields, and scattered residences. The need for the project stems from the erosion occurring along the westbound lane of SR 58 causing the edge of the roadway to deteriorate and fail. The stream adjacent to the road has caused this erosion. The purpose of the project is to correct the stream erosion and pavement failure along this section of SR 58, resulting in improved mobility along SR 58. The erosional slide is occurring along the westbound lane of SR 58 in multiple locations within a 1,700-foot length of the roadway. These locations are generally where the stream, UNT to Leatherwood Creek, meanders close to the road and has caused erosion of the partially shale/sandstone lined waterway. Based off the preliminary scope, INDOT hydraulic review, and a field review it appears there could be up to approximately 500 feet of stream/roadway in need of repair. Stream mitigation may be necessary due to the length of stream that may be impacted by this project. Additionally, the stream being located near the roadway introduces inherent roadside safety design issues. It is proposed to construct a widened shoulder to provide an appropriate obstruction free zone. Approximately 0.1 acre of tree clearing is anticipated as part of the project. The proposed maintenance of traffic (MOT) includes road closure with an official detour. Construction is anticipated to begin in Spring 2024. This project is anticipated to require approximately 1.0 acre of permanent right-of-way (ROW). No temporary ROW is anticipated. A Red Flag Investigation (RFI) was performed for a 0.5-mile radius of the project area. Several "Red Flags" were identified within the 0.5-mile search radius; however, not all will impact the proposed project. One NWI-Line segment and one stream segment, associated with an unnamed stream, are present within the project area. The unnamed stream segment is listed as impaired for E. coli. The project is located within a floodplain. One sinkhole area polygon is located within 0.5 mile of the project area.

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 follow statutes:
 - IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
 - IC 14-28-1 Flood Control Act 310 IAC 6-1
 - IC 14-29-1 Navigable Waterways Act 312 IAC 6
 - 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 atdem.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

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) intend to proceed with a slide correction project on SR 58 in Lawrence County (Des. No. 1900296). The proposed project is located on SR 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County. Specifically, the project is located in Section 34, Township 6 N, Range 1 E in Pleasant Run Township and Section 3, Township 5 N, Range 1 E in Shawswick Township as depicted on the Bartlettville U.S. Geological Survey 1:24,000 scale quadrangle. Adjacent land use consists of mature forests, riparian corridors, agricultural fields, and scattered residences. The need for the project stems from the erosion occurring along the westbound lane of SR 58 causing the edge of the roadway to deteriorate and fail. The stream adjacent to the road has caused this erosion. The purpose of the project is to correct the stream erosion and pavement failure along this section of SR 58, resulting in improved mobility along SR 58. The erosional slide is occurring along the westbound lane of SR 58 in multiple locations within a 1,700-foot length of the roadway. These locations are generally where the stream, UNT to Leatherwood Creek, meanders close to the road and has caused erosion of the partially shale/sandstone lined waterway. Based off the preliminary scope, INDOT hydraulic review, and a field review it appears there could be up to approximately 500 feet of stream/roadway in need of repair. Stream mitigation may be necessary due to the length of stream that may be impacted by this project. Additionally, the stream being located near the roadway introduces inherent roadside safety design issues. It is proposed to construct a widened shoulder to provide an appropriate obstruction free zone. Approximately 0.1 acre of tree clearing is anticipated as part of the project. The proposed maintenance of traffic (MOT) includes road closure with an official detour. Construction is anticipated to begin in Spring 2024. This project is anticipated to require approximately 1.0 acre of permanent right-of-way (ROW). No temporary ROW is anticipated. A Red Flag Investigation (RFI) was performed for a 0.5-mile radius of the project area. Several "Red Flags" were identified within the 0.5-mile search radius; however, not all will impact the

proposed project. One NWI-Line segment and one stream segment, associated with an unnamed stream, are present within the project area. The unnamed stream segment is listed as impaired for E. coli. The project is located within a floodplain. One sinkhole area polygon is located within 0.5 mile of the project area.

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: 11/16/2021

Signature of the INDOT
Project Engineer or Other Responsible Agent *Emily Sprinkle*

Emily Sprinkle

Date: 11/12/2021

Signature of the
For Hire Consultant *Holly Hume*

Holly Hume



INDIANA
GEOLOGICAL SURVEY

Organization and Project Information

Project ID: INDOT
Des. ID: Des 1900296
Project Title: SR 58 Slide Correction Project
Name of Organization: Lochmueller Group, Inc.
Requested by: Holly Hume

Environmental Assessment Report

1. Geological Hazards:

- Potential Karst
- 1% Annual Chance Flood Hazard

2. Mineral Resources:

- Bedrock Resource: High Potential
- Sand and Gravel Resource: None documented in the area

3. Active or abandoned mineral resources extraction sites:

- Petroleum Exploration Wells

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

DISCLAIMER:

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

This information was furnished by Indiana Geological Survey

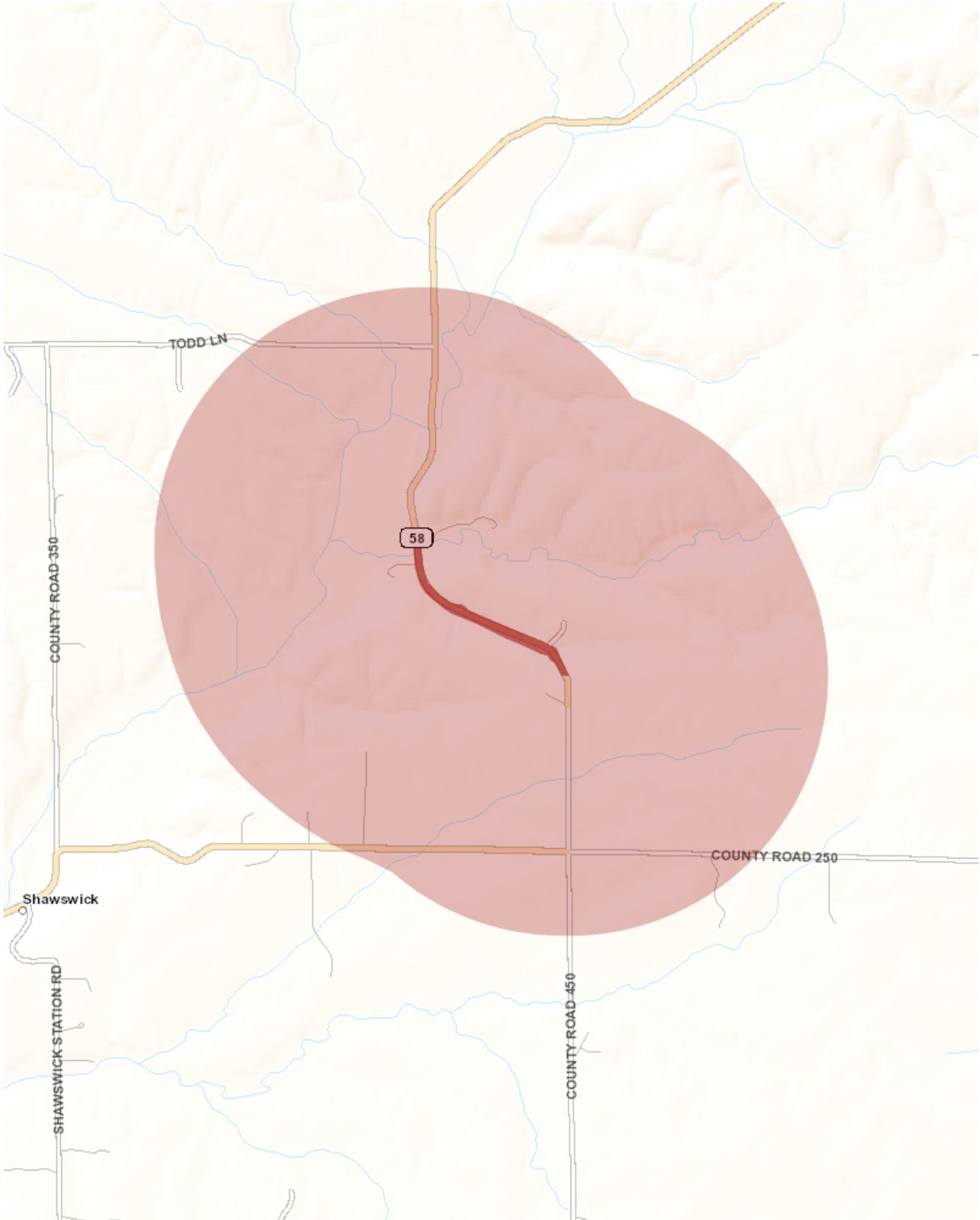
Address: 420 N. Walnut St., Bloomington, IN 47404

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: November 12, 2021





Metadata:

- https://maps.indiana.edu/metadata/Hydrology/Karst_Sinkhole_Areas.html
- https://maps.indiana.edu/metadata/Geology/Petroleum_Wells.html
- https://maps.indiana.edu/metadata/Hydrology/Floodplains_FIRM.html
- https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html

Holly Hume

From: Falls, Ryan G <RFalls@indot.IN.gov>
Sent: Monday, November 15, 2021 7:41 AM
To: Holly Hume
Cc: Daniel Townsend
Subject: RE: Early Coordination - Des 1900296 SR 58 Slide Correction Project

Holly Hume,

With the length of stream that could be potentially impacted, it doesn't appear this will fall under the USFWS interim policy. Coordination with USFWS should occur. Thank you for the opportunity to respond to early coordination.

Ryan Falls

Capital Program Management-Senior Environmental Manager Supervisor

Indiana Department of Transportation
3650 South US Highway 41
Vincennes, IN 47591

Email: rfalls@indot.IN.gov

Cell: 812-582-1387



855-463-6848

From: Holly Hume <HHume@lochgroup.com>
Sent: Friday, November 12, 2021 12:05 PM
To: Falls, Ryan G <RFalls@indot.IN.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>
Subject: Early Coordination - Des 1900296 SR 58 Slide Correction Project


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

Dear Mr. Falls,

We are working on the environmental document for a slide correction project located on SR 58, approximately 3.56 miles west of the SR 446 junction in Lawrence County, IN (Des 1900296). The early coordination package is attached for your review and comment.

Thank you,
Holly




 **Web:** <http://lochgroup.com>





Holly Hume

Environmental Specialist I

 **Lochmueller Group**
6200 Vogel Road, Evansville, IN 47715

 **Email:** HHume@lochgroup.com

 **Direct:** 812.759.4107
 **Mobile:** 812.582.1993

THIS IS NOT A PERMIT

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

DNR #: ER-24251

Request Received: November 12, 2021

Requestor: Lochmueller Group Inc
Holly Hume
6200 Vogel Road
Evansville, IN 47715

Project: SR 58 slide correction, about 3.56 miles west of SR 446 junction; Des #1900296

County/Site info: Lawrence

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

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

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

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

Fish & 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) Riparian Habitat:

We recommend a mitigation plan be developed for any unavoidable habitat impacts that will occur. The mitigation site should be located 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, 1 inch to 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.

2) Stream Impacts & Mitigation:

Impacts to the channel should first be addressed in planning through avoidance, minimization, and lastly compensatory mitigation. Mitigation for a stream

THIS IS NOT A PERMIT

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

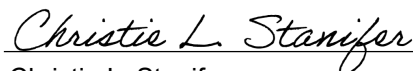
channelization/relocation should include replacement of the impacted channel length with an equal length of restored channel that possesses equal or higher quality riparian and stream habitat as the impacted area. Habitat enhancement should also occur along another length of stream equal to the length impacted. Experienced professionals with backgrounds in soils, botany, ecology, fish and wildlife management, fluvial geomorphology, and engineering should design all channel relocation projects. A restrictive covenant should be used to protect the channel from future disturbance, and it should cover both the restored and enhanced stream lengths (essentially at a ratio of 2:1 or greater in linear feet of stream relocated/impacted).

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 level to provide habitat for aquatic organisms in the voids.
8. 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.
9. 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
Environ. Coordinator
Division of Fish and Wildlife

Date: December 10, 2021

December 10, 2021

Holly Hume
Lochmueller Group, Inc.
6200 Vogel Road
Evansville, Indiana 47715

Dear Ms. Hume:

The proposed project to proceed with a slide correction over State Road 58 in Lawrence County, Indiana, (Des No 1900296) as referred to in your letter received November 12, 2021, will not cause a conversion of prime farmland.

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

Sincerely,

RICHARD Digitally signed by
RICHARD NEILSON
NEILSON Date: 2021.12.13
13:12:07 -05'00'

RICK NEILSON
State Soil Scientist



Categorical Exclusion

Appendix D

**Section 106 of the National Historic
Preservation Act (NHPA)**

Minor Projects PA Project Assessment Form

Date: 3/11/2022

Project Designation Number: 1900296

Route Number: SR 58

Project Description: Slide Correction, 3.56 miles west of SR 446 Junction

INDOT plans to proceed with a slide correction project on SR 58 in Lawrence County. The need for the project stems from the erosion occurring along the westbound lane of SR 58 causing the edge of the roadway to deteriorate and fail. The stream adjacent to the road has caused this erosion. The purpose of the project is to correct the stream erosion and pavement failure along this section of SR 58, resulting in improved mobility along SR 58.

The erosional slide is occurring along the westbound lane of SR 58 in multiple locations within a 1,700-foot length of the roadway. These locations are generally where the stream, unnamed tributary (UNT) to Leatherwood Creek, meanders close to the road and has caused erosion of the partially shale/sandstone lined waterway. Based off the preliminary scope, INDOT hydraulic review, and a field review it appears there could be up to approximately 500 feet of stream/roadway in need of repair. Additionally, the stream being located near the roadway introduces inherent roadside safety design issues. It is proposed to construct a widened shoulder to provide an appropriate obstruction free zone. Approximately 0.1 acre of tree clearing is anticipated as part of the project. This project is anticipated to require approximately 1.8 acres of permanent right-of-way (ROW). No temporary ROW is anticipated.

The proposed maintenance of traffic (MOT) includes road closure with an official detour.

Feature crossed (if applicable): UNT to Leatherwood Creek

City/Township: Pleasant Run and Shawswick townships

County: Lawrence County

Information reviewed (please check all that apply):

General project location map	<input checked="" type="checkbox"/>	USGS map	<input checked="" type="checkbox"/>	Aerial photograph	<input checked="" type="checkbox"/>
Written description of project area	<input type="checkbox"/>	General project area photos	<input type="checkbox"/>		
Previously completed archaeology	<input checked="" type="checkbox"/>	Interim Report	<input checked="" type="checkbox"/>		
Previously completed historic property reports	<input type="checkbox"/>	Soil survey data	<input type="checkbox"/>		
Bridge inspection information	<input type="checkbox"/>	SHAARD	<input checked="" type="checkbox"/>	SHAARD GIS	<input checked="" type="checkbox"/>
				Streetview Imagery	<input checked="" type="checkbox"/>

Other (please specify): Indiana Historic Building, Bridges, and Cemeteries Map (IHBBCM); County GIS data (accessed via <https://lawrencein.elevatemaps.io/>); Bridge Inspection Application System (BIAS); project information provided by Lochmueller Group dated 1/28/2022 and on file at INDOT-CRO;

Travis, Sidney

2022 A Phase Ia Archaeological Reconnaissance for the Proposed Slide Correction on E SR 58, Approximately 3.56 Miles West of SR 446 Junction in Lawrence County, Indiana (INDOT Des. No. 1900296) (CRA Publication Series 22-012). Cultural Resource Analysts, Evansville. Document on file at INDOT-CRO.

Minor Projects PA Project Assessment Form

Please specify all applicable categories and condition(s) (conditions that are applicable are highlighted):

B-10. Slide corrections, slope repairs, and other erosion control measures, in undisturbed soils under the conditions listed below **[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]:**

Condition A (Archaeological Resources)

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 reports 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)

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

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

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

Additional Comments:

Above-ground Resources

An INDOT-Cultural Resources Office (CRO) 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 Lawrence County. No listed resources are present within 0.15 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 Indiana Historic Sites and Structures Inventory (IHSSI) and National Register information for Lawrence County are available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). All sites were reviewed through the IHBBCM, which contains the most recently updated SHAARD information. No IHSSI resources are recorded within 0.15 mile of the project.

According to the IHSSI rating system, generally properties rated "contributing" do not possess the level of historical or architectural significance necessary to be considered individually National Register eligible, although they would contribute to a historic district. If they retain material integrity, properties rated "notable" might possess the necessary level of significance after further research. Properties rated "outstanding" usually possess the necessary level of significance to be considered National Register eligible if they retain material integrity. Historic districts identified in the IHSSI are usually considered eligible for the National Register.

Land surrounding the project area is rural in a highly wooded area with agricultural fields to the south and scattered above-ground properties present. Within 0.15 mile of the project area, there are seven above-ground properties present. Four of the properties are residential and date to the late twentieth century. They will not be 50 years old or older by the time of project letting in 2024. The other three properties are residential as well, dating to the late nineteenth century and early twentieth century. There is no evidence that any of these properties possess the material integrity or cultural significance necessary to be considered eligible to the National Register.

Minor Projects PA Project Assessment Form

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

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the Phase Ia field reconnaissance survey report completed for the project by Cultural Resource Analysts (Travis 2022). No archaeological sites were previously recorded within or adjacent to the project area. A 5.13-acre survey area was investigated through a combination of visual inspection of previously disturbed areas, pedestrian survey in an agricultural field, systematic shovel probing (n=8) and auger probing (n=2) in alluvial soil. The majority of the project area was found to be disturbed or steeply sloping. No archaeological sites were recorded as a result of the survey and no further work was recommended (Travis 2022).

Therefore, there are no archaeological concerns as long as the project scope does not change.

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

INDOT Cultural Resources staff reviewer(s): Kelyn Alexander and Matt Coon

****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.*

Categorical Exclusion

Appendix E

**Red Flag Investigation
& Hazardous Materials**



INDIANA DEPARTMENT OF TRANSPORTATION

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

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

Eric Holcomb, Governor
Joe McGuinness, Commissioner

Date: February 18, 2022

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

From: Holly Hume
Lochmueller Group, Inc.
6200 Vogel Road
Evansville, Indiana 47715
hhume@lochgroup.com

Re: RED FLAG INVESTIGATION
DES # 1900296, State Project
Slide Correction
State Road (SR) 58, 3.56 miles West of SR 446 Junction
Lawrence County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: An erosional slide is occurring in multiple locations within a 1,700 foot length of the roadway along the westbound lane of SR 58 approximately 3.56 miles west of the SR 446 junction. These locations are generally where the stream, a potential Unnamed Tributary (UNT) to Leatherwood Creek, meanders close to the road and over the years has caused erosion of the partially shale/sandstone lined waterway. The proposed 3R slide correction includes the reconstruction of the stream in accordance with the approved hydraulic analysis completed by Indiana Department of Transportation (INDOT) Hydraulics. This includes a 6-foot aggregate shoulder and a riprap lined channel. Pavement patching may be required in locations where erosion has caused the edge of asphalt pavement failure. Mill and overlay of the existing roadway are also anticipated. Two existing unnamed culverts are anticipated to be extended as part of the project. Two additional culverts, CV 058-047-85.70 and CV 058-047-85.36, are also present in the project area; however, no work is planned for these structures.

Bridge and/or Culvert Project: Yes No Structure # CV 058-047-85.70, CV 058-047-85.36, and two unnamed culverts

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

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

Proposed right of way: Temporary # Acres _____ Permanent # Acres 1.0, Not Applicable

Type and proposed depth of excavation: For the stream reconstruction along WB lane of SR 58, excavation is preliminarily anticipated to be in 4 locations and equal approximately 500 feet in length with depth of excavation anticipated to be 6 to 8 feet.

Maintenance of traffic: Road closure with detour is anticipated.

www.in.gov/dot/

An Equal Opportunity Employer

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

State Project: LPA:

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

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

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

Explanation:

Railroads: One (1) railroad segment is located within the 0.5 mile search radius. The segment, associated with an unknown railroad, is mapped approximately 0.06 mile northeast of the northern terminus of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	8	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	21
Canal Structures – Historic	N/A	Lakes	4
NPS NRI Listed	N/A	Floodplain - DFIRM	1
NWI-Lines	18	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	7	Sinkhole Areas	1
Rivers and Streams	13	Sinking-Stream Basins	N/A

Explanation:

NWI - Points: Eight (8) NWI - Points are located within the 0.5 mile search radius. The nearest NWI - Point is located approximately 0.17 mile southeast of the central portion of the project area. No impact is expected.

NWI-Lines: Eighteen (18) NWI-Line segments are located within the 0.5 mile search radius. One (1) NWI-Line segment is located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

IDEM 303d Listed Streams and Lakes (Impaired): Seven (7) 303d Listed Stream segments are located within the 0.5 mile search radius. An unnamed stream is located within the project area. The unnamed stream is listed as impaired for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate personal protective equipment (PPE), observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

Rivers and Streams: Thirteen (13) river and stream segments are located within the 0.5 mile search radius. One (1) stream segment, associated with an unnamed stream, is located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI - Wetlands: Twenty-one (21) wetlands are located within the 0.5 mile search radius. The nearest wetland is located approximately 0.02 mile east of the northern portion of the project area. No impact is expected.

Lakes: Four (4) lakes are located within the 0.5 mile search radius. The nearest lake is located approximately 0.26 mile southwest of the central portion of the project area. No impact is expected.

Floodplain - DFIRM: One (1) floodplain polygon is located within the 0.5 mile search radius. The project area is located within the floodplain polygon. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Sinkhole Areas: One (1) sinkhole area polygon is located within the 0.5 mile search radius. The sinkhole area polygon is located approximately 0.32 mile southeast of the southern terminus of the project area. Per the July 15, 2021 *Protection of Karst Features during Project Development and Construction*, further analysis is required.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	1	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation:

Petroleum Wells: One (1) petroleum well is located within the 0.5 mile search radius. The petroleum well is located approximately 0.32 mile south of the southern terminus of the project area. No impact is expected.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	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 materials concerns were identified within the 0.5 mile search radius.

ECOLOGICAL INFORMATION SUMMARY

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

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by mature forests and farm fields. The March 9, 2021 inspection report for CV 058-047-85.70 and the March 15, 2021 inspection report for CV 058-047-85.36 state that no evidence of bats was seen or heard in the culvert. Additional investigation to confirm the presence or absence of endangered bats in the two unnamed culverts will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE: N/A

WATER RESOURCES:

The presence of the following water resources will require the preparation of a Waters of the US Report and coordination with INDOT ESD Ecology and Waterway Permitting:

- One (1) NWI-Line segment is located within the project area.
- One (1) stream segment, associated with an unnamed stream, is located within the project area.
- The project area is located within the floodplain polygon (coordination only).

IDEM 303d Listed Streams and Lakes (Impaired): One (1) unnamed stream is located within the project area. The unnamed stream is listed as impaired for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate personal protective equipment (PPE), observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

Sinkhole Areas: One (1) sinkhole area polygon is located approximately 0.32 mile southeast of the southern terminus of the project area. Per the July 15, 2021 *Protection of Karst Features during Project Development and Construction*, further analysis is required.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. Additional investigation to confirm the presence or absence of endangered bats in the two unnamed culverts will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

INDOT ESD concurrence: Chad Pitcher, CHMM  Digitally signed by Chad Pitcher, CHMM
Date: 2022.02.18 10:55:19 -05'00' (Signature)

Prepared by:
Holly Hume
Environmental Specialist
Lochmueller Group, Inc.

Graphics:

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

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: N/A

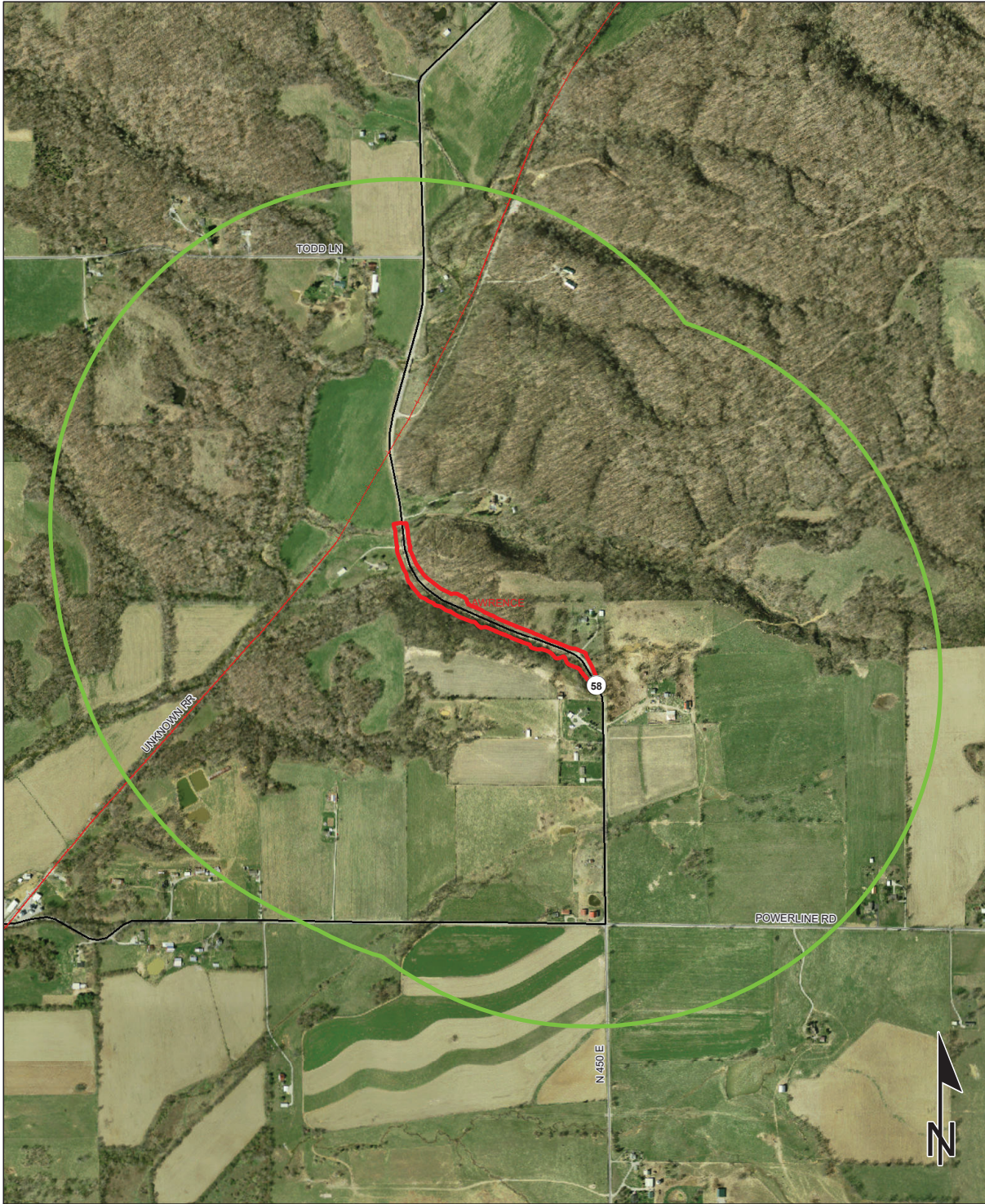
Red Flag Investigation - Site Location
 SR 58, 3.56 miles West of SR 446 Junction
 Des. No. 1900296, Slide Correction
 Lawrence County, Indiana



Sources: 0.5 0.25 0 0.5 Miles
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
 Map Projection: UTM Zone 16 N Map Datum: NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

BARTLETTSVILLE
 QUADRANGLE
 INDIANA
 7.5 MINUTE SERIES

Red Flag Investigation - Infrastructure
 SR 58, 3.56 miles West of SR 446 Junction
 Des. No. 1900296, Slide Correction
 Lawrence County, Indiana

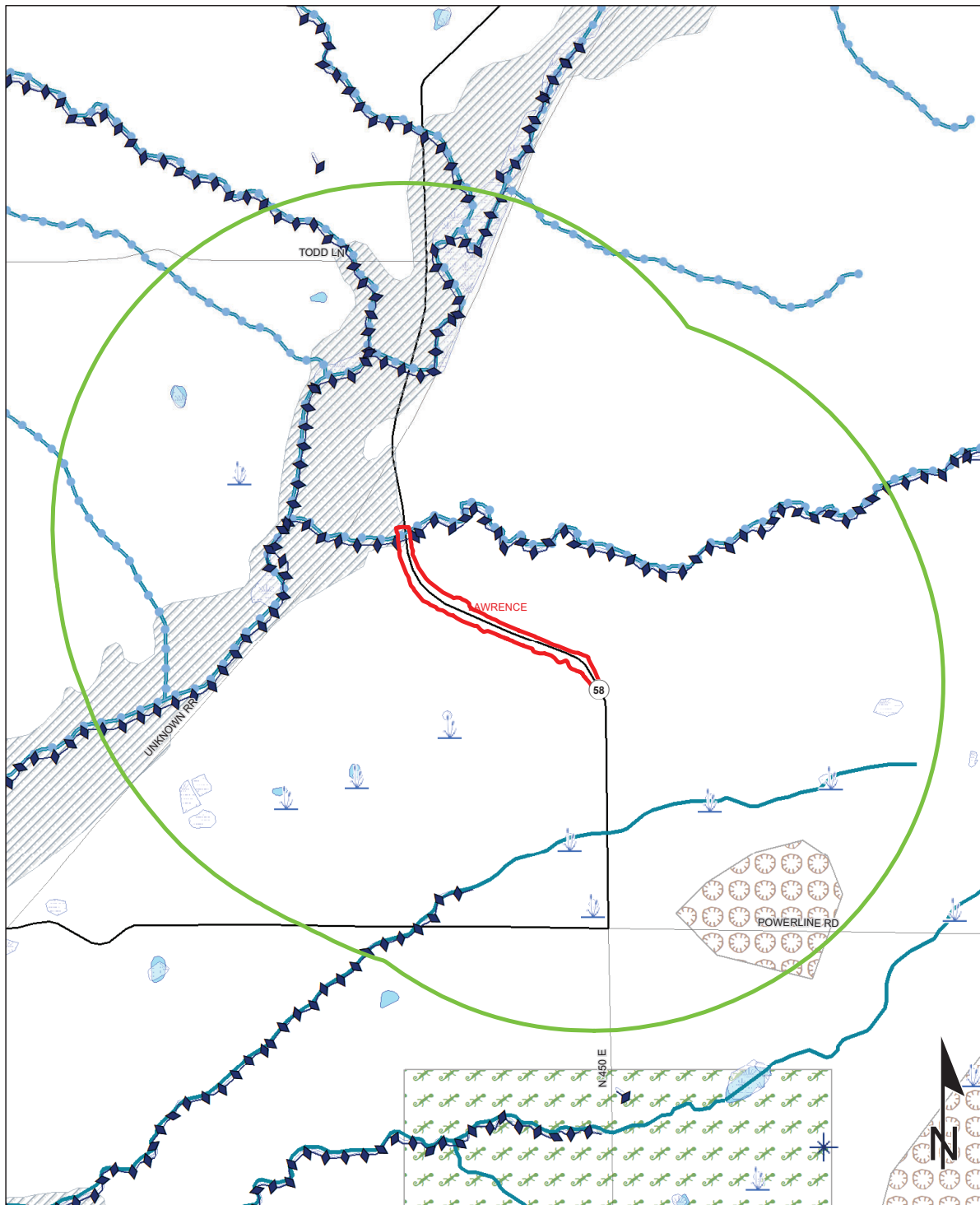


Sources: 0.15 0.075 0 0.15 Miles
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
 Map Projection: UTM Zone 16 N Map Datum: NAD83

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	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, 3.56 miles West of SR 446 Junction
 Des. No. 1900296, Slide Correction
 Lawrence County, Indiana

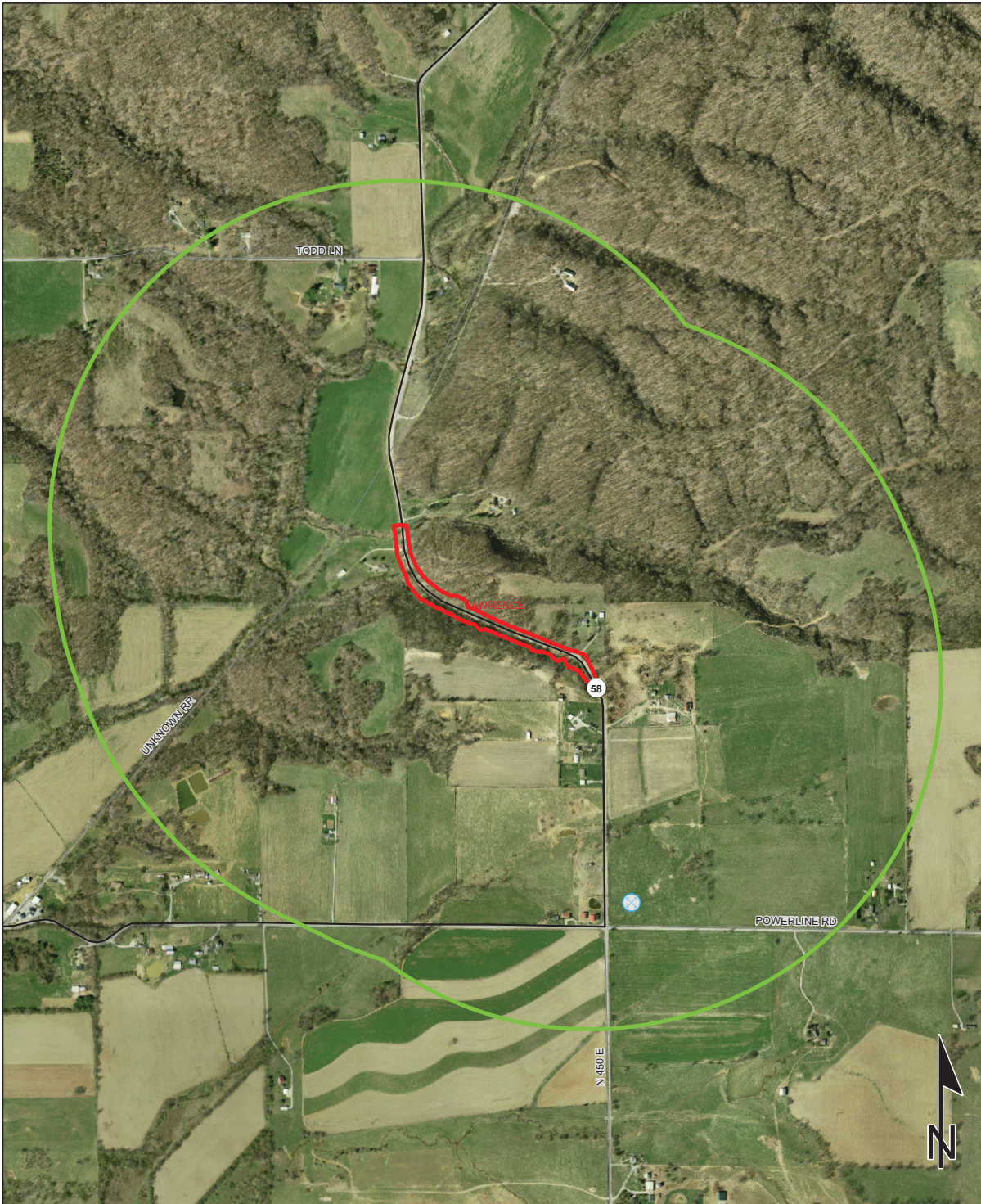


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Red Flag Investigation - Mining/Mineral Exploration
 SR 58, 3.56 miles West of SR 446 Junction
 Des. No. 1900296, Slide Correction
 Lawrence County, Indiana



0.15 0.075 0 0.15 Miles

Sources:
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