FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	State Route (SR) 9 / LaGrange County
Designation Number(s):	2002233
Project Description/Termini:	SR 9 Small Structure Project, 7.27 Miles North of US 6

	Categorical Exclusion, Level 2 – Required Signatories: INDOT DE and/or INDOT ESD
X	**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

N/A
INDOT DE Initials and Date

ADWP July 30, 2026
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: Jason A. Stone / DLZ Indiana, LLC

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.**

	Yes	No
Does the project have a historic bridge processed under the Historic Bridges PA*?		x
If No, then:		
Opportunity for a Public Hearing Required?	x	

**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 August 19, 2021, 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 meets 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.

Note that INDOT originally released this project for public involvement on February 20, 2024. Shortly thereafter, the project was put on hold. While the project was on hold, an abutting landowner requested that the amount of land to be acquired from his property be reduced, if possible. INDOT determined that the amount of land to be acquired from the property could be reduced. Refer to the *Right-of-Way* section of this document for additional detail.

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: INDOT INDOT District: Fort Wayne

Local Name of the Facility: SR 9

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

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

PURPOSE AND NEED:

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

Need:
The need for this project is evidenced in the October 22, 2024 INDOT Culvert Inspection Report. The existing small structure (CV 009-044-181.03) has developed condition-related deficiencies. The small structure was given an overall condition rating of 5 (moderate to major deterioration) out of 9 (no deficiencies) (Appendix I, page 4).

The roof slab was noted to have areas of honeycomb with bad patching and other areas with cracks and efflorescence, a few spalls with exposed rebar on roof slab and numerous cracks with heavy efflorescence in northwest and southwest corners. The roof slab was noted to be failing at the west end with severe spalling and exposed rebar. The side walls were noted to have minor surface scaling (Appendix I, page 4).

Purpose:
The purpose of this project is to address the above-noted deficiencies in order to provide a SR 9 crossing over an unnamed tributary (UNT) to Martin Lake (also known as UNT of Dove Creek) with a condition rating equal to or greater than 7 (good overall condition).

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: LaGrange Municipality: N/A

Limits of Proposed Work: Approximately 48 feet south and 22 feet north of the existing small structure, not including incidental construction.

Total Work Length: 0.013 Mile(s) Total Work Area: 0.643 Acre(s)

	Yes[1]	No
Is an Interstate Access Document (IAD)[1] required?		x
If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?	Date:	

[1] *If 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 Indiana Department of Transportation (INDOT) Fort Wayne District and the Federal Highway Administration (FHWA) intend to proceed with a SR 9 small structure improvement project (Des. No. 2002233).

Location:
The project area is located in Sections 27 and 28, T36N, R10E, Johnson Township, LaGrange County, Indiana. The project is located approximately 7.27 miles north of US 6. The involved small structure (CV 009-044-181.03) is located approximately at Reference Post (RP) 181+03. Project location graphics are presented as Appendix B, pages 1 – 3.

Existing Conditions:
Within the project area, SR 9 is functionally classified as a Minor Arterial roadway (Appendix B, page 7).

The existing SR 9 typical section consists of a rural, two-lane roadway carrying two 12-foot travel lanes. The existing shoulders consist of a 2.5-foot paved shoulder with a 4.5-foot usable shoulder along the west side of the roadway and a 3-foot paved shoulder with a 5-foot usable shoulder along the east side of the roadway, for a total clear width of 33.5 feet at the structure. There is existing W-beam guardrail on both sides of the roadway at the structure. The existing roadway side slopes are approximately 2:1. The

intersection of County Road (CR) 600 S with SR 9 is located approximately 100 feet north of the existing structure. (Appendix I, page 5).

The existing structure is an 8-foot span by 6-foot rise reinforced concrete box (RCB) culvert with about 5 feet of cover and a length of 55 feet. The structure is perpendicular to SR 9 (Appendix I, page 6).

The existing structure has developed condition-related deficiencies. The roof slab was noted to have areas of honeycomb with bad patching and other areas with cracks and efflorescence, a few spalls with exposed rebar on roof slab and numerous cracks with heavy efflorescence in northwest and southwest corners. The roof slab was noted to be failing at the west end with severe spalling and exposed rebar. The side walls were noted to have minor surface scaling.

UNT to Martin Lake flows from the southeast, crosses under SR 9 and continues to the northwest to discharge into Martin Lake. The stream is scouring out the southeast bank causing the stream to briefly flow parallel to the roadway. There is a small existing V-ditch in the southwest quadrant and an existing flat bottom ditch in the northwest quadrant. There are no ditches on the east side of the roadway (Appendix I, page 5). Roadway drainage is via sheet flow. The project is in a rural setting with agricultural fields and residential properties abutting the project area.

Preferred Alternative:
The preferred alternative involves open cut of the existing roadway pavement and excavation to allow removal of the existing small structure and installation of a 9-foot span by 6-foot rise RCB culvert. The proposed structure will be 132 feet long and will be skewed 17 degrees to the right to align the inlet and outlet of the structure with the existing stream. The structure will be extended for the side slope to reach the flowline of the stream to eliminate the need for wingwalls and headwalls. The top of the structure will be kept buried within the 24-foot clear zone to eliminate the need for guardrail. The structure will be “sumped” 6-inches to comply with hydraulic requirements. Revetment riprap over geotextile will be placed at the outlet of the structure for scour protection (Appendix I, page 6).

The proposed typical section will consist of two 12-foot travel lanes, 3-foot paved shoulder widths with 2-foot aggregate shoulder widths, for a total width of 5-foot usable shoulders. The proposed structure will be extended to eliminate the need for guardrail. The existing guardrail at the structure will be removed. The side slopes will be changed to 4:1 slopes. Flat bottom ditches (4-foot-wide) will be constructed in all four quadrants. This will include realigning the existing ditches along the west side of the roadway and installing new ditches along the east side of the roadway. The backslopes for the proposed ditches will be 3:1. The existing horizontal and vertical alignments will be maintained within the project limits (Appendix I, page 6).

The project will require approximately 114 linear feet of permanent impacts and approximately 16 linear feet of temporary impacts to a likely jurisdictional waterway. The project will require approximately 0.183 acre of permanent impacts to likely jurisdictional wetlands. Therefore, Section 401/Section 404 permitting is anticipated to be required. No temporary wetland impacts are required. The project requires permanent disturbance to approximately 0.263 acre of terrestrial habitat. No temporary habitat impacts are required. The project requires approximately 0.687 acres of new permanent right-of-way. The project does not require temporary right-of-way. Refer to the *Right of Way* section of this document for additional details. Maintenance of traffic for the project will require a roadway closure and a detour. Refer to the *Maintenance of Traffic* section of this document for additional details. Efforts to avoid, minimize, and/or mitigate project impacts, such as limiting the project’s construction footprint to the degree practicable, have been made.

The preferred alternative will meet the project purpose and need of improving this SR 9 crossing of an UNT to Martin Lake by improving the condition rating to 7 (good overall condition) out of 9 or higher. The project termini along SR 9 are approximately 48 feet south and 22 feet north of the existing small structure, not including incidental construction. The project termini are logical as this project involves only the area needed for replacement of the existing small structure and associated roadway approach work and guardrail removal. The project has independent utility as this project does not rely on any other project to satisfy its purpose and need.

Project area photographs are presented as Appendix B, pages 4 and 5 and Appendix F, pages 19 - 38. Project plan sheets are presented as Appendix B, pages 7 – 11.

OTHER ALTERNATIVES CONSIDERED:

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

Do Nothing Alternative:
The Do Nothing Alternative was considered; however, this alternative was discarded as it would not provide a SR 9 crossing over an unnamed tributary (UNT) to Martin Lake with a condition rating equal to or greater than 7 out of 9.

Small Structure Replacement – 117-Inch by 79-Inch Corrugated Metal Plate Arch with Square Headwall:
Replacing the existing small structure with a 117-inch by 79-inch corrugated metal plate (CMP) arch with a square headwall was considered (Appendix I, pages 6 and 10). This alternative would satisfy the project purpose and need and would result in similar roadway approach work, maintenance of traffic and stream and terrestrial habitat impacts as compared to the preferred alternative. However, this alternative was not viewed favorably by the INDOT Fort Wayne District (Appendix I, pages 6 and 12) because CMP structures require maintenance earlier in their lifespan and can have shorter lifespans than concrete structures. For these reasons, this alternative was discarded from further consideration.

Small Structure Replacement – 12-Foot Span, 3-Sided Concrete Arch Top Structure:
Replacing the existing small structure with a 12-foot span, 3-sided concrete arch top structure was considered. This alternative would satisfy the project purpose and need and would result in similar roadway approach work, maintenance of traffic and stream and terrestrial habitat impacts as compared to the preferred alternative. However, this alternative is more costly to install. For these reasons, this alternative was discarded from further consideration (Appendix I, page 6 and 10).

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	x
It would result in serious impacts to the motoring public and general welfare of the economy.	
Other (Describe): It would not satisfy the project purpose and need.	x

ROADWAY CHARACTER:

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

Name of Roadway	SR 9				
Functional Classification:	Rural Minor Arterial				
Current ADT:	5,273	VPD (2024)	Design Year ADT:	5,566	VPD (2044)
Design Hour Volume (DHV):	504	Truck Percentage (%)	17		
Designed Speed (mph):	55	Legal Speed (mph):	55		

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Through travel		Through travel	
Pavement Width:	29.5	ft.	30	ft.
Shoulder Width:	West side - 2.5-foot paved, 4.5-foot usable. East side - 3-foot paved, 5-foot usable.	ft.	Both sides - 3-foot paved, 5-foot usable.	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting:		Urban		Suburban	x	Rural
Topography:	x	Level		Rolling		Hilly

BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s): CV 009-044-181.03 / 93001902 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	8-Foot Span, 6-Foot Rise, 55-Foot Long RCB		9-Foot Span, 6-Foot Rise, 132-Foot Long RCB	
Number of Spans:	1		1	
Weight Restrictions:	None	ton	None	ton
Height Restrictions:	None	ft.	None	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	N/A	ft.
Shoulder Width:	5	ft.	5	ft.

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

The existing small structure (CV 009-044-181.03) is an 8-foot by 6-foot RCB with about 5 feet of cover and a length of 55 feet. The structure is perpendicular to SR 9. The existing structure will be removed and replaced. The proposed replacement structure is a 9-foot span by 6-foot rise RCB culvert that will be 132 feet in length. The existing structure has developed condition-related deficiencies and exhibits moderate to major deterioration. The existing structure was constructed in 1933 and is not historic.

Replacement of the small structure will result in an approximate total of 114 linear feet of permanent impact below UNT to Martin Lake's ordinary high water mark, east and west of the roadway. Refer to the *Streams, Rivers, Watercourses & Other Jurisdictional Features Section* of this document for additional details. Replacement of the small structure will result in an approximate total of 0.183 acre of permanent wetland impacts, east and west of the roadway. Refer to the *Wetlands Section* of this document for additional details.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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 closure of SR 9. Traffic will be detoured to US 6, SR 3 and US 20. (Appendix I, page 8 and Appendix B, page 10). The detour will add approximately 11.75 miles to a through trip. The detour duration is anticipated to be up to 90 days.

The road closure will pose a temporary inconvenience to traveling motorists (including Amish travelers, school buses and emergency services). INDOT has determined this road closure and detour to be significant given the current traffic volumes and the large seasonal fluctuations in traffic volumes that occur during lake season. INDOT has determined a roadway closure and detour to be the most efficient and safest way to perform the work.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: $ 689,300.00 (2022) Right-of-Way: $ 100,000.00 (2024) Construction: $ 901,2822 (2028)

Anticipated Start Date of Construction: October 2027

Note that this project was originally bundled with Des. Nos. 2002234 and 2002235 under Contract No. 43287 (Appendix H, page 6). This project is currently bundled with Des. No. 2400456 under Contract No. 45348. Engineering and Right of Way funds were previously allocated under Contract No. 43287 and are not listed in the current STIP. The total project cost for Contract No. 45348 is $1,354,632.00.

RIGHT OF WAY:

	Amount (acres)	
Land Use Impacts	Permanent	Temporary
Residential	0.095	0
Commercial	0	0
Agricultural	0.015	0
Forest/Brush	0.124	0
Wetlands	0.260	0
Other: Stream	0.031	0
Other: Grass slope above ordinary high water mark	0.091	0
TOTAL	0.616	0

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

The apparent existing SR 9 right of way (ROW) is typically 60 feet wide through the project area. The maximum existing ROW width is 60 feet (Appendix I, page 8 and Appendix B, page 9). The proposed maximum ROW width is approximately 174 feet.

Note that INDOT originally released this project for public involvement on February 20, 2024. At that time, the project required approximately 0.687 acre of new permanent ROW. Shortly thereafter, the project was put on hold. While the project was on hold, an abutting landowner requested that the amount of land acquired from his property be reduced. INDOT elected to reduce the amount of land to be acquired from the parcel, bringing the new permanent ROW need down to approximately 0.616 acre, as detailed below.

The project requires approximately 0.616 acre of new permanent ROW to allow for roadway slope grading and construction access for installation of the new culvert and rip-rap. The new permanent ROW consists of 0.015 acre of agricultural land west of the roadway, 0.260 acre of wetland east (0.198 acre) and west (0.062 acre) of the roadway, 0.091 acre of grass road slope east (0.046 acre) and west (0.045 acre) of the roadway, 0.033 acre of stream east (0.014 acre) and west (0.019 acre) of the roadway, and 0.222 acre of residential land east (0.095 acre) and west (0.124 acre) of the roadway. In addition, the project requires reacquisition of approximately 0.283 acre of apparent SR 9 ROW, consisting of 0.133 acre east and 0.150 acre west of the roadway. Refer to Appendix B, page 9. The project does not require temporary ROW or easements. Note that ROW funds were previously allocated under Contract No. 43287, using 100% state funds.

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

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

SECTION A - EARLY COORDINATION:

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

Early coordination letters were sent on September 1, 2021, Appendix C, pages 1 - 3. In addition, an early coordination letter was sent to the USFWS on April 3, 2023.

Agency	Date Sent	Date Response Received	Appendix C Page #
Indiana Department of Environmental Management (IDEM)	9/1/2021	9/1/2021	4-11
Indiana Department of Natural Resources (IDNR)	9/1/2021	9/30/2021	19-21
Indiana Geological and Water Survey (IGWS)	9/1/2021	9/1/2021	12-13
INDOT Aviation Section	9/1/2021	9/3/2021	14
INDOT Fort Wayne District	9/1/2021	9/27/2021	18
Natural Resource Conservation Service (NRCS)	9/1/2021	9/15/2021	15
National Parks Service (NPS)	9/1/2021	No Response	N/A
US Army Corps of Engineers (USACE)	9/1/2021	9/28/2021	22-23
US Department of Housing and Urban Development (USHUD)	9/1/2021	No Response	N/A
LaGrange County Commissioners	9/1/2021	No Response	N/A
LaGrange County Drainage Board	9/1/2021	No Response	N/A
LaGrange County Engineer	9/1/2021	9/17/2021	17
LaGrange County Planning and Development	9/1/2021	No Response	N/A
LaGrange County Surveyor's Office	9/1/2021	No Response	N/A
LaGrange County Sheriff's Office	9/1/2021	No Response	N/A
Township Fire Department	9/1/2021	No Response	N/A
Lakeland School Corporation	9/1/2021	No Response	N/A
FHWA	9/1/2021	No Response	N/A
United States Fish and Wildlife Service (USFWS)	4/3/2023	5/1/2023	55-56

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

SECTION B – ECOLOGICAL RESOURCES:

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

Total stream(s) in project area: 202 Linear feet Total impacted stream(s): 114 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 to Martin Lake	R5UBF	202	114	East and west of the roadway, flow east to west, likely Water of the U.S., Appendix F, pages 4 and 15.

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

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, page 2), there are 12 streams, rivers, watercourse or other jurisdictional features within the 0.5-mile search radius. There is one stream, river, watercourse, or other jurisdictional feature within or adjacent to the project area. That number was confirmed by the site visit on September 16, 2021 by DLZ Indiana, LLC (DLZ).

A Waters of the U.S. Determination / Wetland Delineation Report was approved by INDOT Ecology and Waterway Permitting Office on August 12, 2022. Please refer to Appendix F, page 1 for the Waters of the U.S. Determination / Wetland Delineation Report. It was determined that UNT to Martin Lake is a likely jurisdictional stream feature. The USACE makes all final determinations regarding jurisdiction.

UNT to Martin Lake:
UNT to Martin Lake is a perennial drainage feature. The estimated drainage area of UNT to Martin Lake at the project site is approximately 3.026 square miles. UNT to Martin Lake displays an ordinary high water mark (OHWM). UNT to Martin Lake is considered a Water of the US because it conveys perennial flow to the St. Joseph River, which is a traditionally navigable waterway. There is approximately 202 linear feet or 0.058 acre of UNT to Martin Lake within the study limits. The maximum width at the OHWM is approximately 20 feet in an area of scour downstream (west) of the project culvert. The typical width at the OHWM is approximately 9.5 feet. The depth at the OHWM is approximately 1.5 foot. The substrate consists of gravel and silt. UNT to Martin Lake provides in-stream habitat including riffles and pools; however, the stream quality is considered average since the banks exhibit erosion.

Roadside Ditches:
No roadside ditch features were observed within the area investigated for water resources.

The project will result in approximately 114 linear feet of permanent impacts below UNT to Martin Lake's OHWM, consisting of 98 feet which relate to installation of the new small structure, and 16 feet which are for installation of rip-rap and scour protection measures at the new culvert's outlet. The project will also result in a total of 16 feet of temporary impacts below the OHWM for pump around (8 feet upstream and 8 feet downstream). The impacts are necessary for the increased length and alignment of the proposed new small structure and riprap required for scour protection; therefore, avoidance is not practicable. Mitigation is not anticipated to be required. A USACE Section 404 Permit will likely be required. In the event a Section 404 Permit is required, a Section 401 Water Quality Certification must also be obtained from the IDEM Office of Water Quality.

IDEM's electronically generated response dated September 1, 2021 included recommendations to minimize impacts to streams (Appendix C, page 6).

IDNR-DFW responded on September 30, 2021 with recommendations pertaining to proposed crossing structures, wildlife passage, minimization of in-channel disturbance and sedimentation, seasonal restrictions on work in waterways, erosion control, excavation in low flow areas, and use of temporary runarounds, access bridges, causeways, cofferdams diversions and pump-arounds (Appendix C, pages 19 - 21).

USACE responded on September 29, 2021 and indicated that any work that occurs within a water of the United States or adjacent wetlands will likely require prior authorization, pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 (Appendix C, page 22).

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

Open Water Feature(s)	Presence	Impacts Yes	Impacts No
Reservoirs			
Lakes			
Farm Ponds			
Retention/Detention Basin			
Storm Water Management Facilities			
Other:			

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

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, page 2), there are 15 open water feature(s) within the 0.5-mile search radius. There are no open water features within or adjacent to the project area. That number was confirmed by the site visit on September 16, 2021 by DLZ. Therefore, no impacts are expected.

	Presence	Impacts Yes	Impacts No
Wetlands	x	x	

Total wetland area: 0.254 Acre(s) Total wetland area impacted: 0.183 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)
A	PSS1C	0.096	0.054	East of SR 9, likely Water of the U.S., Appendix F, page 5
B	PEM1C	0.084	0.080	East of SR 9, likely Water of the U.S., Appendix F, page 6
C	PEM1C	0.011	0.011	West of SR 9, likely Water of the U.S., Appendix F, page 6
D	PEM1C	0.025	0.001	West of SR 9, likely Water of the U.S., Appendix F, page 7
E	PFO1C	0.038	0.037	West of SR 9, likely Water of the U.S., Appendix F, page 7

Wetlands (*Mark all that apply*)	Documentation	ESD Approval Dates
Wetland Determination	x	August 12, 2022
Wetland Delineation	x	August 12, 2022
USACE Isolated Waters Determination		

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.	x

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 2), there are 22 wetlands within the 0.5-mile search radius. There are five wetlands within or adjacent to the project area. That number was confirmed by the site visit on September 16, 2021 by DLZ.

A Waters of the U.S. Determination / Wetland Delineation Report was approved by INDOT Ecology and Waterway Permitting Office on August 12, 2022. Please refer to Appendix F, page 1 for the Waters of the U.S. Determination / Wetland Delineation Report. It was determined that there are five likely jurisdictional wetlands (Wetlands A - E) within the project area. The USACE makes all final determinations regarding jurisdiction.

Wetland A:
Wetland A is located along the east side of SR 9 and to the north of UNT to Martin Lake. Wetland A is dominated by wetland plants consisting of sandbar willow (*Salix interior*), rice cutgrass (*Leersia oryzoides*) and touch-me-not (*Impatiens capensis*). The plant community type is scrub-shrub wetland. The quality of Wetland A is considered average due to its low species diversity and location near the roadway. Wetland hydrology and hydric soils were noted to be present. Therefore, this area meets the three jurisdictional wetland criteria. The size of Wetland A within the study limits is approximately 0.096 acre. The boundary of Wetland A was determined by observing the change in plant community and corresponding change in topography. Wetland A is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake.

Wetland B:
Wetland B is located along the east side of SR 9 and to the south of UNT to Martin Lake. Wetland B is dominated by cattail (*Typha latifolia*), a wetland plant. This plant community meets the hydrophytic plant criteria. The plant community type is emergent wetland. The quality of Wetland B is considered average due to its low species diversity and location near the roadway. Wetland hydrology and hydric soils were noted to be present. Therefore, this area meets the three jurisdictional wetland criteria. The size of Wetland B within the study limits is approximately 0.084 acre. The boundary of Wetland B was determined by observing the change in plant community and corresponding change in topography. Wetland B is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake.

Wetland C:
Wetland C is located along the west side of SR 9 and to the north of UNT to Martin Lake. Wetland C is dominated by wetland plants consisting of rice cut grass (*Leersia oryzoides*) and reed canarygrass (*Phalaris arundinacea*). The plant community type is emergent wetland. The quality of Wetland C is considered poor due to its low species diversity and since it is dominated by reed canarygrass, an invasive species. Wetland hydrology and hydric soils were noted to be present. Therefore, this area meets the three jurisdictional wetland criteria. The size of Wetland C within the study limits is approximately 0.011 acre. The boundary of Wetland C was determined by observing the change in plant community and corresponding change in topography. Wetland C is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake.

Wetland D:
Wetland D is located west of SR 9 and to the north of UNT to Martin Lake. Wetland D is dominated by wetland plants consisting of rice cut grass (*Leersia oryzoides*) and touch-me-not (*Impatiens capensis*). The plant community type is emergent wetland. The quality of Wetland D is considered average due to its low species diversity and small size. Wetland hydrology and hydric soils were noted to be present. Therefore, this area meets the three jurisdictional wetland criteria. The size of Wetland D within the study limits is approximately 0.025 acre. The boundary of Wetland D was determined by observing the change in plant community and corresponding change in topography. Wetland D is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake.

Wetland E:
Wetland E is located west of SR 9 and to the south of UNT to Martin Lake. Wetland E is dominated by wetland plants consisting of black willow (*Salix nigra*), reed canarygrass (*Phalaris arundinacea*) and dark green bulrush (*Scirpus atrovirens*). The plant community type is forested wetland. The quality of Wetland E is considered poor since it is located near the roadway and is dominated by reed canarygrass, an invasive species. Wetland hydrology and hydric soils were noted to be present. Therefore, this area meets the three jurisdictional wetland criteria. The size of Wetland E within the study limits is approximately 0.038 acre. The boundary of Wetland E was determined by observing the change in plant community and corresponding change in topography. Wetland E is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake.

The project will result in a total of approximately 0.183 acre of permanent wetland impacts, consisting of 0.054 acre of impact to Wetland A, 0.080 acre of impact to Wetland B, 0.011 acre of impact to Wetland C, 0.001 acre of impact to Wetland D, and 0.037 acre of impact to Wetland E. These impacts relate to the increased length and alignment of the proposed new structure and

placement of riprap at the outlet. Temporary wetland impacts are not required. The proposed riprap is required for scour protection, and wetlands are located on both sides of the roadway; therefore, avoidance is not practicable. Mitigation will likely be required and will be determined during permitting. Non-impacted portions of Wetlands A, B, D and E will be marked "Do Not Disturb" on the project plans.

A USACE Section 404 Permit will likely be required. In the event a Section 404 Permit is required, a Section 401 Water Quality Certification must also be obtained from the Indiana Department of Environmental Management (IDEM) Office of Water Quality.

IDEM's electronically generated early coordination response dated September 1, 2021 contained recommendations relating to minimization of impacts to wetlands and permitting requirements (Appendix C, page 5).

IDNR-DFW responded on September 30, 2021 with recommendations pertaining to agency coordination and avoidance of riparian wetlands (Appendix C, page 20).

USACE responded on September 29, 2021 and indicated that any work that occurs within a water of the United States or adjacent wetlands will likely require prior authorization, pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 (Appendix C, page 22).

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

	Presence	Impacts	
		Yes	No
Terrestrial Habitat	x	x	

Total terrestrial habitat in project area: 0.263 Acre(s) Total tree clearing: 0.020 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 16, 2021, by DLZ and the aerial map of the project area (Appendix B, page 3), there are roadside slopes vegetated with grass species and agricultural fields within the project area. The project requires disturbance to approximately 0.263 acre of terrestrial habitat, consisting of approximately 0.243 acre of grassed roadway slope/mowed lawn, and approximately 0.020 acre of tree removal.

The dominant grass species present in the affected roadside slopes and lawn are smooth brome (*Bromus inermis*), giant foxtail (*Setaria faberi*) and tall fescue (*Schedonorus arundinaceus*). The dominant tree species present include eastern cottonwood (*Populus deltoides*), common mulberry (*Morus alba*) and box elder maple (*Acer negundo*). The impacts to terrestrial habitat are the result of replacing the existing small structure with a larger small structure and regrading the roadway slopes. Impacts have been minimized by keeping work contained to the area necessary for the proposed construction. These impacts are necessary to achieve the proposed construction; therefore, avoiding the impacts is not practicable. Rehabilitation of disturbed areas shall be accomplished per the current INDOT Standard Specifications. Mitigation is not anticipated to be required.

IDNR-DFW responded on September 30, 2021, with recommendations pertaining to bank stabilization, revegetation of disturbed areas and seasonal tree clearing restrictions (Appendix C, pages 21 and 22).

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

Protected Species

Federally Listed Bats	Yes	No
Information for Planning and Consultation (IPaC) determination key completed	x	
Section 7 informal consultation completed (IPaC cannot be completed)		x
Section 7 formal consultation Biological Assessment (BA) required		x

Indiana Department of Transportation

County LaGrange Route SR 9 Des. No. 2002233

Determination Received for Listed Bats from USFWS: NE [ ] NLAA [x] LAA [ ]

Other Species not included in IPaC	**Yes**	**No**
Additional federal species found in project area (based on IPaC species list)	x	
State species (not bird) found in project area (based upon consultation with IDNR)		x

Migratory Birds	**Yes**	**No**
Known usage or presence of birds (i.e. nests)		x
State bird species based upon coordination with IDNR		x

Discuss IDNR coordination and species identified. Describe USFWS Section 7 consultation and determination received for Indiana bat and northern long-eared bat impacts. Discuss if other federally listed species were identified. If so, include consultation that has 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 DLZ on March 15, 2022, the IDNR LaGrange County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated September 30, 2021 (Appendix C, pages 19 - 21), the Natural Heritage Program's Database has been checked. IDNR-DFW indicated that 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 March 12, 2026. 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 on April 22, 2026 (Appendix C, pages 24 – 37). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*). Other species were generated in the IPaC species list along with the Indiana bat.

The official species list generated from IPaC indicated the federal proposed threatened monarch butterfly (*Danaus plexippus*) and the experimental population whooping crane (*Grus americana*) are present within the project area. Because the monarch butterfly and whooping crane are not currently listed as threatened or endangered, and because no critical habitat impacts are proposed, no determinations of effect or further coordination is required at this time.

The official species list generated from IPaC indicated the eastern massasauga rattlesnake (*Sistrurus catenatus*) is present within the project area. A standard coordination letter was prepared and submitted for INDOT review on March 1, 2023. INDOT reviewed the standard coordination letter and submitted to USFWS for review on April 3, 2023. On May, 1 2023, USFWS issued a conditional concurrence letter (Appendix C, pages 55 and 56). With the following measure in place, USFWS concurs with the determination that the proposed project is not likely to adversely affect the eastern massasauga. The following measures are included as firm commitments in the Environmental Commitments section of this document:

- INDOT's standard erosion control measures, particularly silt fences, can serve as measures to keep eastern massasauga and other small species out of the active construction area. The fences should be inspected daily to ensure that they are functioning as required.
- Animals found on the work side of the fencing should be moved to the non-work side.
- If eastern massasuaga or other Indiana-listed species are found, a qualified biologist with Federal and State permits would need to be available to move the individuals.

The project qualifies for the Range-wide Programmatic Informal Consultation for the Indiana bat, northern long-eared bat (NLEB) and tricolored bat (*Perimyotis subflavus*), dated December 2024, between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. The structure was inspected on June 8, 2026 and no bats/birds or signs of bats/birds using the structure were found (Appendix C, page 52). An effect determination key was completed on April 22, 2026, and based on the responses provided, the project was found to "May Affect – Not Likely to Adversely Affect" the Indiana bat and/or the NLEB (Appendix C, page 38). INDOT reviewed and verified the effect finding on April 22, 2026 and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. This project includes Avoidance and Minimization Measures (AMMs) pertaining to contractor awareness and tree clearing. AMMs and/or commitments are included as firm commitments in the Environmental Commitments section of this document.

USFWS Bridge/Structure Assessment are only valid for two years. The structure was inspected on June 8, 2026 (Appendix C, page 52). This inspection found no bats/birds or signs of bats/birds using the structure. If construction will begin after June 8, 2028, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the *Environmental Commitments* of this document.

The existing small structure (CV 009-044-181.03) and the project's surrounding habitat is conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP/RSP.

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	**Yes**	**No**
Project located within the Indiana Karst Region		x
Karst features identified within or adjacent to the project area		x
Oil/gas or exploration/abandoned wells identified in the project area		x

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

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

Based on a desktop review and the Indiana Karst Region map, the project is located outside the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topo map of the project area (Appendix B, page 2) and the RFI report (Appendix E, page 2), there are no karst features identified within or adjacent to the project area. In the early coordination response dated September 1, 2021, the Indiana Geological and Water Survey (IGWS) did not indicate that karst features exist in the project area (Appendix C, page 12).

The IGWS Environmental Assessment Report indicated the following in the general project vicinity:

- Geological Hazards: moderate liquefaction potential
- Bedrock Resources: low potential
- Sand and Gravel Resources - high potential
- Active or abandoned mineral resources extraction sites: none documented in the area.

The features will not be affected because appropriate soils investigations will be conducted to assess the soils in the project area, and the project will be designed accordingly. There are no petroleum exploration wells in the project area. The project involves replacement of an existing small structure and associated roadway work. No excavation which could affect mineral resources is proposed. Response from IGWS has been communicated to the designer on September 1, 2021. No impacts are expected.

SECTION C – OTHER RESOURCES

	Presence	**Impacts**	
Drinking Water Resources		**Yes**	**No**
Wellhead Protection Area(s)			
Source Water Protection Area(s)			
Water Well(s)	x		x
Urbanized Area Boundary			
Public Water System(s)			

	Yes	No
Is the project located in the St. Joseph Sole Source Aquifer (SSA):		x
If Yes, is the FHWA/EPA SSA MOU Applicable?		
If Yes, is a Groundwater Assessment Required?		

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

IDEM's 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 September 16, 2025 by DLZ. This project is not located within a Wellhead Protection Area or Source Water Area. No impacts are expected.

The IDNR Water Well Record Database website (https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=4b4f37e1dde744ce865e1be4d157ac93) was accessed on September 16, 2025 by DLZ. The nearest well is located to the south of the existing small structure. The features will not be affected because they are set back from the roadway and are not within the ROW or construction limits. Therefore, no impacts are expected. Should it be determined during the right-of-way phase that these wells will be affected, a cost to cure will likely be included in the appraisal to restore the wells.

Based on a desktop review of IDEM's MS4 Boundaries Map for Indiana (https://www.in.gov/idem/cleanwater/ms4s-boundaries-map-for-indiana/) by DLZ on September 16, 2025, this project is not located in an Urban Area Boundary. No impacts are expected.

Based on a desktop review, a site visit on September 16, 2021 by DLZ and the aerial map of the project area (Appendix B, page 3), no public water systems were identified. Therefore, no impacts are expected.

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

If applicable, indicate the Floodplain Level?

Level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4 [ ] Level 5 [ ]

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

The Indiana Department of Natural Resources Indiana Floodway Information Portal website (https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e) was accessed on February 28, 2023 by DLZ. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix B, page 6). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

Note that the IDNR-DFW response dated September 30, 2021 (Appendix C, page 19) indicated that the project would require the formal approval for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption. This project qualifies for the rural bridge exemption and a Construction in a Floodway Permit is not required.

	Presence	Impacts	
Farmland		**Yes**	**No**
Agricultural Lands	x	x	
Prime Farmland (per NRCS)	x	x	

Total Points (from Section VII of CPA-106/AD-1006*) 142
**If 160 or greater, see CE Manual for guidance.*

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

Based on a desktop review, a site visit on September 16, 2021 by DLZ and the aerial map of the project area (Appendix B, page 3), the project will convert 0.5 acre farmland as defined by the Farmland Protection Policy Act. Note that 0.5 acre is a default value applied by NRCS for projects with minor impacts. An early coordination letter was sent on September 1, 2021, to NRCS. Coordination with NRCS resulted in a score of 142 on the NRCS-AD 1006 Form (Appendix C, page 16). The NRCS threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
Minor Projects PA	Category B, Type 9	September 28, 2022	

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	☐		
800.11 Documentation	☐		
Historic Properties Report or Short Report	☐		
Archaeological Records Check and Assessment	☐		
Archaeological Phase Ia Survey Report	☐		
Archaeological Phase Ic Survey Report	☐		
Other:	☐		

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

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

On September 28, 2022, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 9, under the Minor Projects Programmatic Agreement, (Appendix D, pages 1 - 6). Category B, Type 9 projects involve installation, replacement, repair, lining, or extension of culverts and other drainage structures. An archaeological survey was required as some of the proposed construction will occur in previously undisturbed soils. The archaeological report recommended that the project be allowed to proceed as planned because the Phase Ia archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional

investigation.

Due to the passage of time, INDOT CRO reviewed the current project information on March 13, 2026, and determined the September 28, 2022 MPPA applicability determination remains valid.

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

	Presence	Use	
Parks and Other Recreational Land		Yes	No
Publicly owned park	☐	☐	☐
Publicly owned recreation area	☐	☐	☐
Other (school, state/national forest, bikeway, etc.)	☐	☐	☐
Wildlife and Waterfowl Refuges			
National Wildlife Refuge	☐	☐	☐
National Natural Landmark	☐	☐	☐
State Wildlife Area	☐	☐	☐
State Nature Preserve	☐	☐	☐
Historic Properties			
Site eligible and/or listed on the NRHP	☐	☐	☐

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

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

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 2), there is one potential 4(f) resource located within the 0.5-mile search radius. According to additional research, and by the site visit on September 16, 2021 by DLZ, 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	
		Yes	No
Section 6(f) Property	☐	☐	☐

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

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits 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 12 properties in LaGrange County (Appendix I, page 1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

SECTION F – Air Quality

STIP/TIP and Conformity Status of the Project	**Yes**	**No**
Is the project in the most current STIP/TIP?	x	
Is the project located in an MPO Area?		x
Is the project in an air quality non-attainment or maintenance area?		x
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)?		

Location in STIP: 2026-2030 STIP Updated Project List, page 100

Name of MPO (if applicable): N/A

Location in TIP (if applicable): N/A

Level of MSAT Analysis required? N/A

Level 1a [x] Level 1b [ ] Level 2 [ ] Level 3 [ ] Level 4 [ ] Level 5 [ ]

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

This project is included in the Fiscal Year (FY) 2026-2030 Statewide Transportation Improvement Program (STIP) (Appendix H, pages 1 - 5).

This project is located in LaGrange County, which is currently in attainment for all criteria pollutants according to the IDEM list of non-attainment areas found on INDOT's website (https://www.in.gov/idem/sips/files/nonattainment_county_list.pdf). 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?		x

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

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

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

SECTION H – COMMUNITY IMPACTS

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

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 is located in an agricultural setting with some residential development. No community features are present in the project area. The project is not anticipated to impact community or neighborhood cohesion, the local tax base, property values, public facilities, community centers, community plans or other important resources. No negative community impacts are anticipated.

Coordination has occurred with LaGrange County during the planning process. Because there are no pedestrian facilities in the project area it was determined that this project would not partake in the LaGrange County Americans with Disabilities Act (ADA) Transition Plan.

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), and the RFI report (Appendix E, page 2), there is one religious facility and one pipeline within 0.5-mile of the project. There is one public facility within or adjacent to the project area: Five Corners Baptist Church. That number was confirmed by the site visit on September 16, 2021 by DLZ. The project will not directly impact the church property. The church will not be accessible by SR 9 from the south during construction. The church will remain accessible by SR 9 from the north and by CR 600S from the west during construction. Access to all properties will be maintained during construction.

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

The INDOT Office of Aviation responded on September 3, 2021 indicating there are no issues with surrounding airspace or airports due to the project meeting the required glideslope requirements to the nearest public-use facility according to 14 CFR Part 77 – Safe, efficient use, and preservation of the navigable airspace. If any object will exceed 200 ft in height regardless of location, the object will need to be airspaced with the FAA 45 days prior to construction through the OEAAA portal (https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp).

The LaGrange County Engineer's response Dated September 17, 2021 (Appendix C, page 17) referenced increasing Amish population in LaGrange County and included a recommendation for consideration of 6-foot shoulders. The existing shoulders consist of a 2.5-foot paved shoulder with a 4.5-foot usable shoulder along the west side of the roadway and a 3-foot paved shoulder with a 5-foot usable shoulder along the east side of the roadway. The proposed shoulders are 3-foot paved shoulder widths with 2-foot aggregate shoulder widths, for a total width of 5-foot usable shoulders. Providing 6-foot wide paved shoulders (a paved surface is appropriate for horse and buggy use) is considered to be outside the scope of this small structure project, particularly given that the

project is only 70 feet in length, not including incidental construction.

Environmental Justice (EJ) (Presidential EO 12898)	**Yes**	**No**
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?		

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.

Due to the issuance of recent federal Executive Orders (EO) from January 2025, including EO 14154, EO 14148, and EO 14173, EO 12898 has been rescinded, and this section is no longer applicable.

Relocation of People, Businesses or Farms	**Yes**	**No**
Will the proposed action result in the relocation of people, businesses or farms?		x
Is a BIS or CSRS required?		x

Number of relocations: Residences: 0 Businesses: 0 Farms: 0 Other: N/A

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

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

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Hazardous Materials & Regulated Substances (Mark all that apply)	**Documentation**
Red Flag Investigation (RFI)	x
Phase I Environmental Site Assessment (Phase I ESA)	
Phase II Environmental Site Assessment (Phase II ESA)	
Design/Specifications for Remediation required?	

Date RFI concurrence by INDOT SAM (if applicable): March 29, 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 Geographic Information System (GIS) and available public records, the RFI was completed on March 15, 2022 by DLZ and INDOT Site Assessment and Management (SAM) provided their concurrence on March 15, 2022 (Appendix E). 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.

Due to the passage of time, the RFI data were reviewed on February 27, 2026 by DLZ to see if there are any new features in or within 0.5 mile of the project area. Minor increases in stream, wetland and open water/lake features were noted; however, these increases are not the result of new features being present. Rather, they are the result of existing features being further segmented. No new hazardous materials sites or updates to previously identified features were noted. INDOT SAM concurred with this determination on May 13, 2026.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)	**Likely Required**
Army Corps of Engineers (404/Section10 Permit)	
Nationwide Permit (NWP)	x
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)	x
Isolated Wetlands	
Construction Stormwater General Permit (CSGP)	
Other	
IN Department of Natural Resources	
Construction in a Floodway	
Navigable Waterway Permit	
Other	
Mitigation Required	x
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."

The project will impact a likely jurisdictional stream and likely jurisdictional wetlands; therefore, IDEM 401/USACE 404 permitting is likely required. Mitigation is anticipated to be required for wetland impacts exceeding 0.1 acre.

IDNR-DFW response included recommendations pertaining to stream and wetland impacts (Appendix C, page 19 - 21). IDEM's electronically generated response included recommendations to minimize impacts to streams (Appendix C, page 6). The IDNR-DFW response (Appendix C, page 19) indicated that the project would require formal approval for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption. This project qualifies exemption and a Construction in a Floodway Permit is not required.

The INDOT Office of Aviation response (Appendix C, page 14) indicated that if any object will exceed 200 feet in height regardless of location, the object will need to be airspaced with the FAA 45 days prior to construction through the OEAAA portal (https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp). No object used for this project will exceed 200 feet in height.

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

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

ENVIRONMENTAL COMMITMENTS

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

Firm:

1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT Fort Wayne District)
2. It is the responsibility of the project sponsor to notify Five Corners Baptist Church, school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
3. Any work in a wetland area within INDOT's right-of-way or in borrow/waste areas is prohibited unless specifically allowed in the US Army Corps of Engineers or IDEM permit. (INDOT EWPSO)
4. Non-impacted portions of Wetlands A, B, D and E will be marked “Do Not Disturb” on the project plans. (INDOT EWPSO)
5. If construction will begin after June 8, 2028, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)
6. The existing small structure (CV 009-044-181.03) and the project’s surrounding habitat is conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the “Potential Migratory Bird on Structure” USP/RSP. (INDOT ESD)
7. GENERAL AMM 1 - Ensure all operators, employees, and contractors working in areas of Indiana bat, NLEB, or TCB suitable habitat are aware of all Transportation Agency environmental commitments, including all applicable AMMs. (USFWS)
8. TREE REMOVAL AMM 1 - Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal/trimming in excess of what is required to implement the project safely. (USFWS)
9. TREE REMOVAL AMM 2 - contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree removal/trimming to ensure contractors stay within clearing limits. (USFWS and IDNR-DFW)
10. TREE REMOVAL AMM 3 - Ensure tree removal/trimming is limited to the inactive season, occurs within 100 ft of the road/ rail surface, and is outside of documented habitat for the Indiana bat, NLEB, and TCB (USFWS)
11. INDOT’s standard erosion control measures, particularly silt fences, can serve as measures to keep eastern massasauga and other small species out of the active construction area. The fences should be inspected daily to ensure that they are functioning as required. (USFWS)
12. Animals found on the work side of the fencing should be moved to the non-work side. (USFWS)
13. If eastern massasuaga or other Indiana-listed species are found, a qualified biologist with Federal and State permits would need to be available to move the individuals. Contacts: Sandra Bowman, INDOT Ecology, Waterway Permitting and Stormwater Office, Tel.: 317 416-2509; and, Robin McWilliams Munson, USFWS Indiana Ecological Services Field Office, Tel.: 812 902-1752. (USFWS)

For Consideration:

1. If box or pipe culverts are used, the bottoms should be buried a minimum of 6 inches (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2 feet) below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the OHWM width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width / length) of 0.25; and have stream depth, channel width, and water velocities during low-flow conditions that are approximate to those in the natural stream channel. Bank lines should be restored within box and pipe structures to allow for wildlife passage above the OHWM. (IDNR-DFW)
2. The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR-DFW)
3. Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Riprap may be used only at the toe of the sideslopes up to the OHWM. The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. (IDNR-DFW)

4. Impacts to non-wetland forest of one 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 acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees) 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. (IDNR-DFW)
5. 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)
6. 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)
7. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pump-arounds. (IDNR-DFW)

Level 3 Categorical Exclusion
SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County
Des. No. 2002233
Indiana Department of Transportation

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APPENDIX A

INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

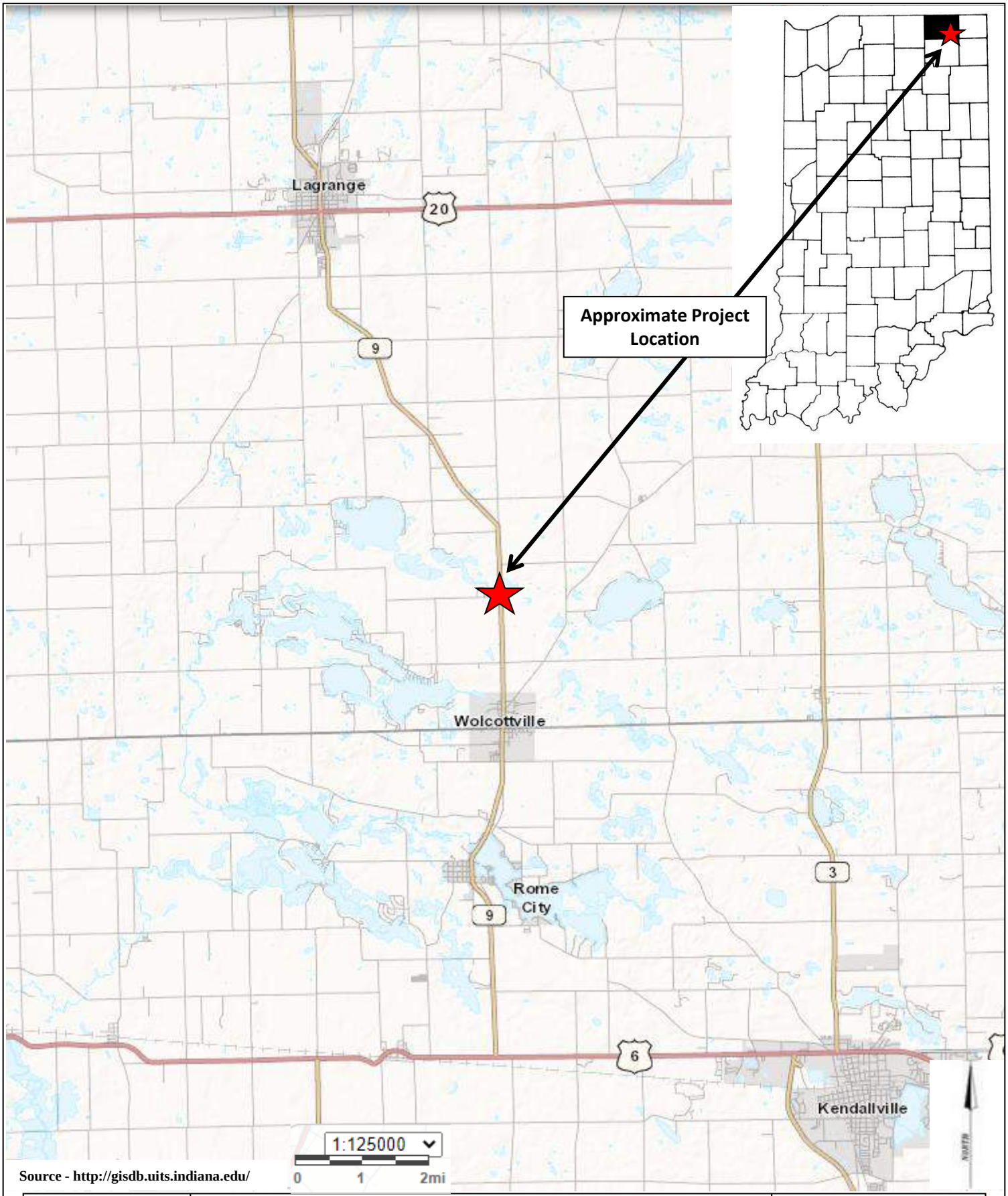
	PCE	Level 1	Level 2	Level 3	Level 4[1]
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	"Adverse Effect"	-
Historic Bridges[2]	None	-	-	Any historic bridge involvement	-
Stream Impacts[3]	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit[4]
Wetland Impacts[3]	No impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-Way[5]	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations[6]	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat, northern long-eared bat, and tricolored bat)*	"No Effect" or "Not Likely to Adversely Affect" (with select AMMs[7])	"Not Likely to Adversely Affect" (with any other AMMs)	-	"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic[8]
Threatened/Endangered Species (Any other species)*	"No Effect" or "Not Likely to Adversely Affect"	-	-	-	"Likely to Adversely Affect"
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Significant Encroachment	IDNR CIF Permit Required[4]	-	-	Significant Encroachment
Public Involvement Required	No	Yes	-	-	-
Section 4(f) Impacts	None	-	-	*De minimis*[9]	Programmatic or Individual
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	Any[10]	-
Noise Analysis Required	No	-	-	Yes	-
Air Quality Analysis Required	No	-	-	-	Yes[11]
Approval Level • **District Env. (DE)** • **Env. Serv. Div. (ESD)** • **FHWA**	Concurrence by DE or ESD	DE or ESD	DE or ESD	ESD	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. INDOT CE approval is contingent upon FHWA providing written concurrence on the preferred alternative, pursuant to the Historic Bridge Programmatic Agreement.
[3] Total permanent impacts to streams (linear feet) and wetlands (acres). Any impacts to streams and/or wetlands must be a minimum CE-1.
[4] USACE = United States Army Corps of Engineers; IDNR CIF = Indiana Department of Natural Resources Construction in a Floodway
[5] Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.
[6] If greater than 5 relocations, a conversation with FHWA, through INDOT ESD, is needed to confirm NEPA classification and outreach plan for the project.
[7] Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not bridge AMMs or structure AMMs.
[8] Projects that do not fall under a Species Specific Programmatic and results in a "Likely to Adversely Affect." Other findings can be processed as a lower-level CE.
[9] The only exception is a *de minimis* evaluation for historic properties (effective January 2, 2020). If a historic property is *de minimis* and no other use, or other exemptions listed in 23 CFR 774.13, mark the *None* column. Section 4(f) *de minimis* approval must be issued by FHWA prior to the INDOT approval of the CE document.
[10] Permanent Traffic Alterations occur if a treatment removes an available traffic movement at an intersection of public roads and diverts it outside the intersection influence area, or if the direction of travel on a public road is changed, e.g., closing a roadway or converting two-way traffic to one-way traffic.
[11] Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.
*Includes threatened/endangered species critical habitat
Note: Substantial controversy on environmental grounds may require a higher-level NEPA document.

Updated: March 2026

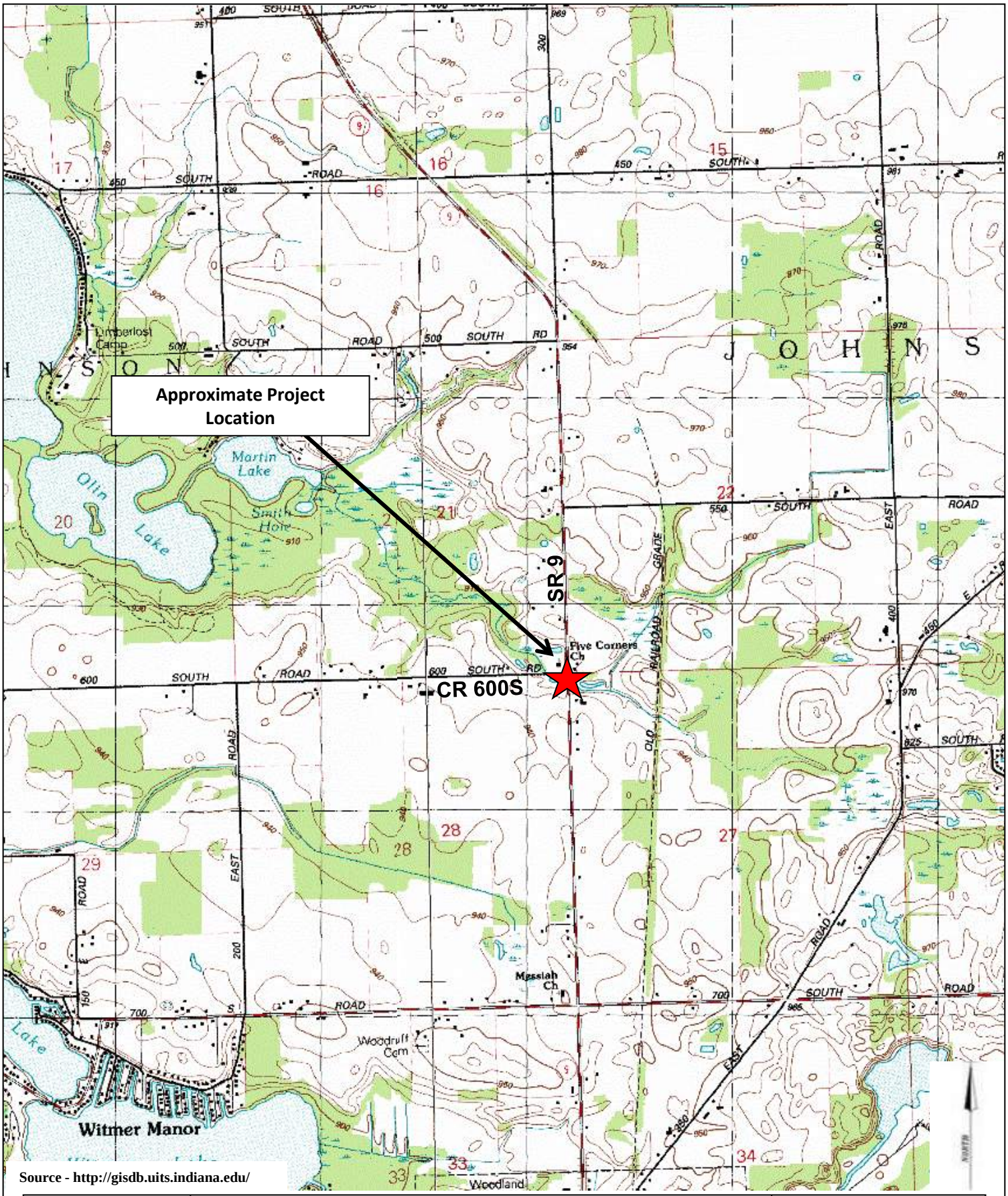
APPENDIX B

Graphics



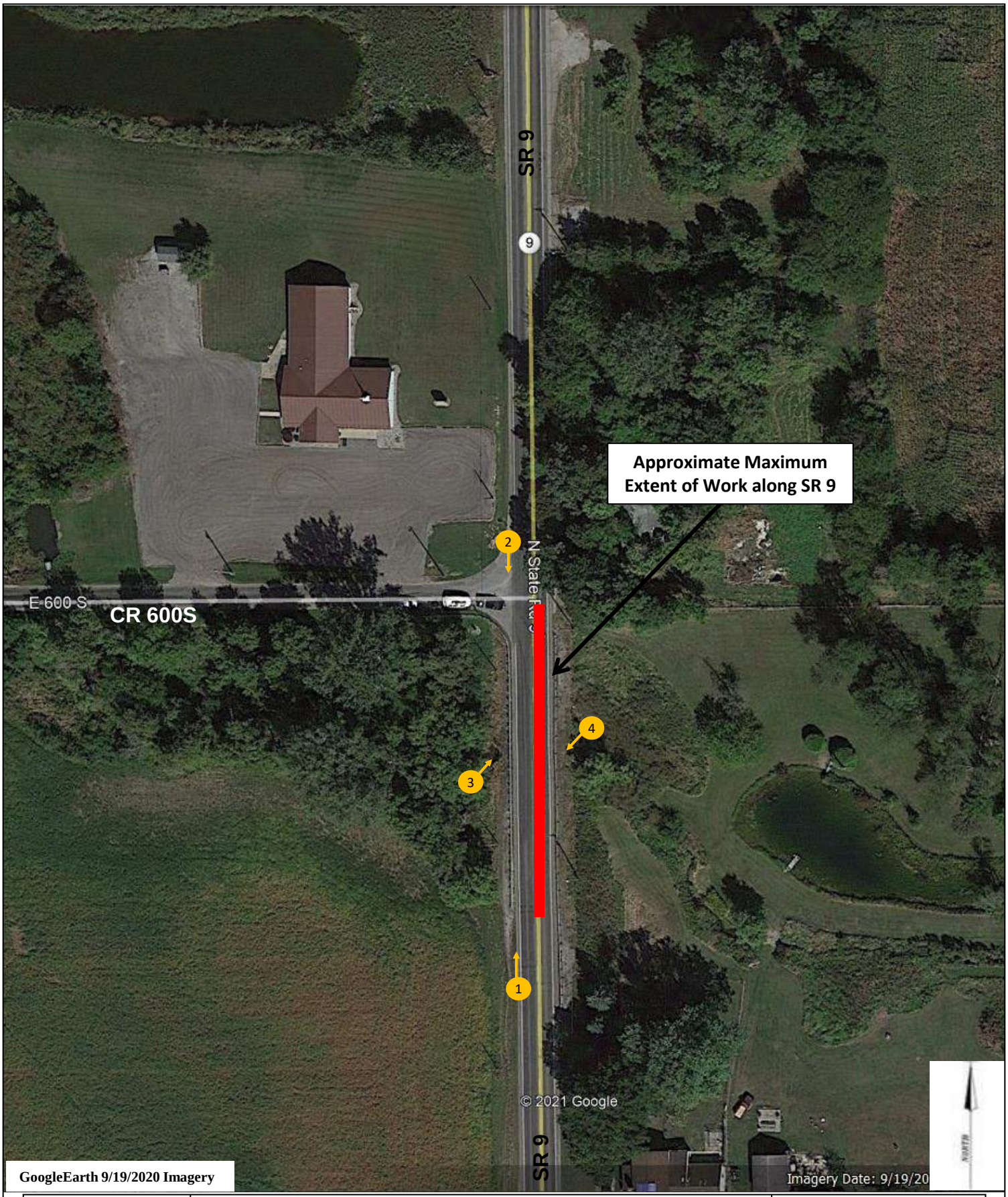
Source - http://gisdb.uits.indiana.edu/

DLZ	**SR 9 Small Structure Project** **Indiana Department of Transportation** **Des. No.: 2002233**	Scale – 1"= 10,417' Figure 1 Project Location



Source - http://gisdb.uits.indiana.edu/

DLZ	**SR 9 Small Structure Project** **Indiana Department of Transportation** **Des. No.: 2002233**	Scale – 1"= 2,000' Figure 2 - USGS Project Location



DLZ	**SR 9 Small Structure Project** **Indiana Department of Transportation** **Des. No.: 2002233**	Scale: 1” = 95’ Figure 3 – Aerial Photo and Photo Key



Photo 1 – View northerly along SR 9 from south of small structure CV 009-044-181.03



Photo 2 – View southerly along SR 9 from north of small structure CV 009-044-181.03

DLZ	**SR 9 Small Structure Project** **Indiana Department of Transportation** **Des. No.: 2002233**	Photos Taken 1/13/2021 Figure 4 – Site Photographs



Photo 3 – View northwesterly, west end of small structure CV 009-044-181.03

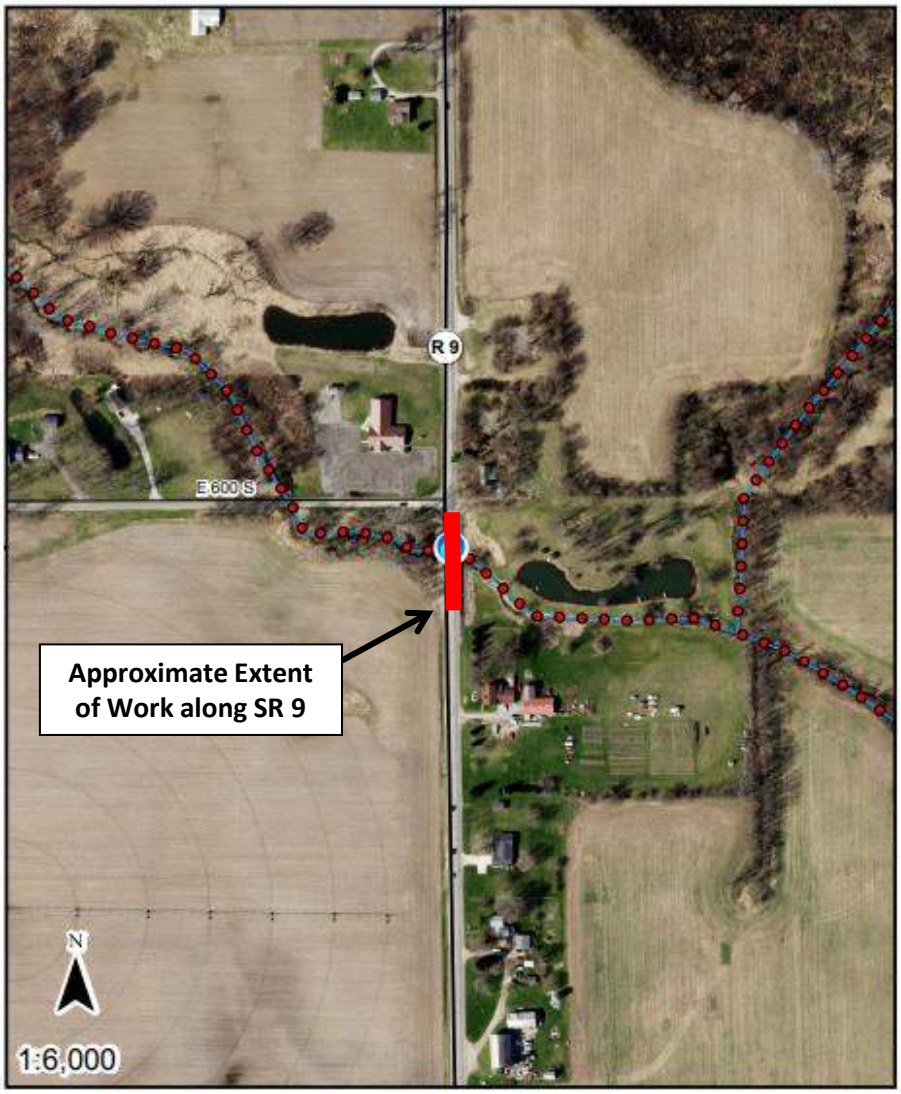


Photo 4 – View southwesterly, east end of small structure CV 009-044-181.03

DLZ	**SR 9 Small Structure Project** **Indiana Department of Transportation** **Des. No.: 2002233**	Photos Taken 1/13/2021
		Figure 5 – Site Photographs

DNR Indiana Department of Natural Resources

Floodplain Analysis & Regulatory Assessment (FARA)



Point of Interest

Base Flood Elevation Point

Flood Elevation Points

JURISDICTIONAL UNSTUDIED STREAM

Rivers and Streams at least 1 square mile

Drainage Area (sq. miles)

1 - 10

Point of Interest Coordinates (WGS84)

Long: **-85.3667135311**

Lat: **41.5547981049**

The information provided below is based on the point of interest shown in the map above.

County: **Lagrange**

Stream Name: **Unnamed Tributary**

Approximate Ground Elevation: **928.8 feet (NAVD88)**

Base Flood Elevation:**Not Available**

Drainage Area: **Not available**

Best Available Flood Hazard Zone: **Not Mapped**

National Flood Hazard Zone: **Not Mapped**

Is a Flood Control Act permit from the DNR needed for this location? **See following pages**

Is a local floodplain permit needed for this location? **Contact your local Floodplain Administrator-**

Floodplain Administrator: **Robbie Miller, Plan Commission Director/Zoning Administrator**

Community Jurisdiction: **Lagrange County, County proper**

Phone: **(260) 499-6347**

Email: **rmiller@LaGrangecounty.org**

US Army Corps of Engineers District: **Detroit**

Date Generated: 2/28/2023

DLZ	**SR 9 Small Structure Project** **Indiana Department of Transportation** **Des. No.: 2002233**	Figure 6 IDNR Floodplain Map

PROJECT	DESIGNATION
2002233	2002233
CONTRACT	CULVERT ASSET ID
R-43287	CV 009-044-181.03

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
2002233	SMALL STRUCTURE REPLACEMENT ON SR 9 OVER UNT OF DOVE CREEK
2002234 (LEAD)	SMALL STRUCTURE REPLACEMENT ON SR 8 OVER UNT OF RUMMEL BRANCH
2002235	SMALL STRUCTURE REPLACEMENT ON SR 9 OVER UNT OF STEFFY DITCH

INDIANA DEPARTMENT OF TRANSPORTATION

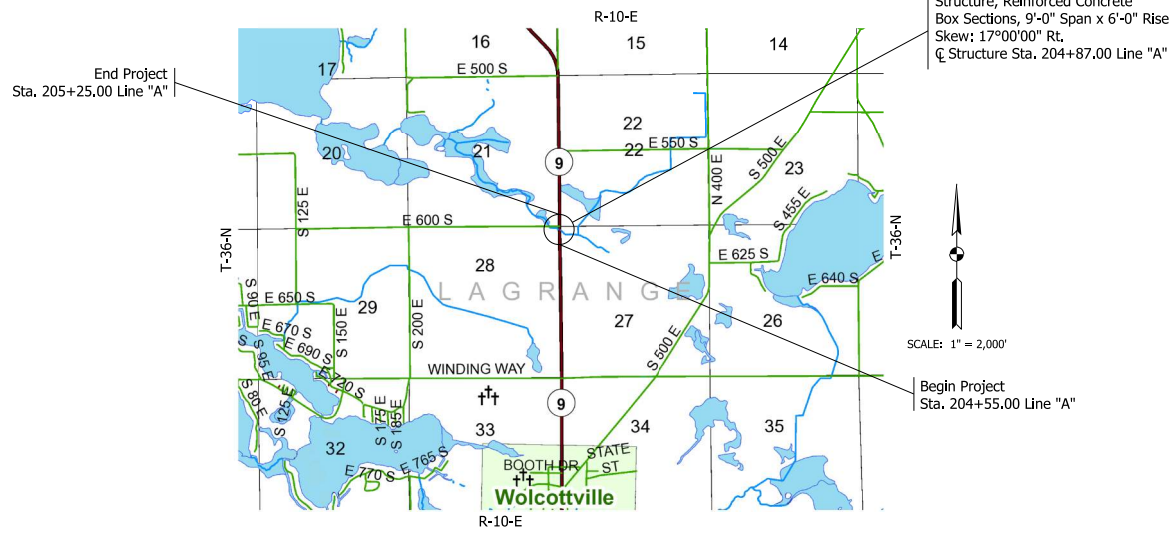
ROAD PLANS

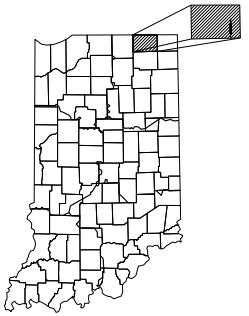
STAGE 2 PLANS
FEBRUARY, 2023

ROUTE: SR 9 AT: RP 183+03

PROJECT NO. 2002233 P.E.
2002233 R/W
2002233 CONST.

Small Structure Replacement on SR 9 over Unnamed Tributary of Dove Creek
Located approximately 7.27 Miles N of US 6
Sections 27 & 28, T-36-N, R-10-E, Johnson Township, LaGrange County, Indiana





LATITUDE: 41°33'17"N LONGITUDE: 85°22'00"W

GROSS LENGTH: 0.013 MI.
NET LENGTH: 0.013 MI.
MAX. GRADE: 1.87 %

HUC: 040500011503

TRAFFIC DATA

A.A.D.T.	(2024)	5273 V.P.D.
A.A.D.T.	(2044)	5566 V.P.D.
D.H.V	(2044)	504 V.P.H.
DIRECTIONAL DISTRIBUTION		50%
TRUCKS		17% A.A.D.T.
		12% D.H.V.

DESIGN DATA

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

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

CERTIFIED BY:
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA NO. 10910597
COVERING OVERALL DESIGN
DATE

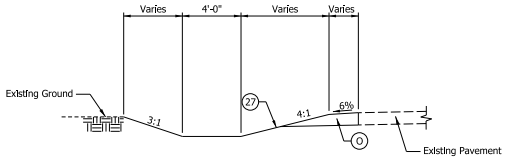
NOT FOR CONSTRUCTION
DLZ INDIANA, LLC

PLANS PREPARED BY:
DLZ INDIANA, LLC
2211 East Jefferson Boulevard
South Bend, Indiana 46615
(574) 236-4400

APPROVED
FOR LETTING:
INDIANA DEPARTMENT OF TRANSPORTATION
DATE

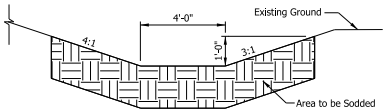
CULVERT ASSET ID	CV 009-044-181.03
DESIGNATION	2002233
SHEETS	
	1 of 12
CONTRACT	PROJECT
R-43287	2002233

2/8/2023
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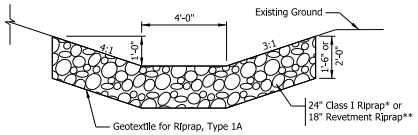
TYPICAL DITCH GRADING SECTION

SCALE: ¼" = 1'-0"
Sta. 203+15.00 to Sta. 203+50.00 "A" Rt.
Sta. 203+50.00 to Sta. 204+05.00 "A" Lt. & Rt.
Sta. 205+80.00 to Sta. 205+90.00 "A" Rt.



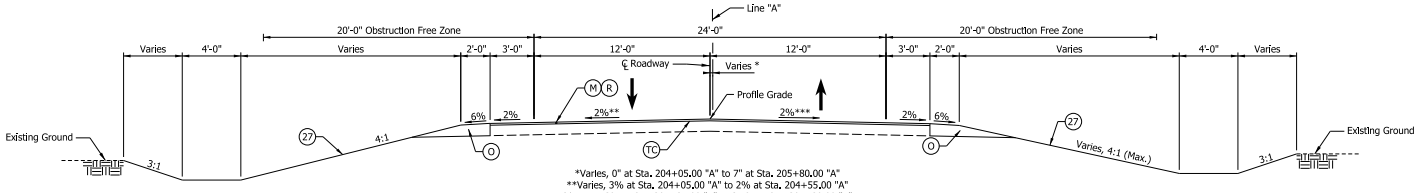
SODDED DITCH DETAIL

Scale: None
Sta. 204+73.00 "A" to Sta. 205+05.00 "A" Rt.
Sta. 205+14.00 "A" to Sta. 205+44.00 "A" Lt.



RIPRAP DITCH DETAIL

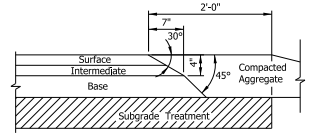
Scale: None
*Sta. 203+15.00 "A" to Sta. 203+88.00 "A" Rt.
*Sta. 205+55.00 "A" to Sta. 205+90.00 "A" Rt.
**Sta. 203+88.00 "A" to Sta. 204+51.00 "A" Rt.
**Sta. 205+05.00 "A" to Sta. 205+55.00 "A" Rt.
**Sta. 203+50.00 "A" to Sta. 205+00.00 "A" Lt.



*Varies, 0" at Sta. 204+05.00 "A" to 7" at Sta. 205+80.00 "A"
**Varies, 3% at Sta. 204+05.00 "A" to 2% at Sta. 204+55.00 "A"
**Varies, 2% at Sta. 205+25.00 "A" to 3.5% at Sta. 205+80.00 "A"
***Varies, 2% at Sta. 205+25.00 "A" to 1.5% at Sta. 205+80.00 "A"

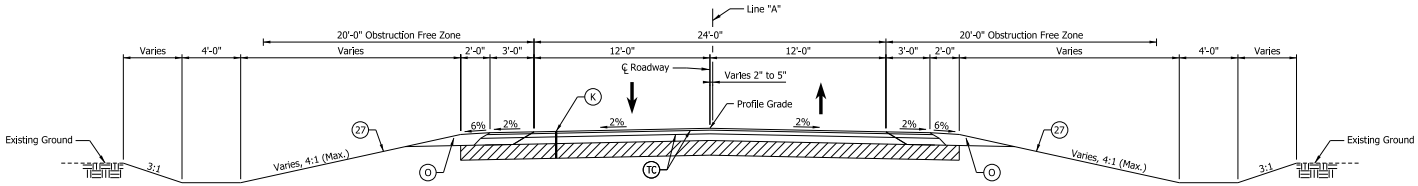
TYPICAL INCIDENTAL SECTION - SR 9

SCALE: ¼" = 1'-0"
Sta. 204+05.00 "A" to Sta. 204+55.00 "A"
Sta. 205+25.00 "A" to Sta. 205+80.00 "A"



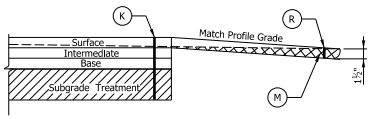
SAFETY EDGE DETAIL

Scale: None



TYPICAL SECTION - SR 9

SCALE: ¼" = 1'-0"
Sta. 204+55.00 "A" to Sta. 205+25.00 "A"



TRANSITION MILLING DETAIL

Scale: None

LEGEND:

- (K) 165#/SYD QC/QA-HMA, 3, 70, Surface, 9.5 mm on 275#/SYD QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on 880#/SYD QC/QA-HMA, 3, 64, Base, 25.0 mm on Subgrade Treatment Type IC on Geotextile for Pavement, Type 2B
- (M) Milling, Transition
- (R) 165#/SYD QC/QA-HMA, 3, 70, Surface, 9.5 mm
- (O) Variable Depth Compacted Aggregate, No. 53
- (TC) Asphalt for Tack Coat
- (27) Mulched Seeding, R w/Erosion Control Blanket

Notes:

1. All pavements shall have a safety edge installed at the edge of the pavement or shoulder.
2. For each lane of traffic, the intermediate layer should be placed simultaneously for mainline and adjacent shoulder.
3. For each lane of traffic, the surface layer should be placed simultaneously for mainline and adjacent shoulder.
4. After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG 64-22 only ; no emulsion should be used. The sealed cracks should not be overbanded.
5. Voids in the Class 1 riprap shall be filled with revetment or uniform riprap.

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SJR 2/2023 | DRAWN: DPH 2/2023

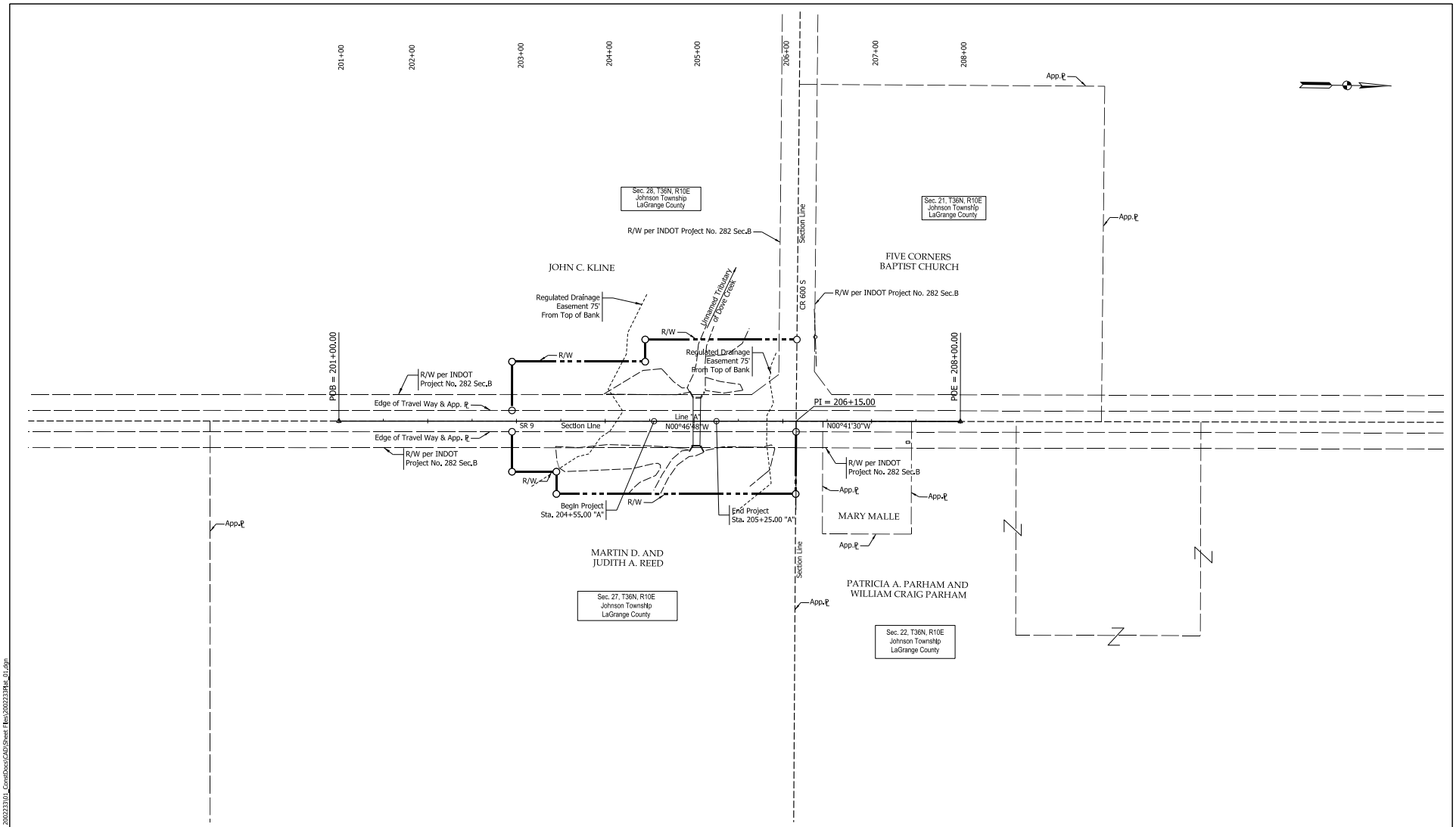
CHECKED: JFM 2/2023 | CHECKED: SJR 2/2023

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE	CULVERT ASSET ID
AS NOTED	CV 009-044-181.03
	DESIGNATION
	2002233
	SHEETS
	3 of 12
CONTRACT	PROJECT
R-43287	2002233

2/8/2023
K:\Projects\2021\216\130250 SR 9 SS 2002233\01_ConstDocs\CAD\Sheet Files\20022331typ01.dgn



2/8/2023
X:\Projects\2021\216\280250 SR 9 SS 2002233\01_ConstDocs\CAD\Sheet Files\2002233Plat_01.dgn

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

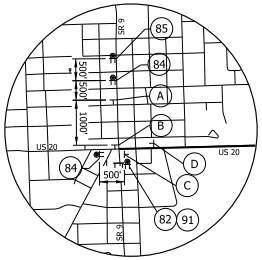
DESIGNED: SJR 2/2023 DRAWN: DPH 2/2023

CHECKED: JFM 2/2023 CHECKED: SJR 2/2023

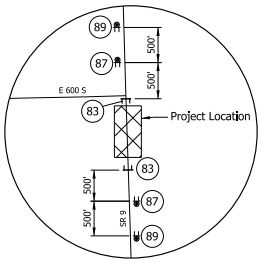
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

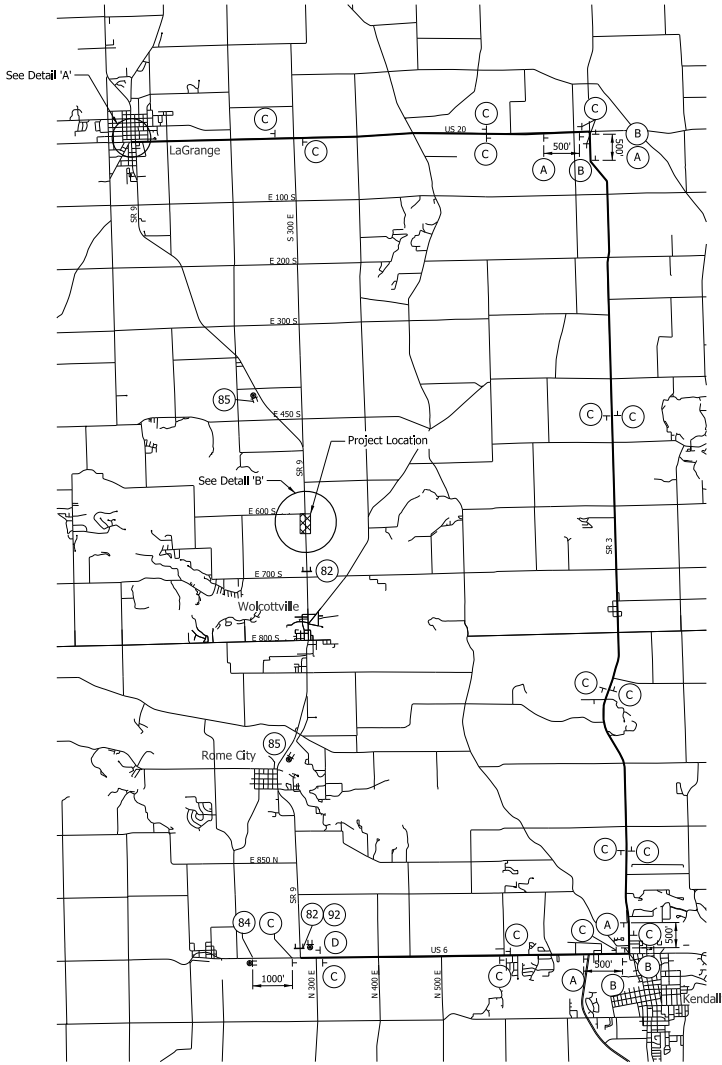
SCALE	CULVERT ASSET ID
1:50	CV 009-044-181.03
	DESIGNATION
	2002233
	SHEETS
	4 of 12
CONTRACT	PROJECT
R-43287	2002233

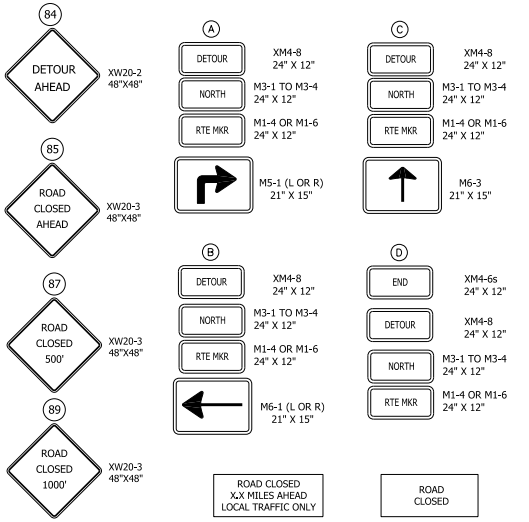


DETAIL 'A'
NOT TO SCALE



DETAIL 'B'
NOT TO SCALE





ROAD CLOSED X.X MILES AHEAD LOCAL TRAFFIC ONLY
R11-3
5'-0"X2'-6"

ROAD CLOSED
R11-2
4'-0"X2'-6"



XM4-10(L) 48"X18"

XM4-10(R) 48"X18"

CONSTRUCTION SIGN SCHEDULE	
ITEM	TOTALS
Type 'A' Sign	
XW20-2	3 Each
XW20-3	7 Each
R11-2	2 Each
R11-3	3 Each
Total Type 'A' Sign	15 Each
Type 'B' Sign	
XM4-10L	1 Each
XM4-10R	1 Each
Total Type 'B' Sign	2 Each
Detour Route Marker Assembly	30 Each
Road Closed Sign Assembly	5 Each
Type III-B Barricade	84 LFT

SIGN LEGEND		
SIGN	DESCRIPTION	SIZE (in x in)
R11-2	"Road Closed" Sign	48 X 30
R11-3	"Road Closed _ Miles Ahead" Sign	60 X 30
XW20-2	"Detour Ahead" Sign	48 X 48
XW20-3	"Road Closed ____" Sign	48 X 48
XM4-10(R OR L)	"Detour" (Inside Orange Arrow) Sign	48 X 18

LEGEND

- (82) Road Closure Sign Assembly with R11-3 and 12 LFT Type III-B Barricade
- (83) Road Closure Sign Assembly with R11-2 and 24 LFT Type III-B Barricade
- (84) XW20-2 "Detour Ahead" Sign
- (85) XW20-3 "Road Closed Ahead " Sign
- (87) XW20-3 "Road Closed 500 ft" Sign
- (89) XW20-3 "Road Closed 1000 ft" Sign
- (91) XM4-10L "Detour Arrow Left" Symbol
- (92) XM4-10R "Detour Arrow Right" Symbol
- (A) Advance Turn Detour Route Marker Assembly with M3-2 Plaque
- (B) Directional Detour Route Marker Assembly with M3-2 Plaque
- (C) Confirming Detour Route Marker Assembly
- (D) End Detour Route Marker Assembly
- Construction Sign
- Type 'A' Construction Warning Light
- Type III-B Barricade
- Area Under Construction
- Detour Route
- Route Marker Assembly

NOTES

1. All signs, barricades, and pavement markings shall conform to the Indiana Manual on Traffic Control Devices for Streets and Highways, 2011 and any current supplements thereto.
2. Contractor shall maintain access to all commercial and private properties during construction.

2/8/2023
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DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

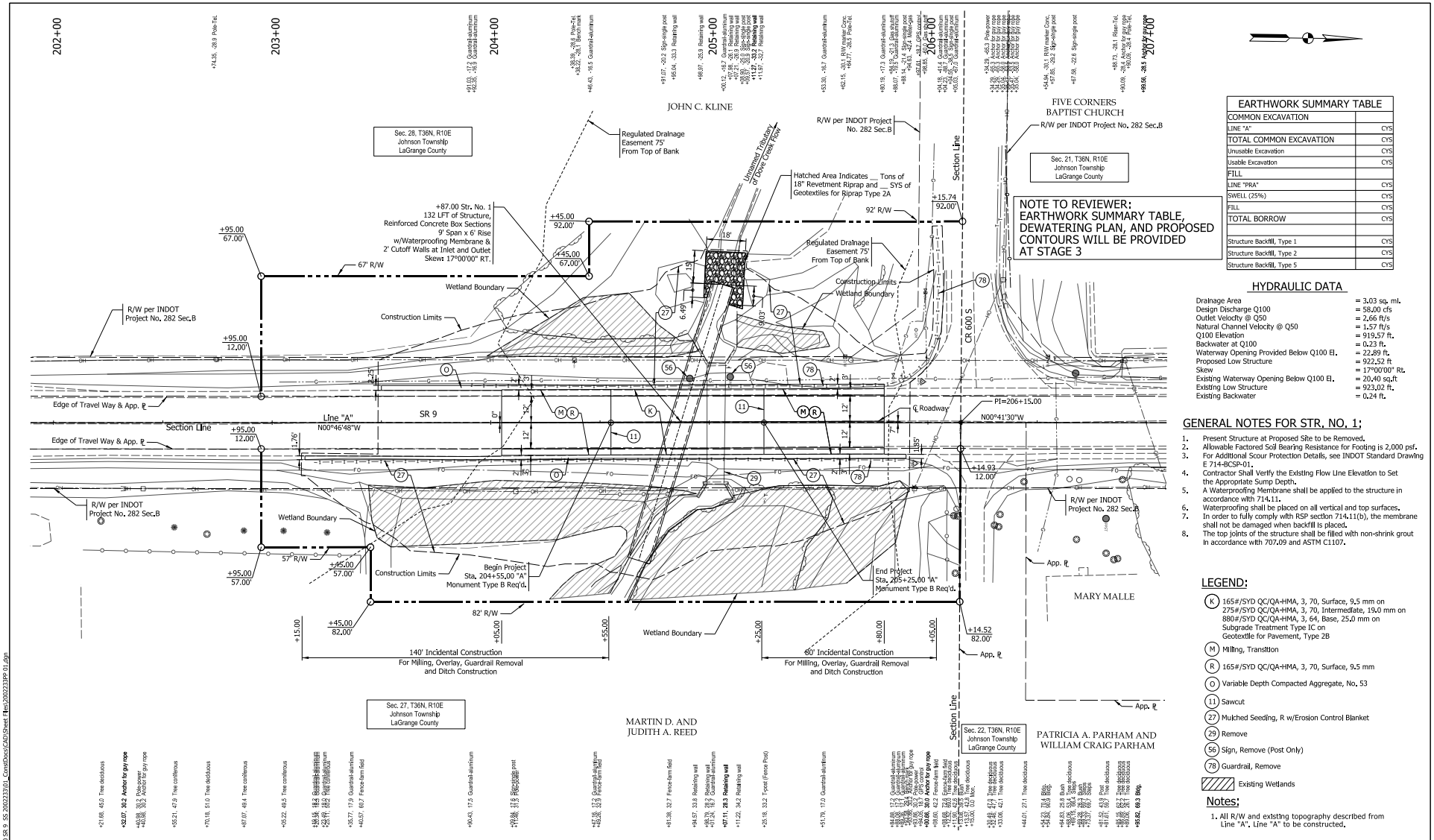
DESIGNED: SJR 2/2023 | DRAWN: DPH 2/2023

CHECKED: JFM 2/2023 | CHECKED: SJR 2/2023

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

SCALE	CULVERT ASSET ID
1"=5000'	CV 009-044-181.03
	DESIGNATION
	2002233
	SHEETS
	5 of 12
CONTRACT	PROJECT
R-43287	2002233



EARTHWORK SUMMARY TABLE

COMMON EXCAVATION	
LINE "A"	CYS
TOTAL COMMON EXCAVATION	CYS
Unusable Excavation	CYS
Usable Excavation	CYS
FILL	
LINE "PRA"	CYS
SWELL (25%)	CYS
FILL	CYS
TOTAL BORROW	CYS
Structure Backfill, Type 1	CYS
Structure Backfill, Type 2	CYS
Structure Backfill, Type 5	CYS

HYDRAULIC DATA

Drainage Area	= 3.03 sq. mi.
Design Discharge Q100	= 58.00 cfs
Outlet Velocity @ Q50	= 2.66 ft/s
Natural Channel Velocity @ Q50	= 1.57 ft/s
Q100 Elevation	= 919.57 ft.
Backwater at Q100	= 0.23 ft.
Waterway Opening Provided Below Q100 El.	= 22.89 ft.
Proposed Low Structure	= 922.52 ft
Skew	= 17°00'00" Rt.
Existing Waterway Opening Below Q100 El.	= 20.40 sq.ft
Existing Low Structure	= 923.02 ft.
Existing Backwater	= 0.24 ft.

GENERAL NOTES FOR STR. NO. 1:

1. Present Structure at Proposed Site to be Removed.
2. Allowable Factored Soil Bearing Resistance for Footing is 2,000 psf.
3. For Additional Scour Protection Details, see INDOT Standard Drawing E 714-8CSP-01.
4. Contractor Shall Verify the Existing Flow Line Elevation to Set the Appropriate Sump Depth.
5. A Waterproofing Membrane shall be applied to the structure in accordance with 714.11.
6. Waterproofing shall be placed on all vertical and top surfaces.
7. In order to fully comply with RSP section 714.11(b), the membrane shall not be damaged when backfill is placed.
8. The top joints of the structure shall be filled with non-shrink grout in accordance with 707.09 and ASTM C1107.

LEGEND:

- (K) 165#/SYD QC/QA-HMA, 3, 70, Surface, 9.5 mm on 275#/SYD QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on 880#/SYD QC/QA-HMA, 3, 64, Base, 25.0 mm on Subgrade Treatment Type IC on Geotextile for Pavement, Type 2B
- (M) Milling, Transition
- (R) 165#/SYD QC/QA-HMA, 3, 70, Surface, 9.5 mm
- (O) Variable Depth Compacted Aggregate, No. 53
- (11) Sawcut
- (27) Mulched Seeding, R w/Erosion Control Blanket
- (29) Remove
- (56) Sign, Remove (Post Only)
- (78) Guardrail, Remove
- Existing Wetlands

Notes:

1. All R/W and existing topography described from Line "A". Line "A" to be constructed.

100 N=229264.220 E=810176.768 — MAG SPIKE SET FLUSH O.P.O.T. STA. 205+97.61 "A" 18.66' LT. ELEV. = 927.28 (NAVD88)

101 N=229261.169 E=810214.194 — 5/8" REBAR WITH DLZ CAP SET FLUSH O.P.O.T. STA. 205+94.05 "A" 18.73' RT. ELEV. = 927.47 (NAVD88)

102 N=229051.830 E=810179.483 — 5/8" REBAR WITH DLZ CAP SET FLUSH O.P.O.T. STA. 203+85.21 "A" 18.83' LT. ELEV. = 926.99 (NAVD88)

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SJR	2/2023	DRAWN: DPH	2/2023
CHECKED: JFM	2/2023	CHECKED: SJR	2/2023

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN LINE 'A'

SCALE	CULVERT ASSET ID
1"=20'	CV 009-044-181.03
	DESIGNATION
	2002233
	SHEETS
	6 of 12
CONTRACT	PROJECT
R-43287	2002233

2/8/2023
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APPENDIX C

Early Coordination Documentation

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

Sample Early Coordination Request Letter
Note: Graphics that accompanied this letter have been removed. Similar graphics are provided in Appendix B.

September 1, 2021

See Appended List

Re: Early Coordination Request
SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County
Indiana Department of Transportation
INDOT Des. No. 2002233 DLZ No. 2161-2802-50

Dear Interested Party:

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a small structure project in LaGrange County. This letter is part of the early coordination phase of the environmental review process. DLZ Indiana, LLC (DLZ) is under contract to advance environmental documentation for the referenced project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with these projects. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts.

This project is located along SR 9, approximately 7.27 miles north of US 6 in LaGrange County. Within the project area, SR 9 is a two-lane Minor Arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 2-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area. One driveway is located within the project limits.

The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure has a length of approximately 54 feet. There is currently guardrail at the structure.

The condition of the structure warrants improvements. As noted in the Culvert Inspection Report (2019), there are areas of honeycomb (a construction defect) with bad patching over the top on the box ceiling. Near the middle of the ceiling, a spall with exposed rebar is present. There are numerous cracks with heavy efflorescence in the northwest and southwest corners. The roof slab is failing at the far west end (severe spalling with exposed rebar). There is minor surface scaling to the box side walls. The west headwall has fallen off structure. The northwest and southwest wingwalls exhibit heavy deterioration (delamination, spalling, cracking) and cracks with efflorescence were noted on the southeast and northeast wingwalls.

The preferred alternative involves replacement of the existing small structure with a larger small structure, and possibly revising the proposed typical section and embankment sideslopes so they are traversable; thus, eliminating the need for guardrail. The proposed structure length will be determined when it is known whether the project will revise the embankment slopes. The existing horizontal and vertical alignments of SR

9 at this location will be maintained.

SR 9 will be designed based on the posted speed limit of 55 mph. Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section consists of two 12-foot lanes with 4-foot paved shoulders where there is guardrail (assuming guardrail is maintained at the site). Existing drainage patterns will be perpetuated.

The project's right of way needs have not yet been determined; however, if land is acquired for new right of way, it is anticipated that less than 0.5 acre will be acquired. It is anticipated that SR 9 will be closed during construction. The detour route would likely use US 6, SR 3 and US 20. Access to properties within the project limits will be maintained during construction.

Land in agricultural and residential use and a church abut the project area. Waters and wetlands determinations will be performed. This project qualifies for USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat. A Section 106 compliance review will be conducted to assess effects upon historic properties. The results of this investigation will be forwarded to the State Historic Preservation Officer for review and concurrence, as appropriate.

Should we not receive your response within thirty (30) calendar days from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request.

If you have any questions regarding this matter, please feel free to contact Jason A. Stone, DLZ Indiana, LLC, 2211 E. Jefferson Blvd., South Bend, Indiana 46615, Telephone - 574 245-1674, E-mail – jstone@dlz.com, or Matthew Witt, INDOT Project Manager, 5333 Hatfield Rd., Fort Wayne, Indiana 46808, Telephone – 260 399-7320, E-mail - mwitt@indot.in.gov.

Thank you in advance for your input.

DLZ INDIANA, LLC

Jason A. Stone
Environmental Scientist

cc: MAK, DLZ file
emc: FHWA, INDOT Ft. Wayne District

The following agencies received this early coordination request

Indiana Department of Environmental Management
(on-line)

Environmental Geology Section
Indiana Geological Survey
(on-line)

Indiana Department of Natural Resources
environmentalreview@dnr.in.gov

Manager, Aviation Section
Indiana Department of Transportation
jcourtade@indot.in.gov

State Conservationist
Natural Resource Conservation Service
rick.neilson@in.usda.gov

Regional Environmental Coordinator
Midwest Regional Office
National Park Service
Mwro_Compliance@nps.gov

Environmental Officer
Chicago Regional Office, USHUD
Erik.r.sandstedt@hud.gov

Chief
Environmental Formulation and Analysis Section
Detroit District USACE
Paul.H.Allerding@usace.army.mil
Charles.A.Uhlarik@usace.army.mil

LaGrange County Highway Department
bparish@lagrangecounty.org

LaGrange County Planning and Development
planning@lagrangecounty.org

LaGrange County Commissioners
tmartin@lagrangecounty.org
lmiller@lagrangecounty.org
dkratz@lagrangecounty.org

LaGrange County Drainage Board
dkratz@lagrangecounty.org

LaGrange County Surveyor
zholsinger@lagrangecounty.org

LaGrange County Sheriff's Department
jcampos@lagrangesd.com

Township Fire Department
johnsontwpfiredept@yahoo.com

Lakeland School Corporation
info@lakelandlakers.net

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 Ft. Wayne District
Alex Zembala, INDOT Project Manager
5333 Hatfield Road
Fort Wayne , IN 46808

DLZ Indiana, LLC
Jason A. Stone
Environmental Services Dept. Manager
2211 E Jefferson Blvd
South Bend , IN 46615

Date

Dear Grant Administrator or Other Finance Approval Authority:

RE: This INDOT project is located along SR 9, approximately 7.27 miles north of US 6 in LaGrange County. Within the project area, SR 9 is a two-lane Minor Arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 2-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area. One driveway is located within the project limits. The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure has a length of approximately 54 feet. There is currently guardrail at the structure. The condition of the structure warrants improvements. As noted in the Culvert Inspection Report (2019), there are areas of honeycomb (a construction defect) with bad patching over the top on the box ceiling. Near the middle of the ceiling, a spall with exposed rebar is present. There are numerous cracks with heavy efflorescence in the northwest and southwest corners. The roof slab is failing at the far west end (severe spalling with exposed rebar). There is minor surface scaling to the box side walls. The west headwall has fallen off structure. The northwest and southwest wingwalls exhibit heavy deterioration (delamination, spalling, cracking) and cracks with efflorescence were noted on the southeast and northeast wingwalls. The preferred alternative involves replacement of the existing small structure with a larger small structure, and possibly revising the proposed typical section and embankment sideslopes so they are traversable; thus, eliminating the need for guardrail. The proposed structure length will be determined when it is known whether the project will revise the embankment slopes. The existing horizontal and vertical alignments of SR 9 at this location will be maintained. SR 9 will be designed based on the posted speed limit of 55 mph. Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section consists of two 12-foot lanes with 4-foot paved shoulders where there is guardrail (assuming guardrail is maintained at the site). Existing drainage patterns will be perpetuated. The project's right of way needs have not yet been determined; however, if land is acquired for new right of way, it is anticipated that less than 0.5 acre will be acquired. It is anticipated that SR 9 will be closed during construction. The detour route would likely use US 6, SR 3 and US 20. Access to properties within the project limits will be maintained during construction.

The Indiana Department of Environmental Management (IDEM) is aware that many local government or not-for-profit entities are seeking grant monies, a bond issuance, or another public funding mechanism to cover some portion of the cost of a public works, infrastructure, or community development project. IDEM also is aware that in order to be eligible for such funding assistance, applicants are required to first evaluate the potential impacts that

their particular project may have on the environment. In order to assist applicants seeking such financial assistance and to ensure that such projects do not have an adverse impact on the environment, IDEM has prepared the following list of environmental issues that each applicant must consider in order to minimize environmental impacts in compliance with all relevant state laws.

IDEM recommends that each applicant consider the following issues when moving forward with their project. IDEM also requests that, in addition to submitting the information requested above, each applicant also sign the attached certification, attesting to the fact that they have read the letter in its entirety, agree to abide by the recommendations of the letter, and to apply for any permits required from IDEM for the completion of their project.

IDEM recommends that any person(s) intending to complete a public works, infrastructure, or community development project using any public funding consider each of the following applicable recommendations and requirements:

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 (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, Kosciosko, 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. To learn more about the water quality certification 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 body of water 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 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 Office of Water Quality at 317-233-8488.

4. If your project will impact more than 0.5 acres of wetland, stream relocation, or other large-scale alterations to bodies of water such as the creation of a dam or a water diversion, you should seek additional input from the Office of Water Quality, Wetlands staff at 317-233-8488.

5. Work within the one-hundred year floodway of a given body of water is regulated by the Department of Natural Resources, Division of Water. Contact this agency at 317-232-4160 for further information.

6. 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.

7. 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.

8. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317-232-4080) for additional project input.

9. 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.

10. 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.

11. 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 (see page 1) 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 under specific conditions (http://www.in.gov/idem/4148.htm (http://www.in.gov/idem/4148.htm)). You also can seek an open burning variance from IDEM.

   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) on-site, although burying large quantities of such material can lead to subsidence problems.

2. 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.

   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 three to five 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

three to five 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.

3. The U.S. EPA and the U.S. 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/4267.htm (http://www.in.gov/idem/4267.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, then U.S. EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L or higher, then U.S. 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). 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).

4. With respect to asbestos removal, all facilities slated for renovation or demolition (except residential buildings that have four (4) 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.

   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 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. Billings will occur 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).

5. 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/idem/permits/guide/waste/leadabatement.html (http://www.in.gov/idem/permits/guide/waste/leadabatement.html).

6. 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 of 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)).

7. 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 (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.

8. For more information on air permits, visit http://www.in.gov/idem/4223.htm (http://www.in.gov/idem/4223.htm), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or oamprod at idem.in.gov.

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 Polychlorinated Biphenyls (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(http://www.in.gov/idem/4999.htm (http://www.in.gov/idem/4999.htm)).

FINAL REMARKS

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

Please note that this letter does not constitutes a permit, license, endorsement, or any other form of approval on the part of either the Indiana Department of Environmental Management or any other Indiana state agency.

Should you have any questions relating to the content or recommendations of this letter, or if you have additional questions about whether a more complete environmental review of your project should be conducted, please feel free to contact Steve Howell at (317) 232-8587, snhowell@idem.in.gov.

Signature(s) of the Applicant

I acknowledge that I am seeking grant monies, a bond issuance, or other public funding mechanism to cover some portion of the cost of the public works, infrastructure, or community development project as described herein, which I am working (possibly with others) to complete.

Project Description

This INDOT project is located along SR 9, approximately 7.27 miles north of US 6 in LaGrange County. Within the project area, SR 9 is a two-lane Minor Arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 2-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area. One driveway is located within the project limits. The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure has a length of approximately 54 feet. There is currently guardrail at the structure. The condition of the structure warrants improvements. As noted in the Culvert Inspection Report (2019), there are areas of honeycomb (a construction defect) with bad patching over the top on the box ceiling. Near the middle of the ceiling, a spall with exposed rebar is present. There are numerous cracks with heavy efflorescence in the northwest and southwest corners. The roof slab is failing at the far west end (severe spalling with exposed rebar). There is minor surface scaling to the box side walls. The west headwall has fallen off structure. The northwest and southwest wingwalls exhibit heavy deterioration (delamination, spalling, cracking) and cracks with efflorescence were noted on the southeast and northeast wingwalls. The preferred alternative involves replacement of the existing small structure with a larger small structure, and possibly revising the proposed typical section and embankment sideslopes so they are traversable; thus, eliminating the need for guardrail. The proposed structure length will be determined when it is known whether the project will revise the embankment slopes. The existing horizontal and vertical alignments of SR 9 at this location will be maintained. SR 9 will be designed based on the posted speed limit of 55 mph. Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section consists of two 12-foot lanes with 4-foot paved shoulders where there is guardrail (assuming guardrail is maintained at the site). Existing drainage patterns will be perpetuated. The project’s right of way needs have not yet been determined; however, if land is acquired for new right of way, it is

anticipated that less than 0.5 acre will be acquired. It is anticipated that SR 9 will be closed during construction. The detour route would likely use US 6, SR 3 and US 20. Access to properties within the project limits will be maintained during construction.

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

Dated Signature of the Public Owner Contact/Responsible Elected Official Alex J. Zembala

Alex Zembala, INDOT Project Manager

Dated Signature of the Project Planner/Consultant Contact Person Jason Stone 4-6-2022

Jason A. Stone

Organization and Project Information

Project ID: 2161-2802-50
Des. ID: 2002233
Project Title: SR 9 Small Structure Project
Name of Organization: DLZ Indiana, LLC
Requested by: Jason Stone

Environmental Assessment Report

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

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

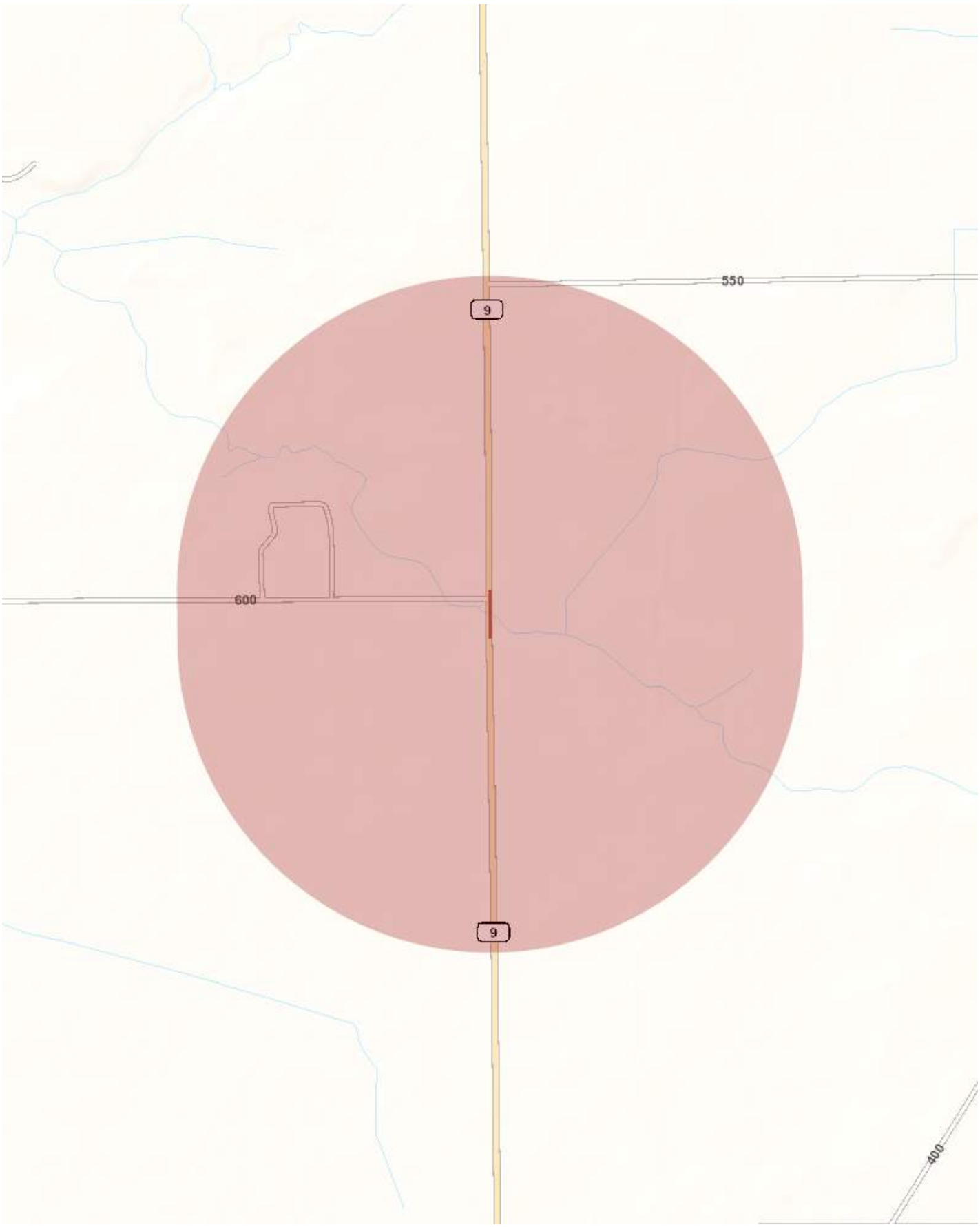
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This information was furnished by Indiana Geological Survey
Address: 1001 E. 10th St., Bloomington, IN 47405
Email: IGSEnvir@indiana.edu
Phone: 812 855-7428

Date: September 01, 2021

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Jason Stone

From: Courtade, Julian <JCourtade@indot.IN.gov>
Sent: Friday, September 3, 2021 11:04 AM
To: Jason Stone
Subject: RE: INDOT, SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County, Des No 2002233 - Early Coordination

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Jason –

I reviewed the Early Coordination Letter and found no issues with any surrounding airspace or public-use airports. This is due to the project meeting the required glideslope criteria from the nearest public-use facility according to 14 CFR Part 77 – Safe, efficient use, and preservation of the navigable airspace.

If any object will exceed 200 ft in height regardless of location, the object will need to be airspaced with the FAA 45 days prior to construction through the OEAAA portal below.

https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp

Please let me know if you have any questions!

Thanks,

Julian L. Courtade
Chief Airport Inspector
100 North Senate Ave, N758-MM
Indianapolis, IN 46204
Cell: (317) 954-7385
Email: jcourtade@indot.in.gov

From: Jason Stone <jstone@dlz.com>
Sent: Wednesday, September 1, 2021 1:33 PM
To: DNR Environmental Review <environmentalreview@dnr.IN.gov>; Courtade, Julian <JCourtade@indot.IN.gov>; Neilson, Rick - NRCS, Indianapolis, IN <rick.neilson@in.usda.gov>; 'Mwro_Compliance@nps.gov' <Mwro_Compliance@nps.gov>; erik.r.sandstedt@hud.gov; 'Allerding, Paul H CIV USARMY CELRE (US)' <paul.h.allerding@usace.army.mil>; 'Charles.A.Uhlarik@usace.army.mil' <Charles.A.Uhlarik@usace.army.mil>; 'bparish@lagrangecounty.org' <bparish@lagrangecounty.org>; planning@lagrangecounty.org; tmartin@lagrangecounty.org; lmiller@lagrangecounty.org; 'dkratz@lagrangecounty.org' <dkratz@lagrangecounty.org>; zholsinger@lagrangecounty.org; jcampos@lagrangesd.com; johnsontwpfiredept@yahoo.com; 'info@lakelandlakers.net' <info@lakelandlakers.net>
Cc: Witt, Matthew <MWitt@indot.IN.gov>; Novak, Karen <KNovak@indot.IN.gov>; Carmany-George, Karstin (FHWA)

United States Department of Agriculture

Natural Resources Conservation Service
Indiana State Office
6013 Lakeside Boulevard
Indianapolis, IN 46278
317-290-3200

September 15, 2021

Jason A. Stone
DLZ
2211 East Jefferson Boulevard
South Bend, Indiana 46615

Dear Mr. Stone:

The proposed project to make small structure improvements along State Road 9 in LaGrange County, Indiana, (Des No 2002233), as referred to in your letter received September 1, 2021 will cause a conversion of prime farmland.

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

If you need additional information, please contact John Allen at 317-295-5859.

Sincerely,

RICHARD NEILSON
Digitally signed by RICHARD NEILSON
Date: 2021.09.16 06:50:19 -04'00'

RICK NEILSON
State Soil Scientist

Enclosures

USDA is an equal opportunity provider, employer and lender.

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*		Date Of Land Evaluation Request	
Name of Project DES2002233_ SR 9 Small Structure		Federal Agency Involved	
Proposed Land Use		County and State Lagrange County, Indiana	
PART II *(To be completed by NRCS)*		Date Request Received By NRCS 9/1/2021	Person Completing Form: JRA
Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑ NO ☐	Acres Irrigated 115214	Average Farm Size 91 ac
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 210989 % 85	Amount of Farmland As Defined in FPPA Acres: % 47	
Name of Land Evaluation System Used LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 9/15/2021	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	0.69			
B. Total Acres To Be Converted Indirectly	0			
C. Total Acres In Site	0.69			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	0.13			
B. Total Acres Statewide Important or Local Important Farmland	0.00			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<0.001			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	22			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	82			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	15			
2. Perimeter In Non-urban Use	(10)	10			
3. Percent Of Site Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	10			
6. Distance To Urban Support Services	(15)	10			
7. Size Of Present Farm Unit Compared To Average	(10)	10			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	5			
10. On-Farm Investments	(20)	0			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL SITE ASSESSMENT POINTS	160	60	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	82	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	60	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	142	0	0	0

Site Selected: A	Date Of Selection March 1, 2023	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

Since this project received a total point value of less than 160 points, this site will receive no further consideration for farmland protection. No other alternatives other than those already discussed in this document will be considered without a re-evaluation of the project's potential impacts upon farmland.

Name of Federal agency representative completing this form: Jason A. Stone / DLZ Indiana, LLC	Date: 3/1/2023

(See Instructions on reverse side) **Form AD-1006 (03-02)**

From: Michael Kummeth <mkummeth@dlz.com>
Sent: Friday, September 17, 2021 12:22:23 PM
To: Jason Stone <jstone@dlz.com>; Tharon Morgan <tmorgan@lagrangecounty.org>
Cc: Pedro Trana, P.E. <ptrana@dlz.com>
Subject: RE: INDOT, SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County, Des No 2002233 - Early Coordination

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Our original intent is to leave CR 600S open to traffic but there would be no access to or from the south during construction. This is subject to change until the scope of work is finalized.

From: Jason Stone [mailto:jstone@dlz.com]
Sent: Friday, September 17, 2021 9:21 AM
To: Tharon Morgan <tmorgan@lagrangecounty.org>
Cc: Witt, Matthew <MWitt@indot.IN.gov>; Pedro Trana, P.E. <ptrana@dlz.com>; Michael Kummeth <mkummeth@dlz.com>
Subject: RE: INDOT, SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County, Des No 2002233 - Early Coordination

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Thanks for the response.

I have cc'd our project manager to make him aware of your questions. We'll provide responses soon.

From: Tharon Morgan <tmorgan@lagrangecounty.org>
Sent: Friday, September 17, 2021 9:08 AM
To: Jason Stone <jstone@dlz.com>
Cc: Witt, Matthew <MWitt@indot.IN.gov>
Subject: RE: INDOT, SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County, Des No 2002233 - Early Coordination

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Good Morning,

I have looked at your documents and have a couple topics of possible concern.

1. Is the intersection of CR 60 S going to remain open or should we look into a detour route on our end during construction?
2. If the guardrail is going to be removed and the side slopes improved, may we suggest factoring in 6' shoulders? As you may or may not know, our Amish population is steadily moving East in our County and are now traveling along SR 9. I think that factoring in 6' shoulders would be beneficial even in the long haul.

Tharon B. Morgan, PE
LaGrange County Engineer
300 E. Factory Street, LaGrange, IN 46761
Office: 260.499.6353
Direct: 260.499.6379
tmorgan@lagrangecounty.org

Jason Stone

From: Papadakis, Arianna <APapadakis@indot.IN.gov>
Sent: Monday, September 27, 2021 2:28 PM
To: Novak, Karen
Cc: Jason Stone
Subject: RE: INDOT, SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County, Des No 2002233 - Early Coordination

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Good morning,

I have reviewed the enclosed early coordination packet and I do not have any environmental concerns regarding the project (Des. No. 2002233, small structure project) at this time. Therefore, I will not be providing a comment letter.

Thank you,

Arianna Papadakis
Environmental Manager II
Fort Wayne District
5333 Hatfield Road
Fort Wayne, IN 46808
Phone: (260) 969-8262
Email: APapadakis@indot.in.gov

From: Novak, Karen <KNovak@indot.IN.gov>
Sent: Thursday, September 23, 2021 10:17 AM
To: Papadakis, Arianna <APapadakis@indot.IN.gov>
Cc: Jason Stone <jstone@dlz.com>
Subject: FW: INDOT, SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County, Des No 2002233 - Early Coordination

Arianna,

This project has been assigned to you. Please review and respond to ECL within 30 days.

Thank You,

Karen M. Novak
Sr Environmental Mgr Supervisor
5333 Hatfield Road
Fort Wayne, IN 46808
Office: (260) 969-8302
Email: knovak@indot.in.gov

THIS IS NOT A PERMIT

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

DNR #: ER-24024 **Request Received:** September 1, 2021

Requestor: DLZ Indiana, LLC
Jason A Stone
2211 East Jefferson Boulevard
South Bend, IN 46615-2607

Project: SR 9 small structure (CV 009-044-181.03) replacement, about 7.27 miles north of US 6; Des #2002233, DLZ #2161-2802-50

County/Site info: LaGrange

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: This proposal will require the formal approval of our agency for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the bridge exemption criteria.

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

The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. When determining an appropriate bridge or culvert size, consider whether or not wildlife/vehicle collisions are a concern at the crossing site. If feasible, a larger bridge or culvert opening can allow for the movement of wildlife under the roadway in order to minimize wildlife/vehicle collisions.

Attachments: A - Bridge Exemption Criteria

2) Bank Stabilization:
Establishing vegetation along the banks is critical for stabilization and erosion control. In addition to vegetation, some other form of bank stabilization may be needed. While hard armoring alone (e.g. riprap or glacial stone) may be needed in certain instances, soft armoring and bioengineering techniques should be considered first. In many instances, one or more methods are necessary to increase the likelihood of vegetation establishment. Combining vegetation with most bank stabilization methods can provide additional bank protection and help reduce impacts upon fish and wildlife. Information about bioengineering techniques can be found at http://www.in.gov/legislative/iac/20120404-IR-312120154NRA.xml.pdf. Also, the following is a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: http://directives.sc.egov.usda.gov/17553.wba.

Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Riprap may be used only at the toe of the sideslopes up to the ordinary high water mark (OHWM). The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

3) Riparian Habitat:
We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at: http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf.

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

4) Wetland Habitat:
Due to the presence or potential presence of wetland habitat on site, we recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program and also the US Army Corps of Engineers (USACE) 404 program. Impacts to wetland habitat should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding.

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 within the project area using a mixture of grasses (excluding all varieties of tall fescue), sedges, wildflowers, shrubs, and trees native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.
2. Minimize and contain within the project limits inchannel disturbance and the clearing

Attachments: A - Bridge Exemption Criteria

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. Do not use broken concrete as riprap.
9. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
10. Minimize the movement of resuspended bottom sediment from the immediate project area.
11. Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway.
12. 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.
13. 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.
14. Do not excavate or place fill in any riparian wetland.

Contact Staff: Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer **Date:** September 30, 2021

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

Attachments: A - Bridge Exemption Criteria

DEPARTMENT OF THE ARMY
U. S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
477 MICHIGAN AVE.
DETROIT, MICHIGAN 48226-2550

September 28, 2021

Jason Stone
DLZ Indiana, LLC
2211 East Jefferson Blvd.
South Bend, IN 46615

Dear Mr. Stone:

This is in response to your letter of September 1, 2021, requesting comments on a proposed State Road (SR) 9 small structure project in LaGrange County, Indiana (Des. No. 2002233). The project site is 7.27 miles north of United States Highway 6, and approximately 100 feet south of County Road (CR) 600 South. An existing, dilapidated box culvert is proposed to be replaced with a larger structure. The design may include a longer structure with revised embankment side slopes to eliminate the need for guard rails. Roadway approach work may extend up to 200 feet north and south of the small structure location. The following information is provided in accordance with our responsibilities under our Regulatory and Civil Works Programs.

Your project may require a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. Any of the proposed work that occurs within a water of the United States or adjacent wetlands, will likely require prior authorization through our regulatory permit process. For further information on permit requirements and the application process, please contact the Michiana Section of our Regulatory Branch in South Bend, Indiana, at 574-232-1952.

There are no current plans under our Civil Works Program to develop waterways in the vicinity of your project; nor do we have any current or proposed flood risk management studies for the area described in your letter.

The project site is designated as an area of minimal flood hazard under the National Flood Insurance Program. The design should consider localized floodplain effects from changes to flow attributable to revised length and/or cross section of the new structure. We recommend that you coordinate with local officials and with the Indiana Department of Natural Resources regarding the applicability of a floodplain permit prior to construction. This coordination would help ensure compliance with local and state floodplain management regulations and acts, such as the Indiana Flood Control Act (IC 13-2-22). If you obtain information that any part of your project would impact the floodplain, you should consider other alternatives that, to the extent possible, avoid or minimize adverse impacts associated with use of the floodplain.

We appreciate the opportunity to comment on the proposed SR 9 small structure project, located near CR 600 South in LaGrange County, Indiana. Questions regarding our Regulatory Program should be directed to Mr. Don Reinke, Regulatory Branch, at 313-226-6812. Any other questions may be directed to Mr. Paul Allerding of my staff at 313-226-7590 or me at 313-226-2476.

Sincerely,

Charles A. Uhlarik

Charles A. Uhlarik
Chief, Environmental Analysis Section

Copies furnished:

Don Reinke, Corps, Regulatory Branch, Detroit MI
Aaron Damrill, Corps, Michiana Regulatory Section, South Bend IN
Garrett D. Ray, Corps, Floodplain Management Services, Detroit MI

United States Department of the Interior

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

In Reply Refer To: 04/22/2026 16:06:25 UTC
Project Code: 2023-0063780
Project Name: INDOT, SR 9 Small Structure Project, Des No 2002233

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

To Whom It May Concern:

The purpose of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Act.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. You can complete this verification formally or informally or request an updated list by visiting the IPaC website at regular intervals during project planning and implementation.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at Midwest Section 7 Technical Assistance | U.S. Fish & Wildlife Service. This website contains step-by-step instructions to help you determine if your project will have an adverse effect on listed species and to lead you through the Section 7 process.?

We appreciate your concern for threatened and endangered species. Federal agencies should include conservation of threatened and endangered species into their project planning to further

the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Other Trust Resources and Activities?

Bald and Golden Eagles?- Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a?permit. A?nest take permit?is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.?

Migratory Birds?- The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of?recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.?

Communication Towers?- Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed? voluntary guidelines for minimizing impacts.?

Transmission Lines?- Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please?refer to?guidelines? developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.?

Wind Energy?- To minimize impacts to migratory birds and bats, wind energy projects should follow the Service’s?Wind Energy Guidelines. In addition, please refer to the Service's?Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

Attachment(s):

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

OFFICIAL SPECIES LIST

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

This species list is provided by:

Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

PROJECT SUMMARY

Project Code: 2023-0063780
Project Name: INDOT, SR 9 Small Structure Project, Des No 2002233
Project Type: Culvert Repair/Replacement/Maintenance
Project Description: The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a small structure project in LaGrange County. This project is located along SR 9, approximately 7.27 miles north of US 6 in LaGrange County. Within the project area, SR 9 is a two-lane Minor Arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 3-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area.

The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure carries an unnamed tributary to Dove Creek (also known as Unnamed Tributary to Martin lake). The structure has a length of approximately 54 feet. There is currently guardrail at the structure.

The preferred alternative involves open cut of the existing roadway pavement and excavation to allow removal of the existing small structure and installation of a 9-foot span by 6-foot rise RCB culvert. The proposed structure will be 132 feet long and will be skewed 17 degrees to the right to align the inlet and outlet of the structure with the existing stream. The structure will be extended for the side slope to reach the flowline of the stream to eliminate the need for wingwalls and headwalls. The top of the structure will be kept buried within the 24-foot clear zone to eliminate the need for guardrail. The structure will be “sumped” 6-inches to comply with hydraulic requirements. Revetment riprap over geotextile will be placed at the outlet of the structure for scour protection.

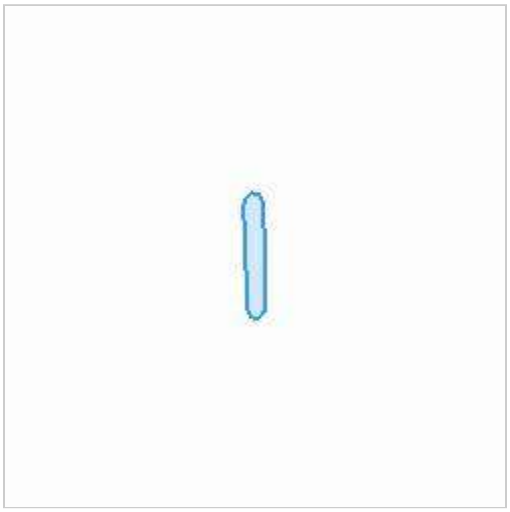
Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section consists of two 12-foot lanes with 4-foot paved shoulders where there is guardrail (assuming guardrail is maintained at the site). Pavement milling will increase noise/vibration above existing background levels. Existing drainage patterns will be perpetuated.

The project requires acquisition of approximately 0.62 acre of new permanent right of way. No temporary right of way is required. SR 9 will be closed during construction. The detour route would use US 6, SR 3 and US 20.

INDOT checked the USFWS database for occurrences of bat species of concern within 0.5 of the project on March 12, 2026 and no such occurrences were found. The small structure was inspected on September 16, 2025 by DLZ. No evidence of bats or use by bats was observed during this inspection. Suitable summer habitat is present within the project area. Approximately 0.020 acre of tree removal is required, which will occur during the inactive season. The dominant species to be removed are black walnut (Juglans nigra) and American elm (Ulmus americana). All work and tree removal will take place within 100 feet of the roadway. Construction is anticipated to begin by October 15, 2027 and end by November 30, 2028. The project will not involve temporary lighting or installation or replacement of permanent lighting. Mitigation is not anticipated to be required.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.5547564,-85.3667119,14z



Counties: LaGrange County, Indiana

ENDANGERED SPECIES ACT SPECIES

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

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], 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.

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

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: Eastern Migratory NEP - U.S.A. (AL, AR, FL, GA, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, OH, SC, TN, VA, WI, WV) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

REPTILES

NAME	STATUS
Eastern Massasauga (=rattlesnake) *Sistrurus catenatus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2202	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

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

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

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project

activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

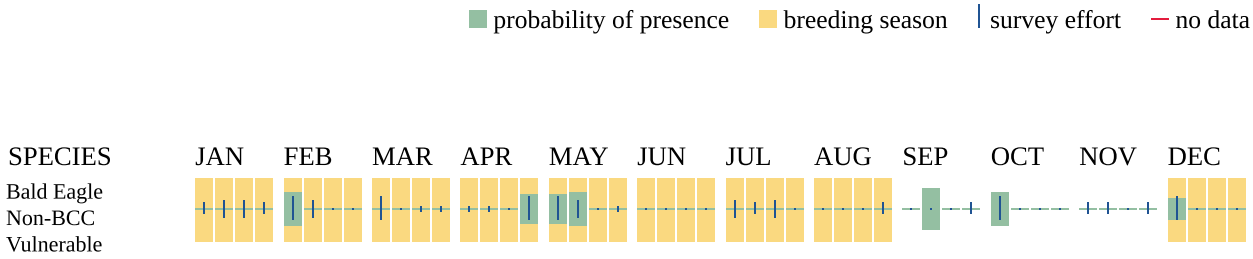
Probability of Presence (■)

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

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

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

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Black Tern *Chlidonias niger surinamenisis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Cerulean Warbler *Setophaga cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 22 to Jul 20
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Grasshopper Sparrow *Ammodramus savannarum perpallidus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere

NAME	BREEDING SEASON
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

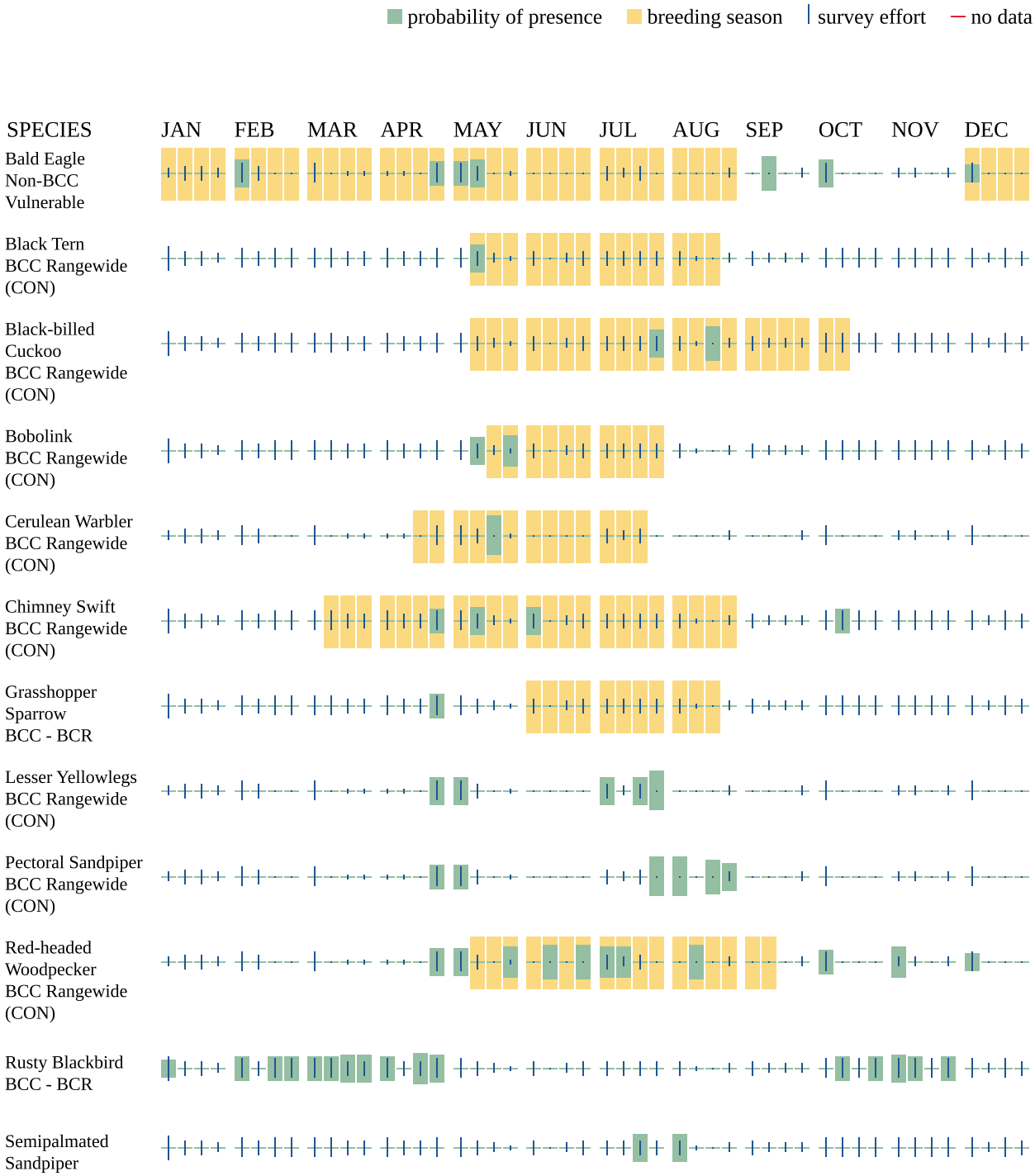
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

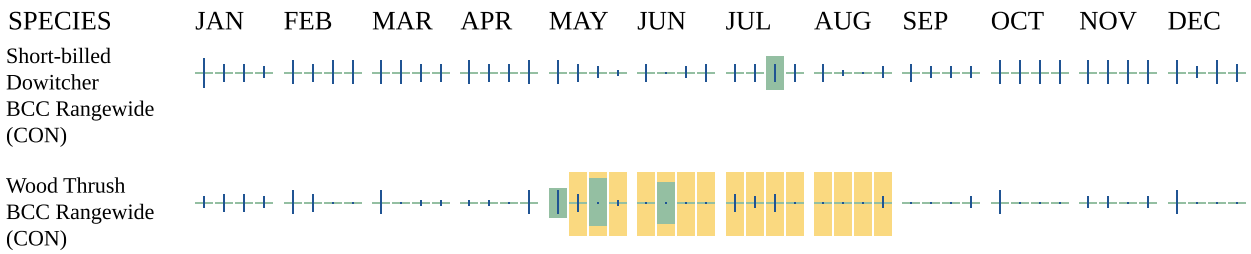
Survey Effort (|)

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.



BCC - BCR



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Federal Highway Administration
Name: Jason Stone
Address: 2211 E Jefferson Blvd
City: South Bend
State: IN
Zip: 46615
Email jstone@dlz.com
Phone: 5742451674

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

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

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)

United States Department of the Interior

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

In Reply Refer To: 04/22/2026 17:30:33 UTC
Project code: 2023-0063780
Project Name: INDOT, SR 9 Small Structure Project, Des No 2002233

Subject: Not Likely to Adversely Affect Concurrence verification letter for the 'INDOT, SR 9 Small Structure Project, Des No 2002233' project under the December 13, 2024, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat, Northern Long-eared Bat, and Tricolored Bat.

To whom it may concern:

This letter records the determination of effects to federally listed (or proposed) bat species anticipated to result from the INDOT, SR 9 Small Structure Project, Des No 2002233 (the Project). This determination is based upon information you entered into the assisted determination key (Dkey) associated with the above referenced Programmatic Biological Opinion/Conference Opinion (PBO/PCO) in the U.S. Fish and Wildlife Service's (Service) Information for Planning and Consultation (IPaC) system on the date listed above to verify that the Project may rely on the concurrence provided in the PBO/PCO to satisfy requirements under section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (16 USC 1536), as amended.

Ensuring Accurate Determinations When Using IPaC:

The Service developed the IPaC system and this Dkey in accordance with the ESA and based on the PBO/PCO. All information submitted by the project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in the Dkey invalidates this letter. Answers to certain questions in the Dkey commit the project proponent to implementation of conservation measures that must be followed for the ESA determinations to remain valid. Carefully review this letter, your ESA requirements are <u>NOT</u> yet complete.

Determinations:

Based on the information you provided (Project Description shown below), you have determined that the Project is within the scope and adheres to the criteria of the PBO/PCO, including the

adoption of applicable avoidance and minimization measures. Based on your IPaC submission and the PBO/PCO, the Project is consistent with the following effect determinations:

Species	Listing Status	Determination
Indiana Bat (*Myotis sodalis*)	Endangered	NLAA

The tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can confer under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a no effect or not likely to adversely affect (NLAA) determination from the key to confirm that the determination is still accurate.

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

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

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

If your initial bridge, culvert, or structure assessment failed to detect Indiana bat, northern long-eared bat, or tricolored bat use or occupancy, yet bats are later detected prior to, or during construction, promptly notify the local Service Field Office within 2 working days of the discovery. In addition, please document whether incidental take occurred, and if so, the type (i.e. kill or harm) and amount (i.e. number of individuals) and submit documentation to the local Service Field Office within 5 working days from the completion of the bridge, culvert, or structure construction (use Appendix E - Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form in the User's Guide). In these instances, potential incidental take of Indiana bats, northern long-eared bats, or tricolored bats may be exempted provided that the take is reported to the Service. In these instances, potential incidental take of Indiana bats, northern long-eared bats, or tricolored bats may be exempted provided that the take is reported to the Service.

If the Project may affect any other federally listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Field Office is required for those species/designated critical habitat. If the Project 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 advise the lead Federal action agency to contact this Service Field Office

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

- Eastern Massasauga (=rattlesnake) *Sistrurus catenatus* Threatened
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

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

NAME

INDOT, SR 9 Small Structure Project, Des No 2002233

DESCRIPTION

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a small structure project in LaGrange County. This project is located along SR 9, approximately 7.27 miles north of US 6 in LaGrange County. Within the project area, SR 9 is a two-lane Minor Arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 3-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area.

The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure carries an unnamed tributary to Dove Creek (also known as Unnamed Tributary to Martin lake). The structure has a length of approximately 54 feet. There is currently guardrail at the structure.

The preferred alternative involves open cut of the existing roadway pavement and excavation to allow removal of the existing small structure and installation of a 9-foot span by 6-foot rise RCB culvert. The proposed structure will be 132 feet long and will be skewed 17 degrees to the right to align the inlet and outlet of the structure with the existing stream. The structure will be extended for the side slope to reach the flowline of the stream to eliminate the need for wingwalls and headwalls. The top of the structure will be kept buried within the 24-foot clear zone to eliminate the need for guardrail. The structure will be “sumped” 6-inches to comply with hydraulic requirements. Revetment riprap over geotextile will be placed at the outlet of the structure for scour protection.

Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section consists of two 12-foot lanes with 4-foot paved shoulders where there is guardrail (assuming guardrail is maintained at the site). Pavement milling will increase noise/vibration above existing background levels. Existing drainage patterns will be perpetuated.

The project requires acquisition of approximately 0.62 acre of new permanent right of way. No temporary right of way is required. SR 9 will be closed during construction. The detour route would use US 6, SR 3 and US 20.

INDOT checked the USFWS database for occurrences of bat species of concern within 0.5 of the project on March 12, 2026 and no such occurrences were found. The small structure was inspected on September 16, 2025 by DLZ. No evidence of bats or use by bats was observed during this inspection. Suitable summer habitat is present within the project area. Approximately 0.020 acre of tree removal is required, which will occur during the inactive season. The dominant species to be removed are black walnut (Juglans nigra) and American elm (Ulmus americana). All work and tree removal will take place within 100 feet of the roadway. Construction is anticipated to begin by October 15, 2027 and end by November 30, 2028. The project will not involve temporary lighting or installation or replacement of permanent lighting. Mitigation is not anticipated to be required.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.5547564,-85.3667119,14z



DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the Indiana bat, northern long-eared bat or tricolored 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 Programmatic Biological Opinion/Conference Opinion for Transportation Projects in the Range of the Indiana bat, northern long-eared bat, and tricolored bat, dated December 13, 2024.

QUALIFICATION INTERVIEW

1. Which Federal Agency is the lead federal agency the action?

   A) Federal Highway Administration (FHWA)

2. Does the Action Area intersect the species list area of the Indiana bat?

   Automatically answered
   Yes

3. Is the project within 0.5 miles radius of an entrance/opening to any known Indiana bat hibernaculum?

   No

4. [Semantic] Is any portion of the action area within a 0.5 mile radius of an entrance/opening to any known NLEB or TCB hibernacula?

   Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact the Field Office listed in the letterhead of this letter.

   Automatically answered
   No

5. Does the action area overlap with any state where bats may use talus or anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs for hibernation?

   Automatically answered
   Yes

6. Does the action area contain or occur within 0.5 miles of (1) talus or (2) anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs?

   No

7. Does your project's activities include raising the road profile above the tree canopy in documented habitat for the Indiana bat, NLEB, or TCB?

   Note: For the definition of documented habitat, refer to Appendix A: https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat

   No

8. Is your project located within a karst area?

   No

9. Will the project include bridge, culvert, or structure removal, replacement, and/or alteration activities?

   Note: For definitions of bridge, culvert, and structure, refer to Appendix A: https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat.

   Yes

10. Do your project's activities involve tree removal/trimming, temporary lighting, new/additional permanent lighting, ground disturbance, percussives that involves noise/vibration above existing background levels, vibrations, or slash pile burning?

    Yes

11. Is there suitable summer habitat for the Indiana bat, NLEB, or TCB within the project action area?

    Note: See the Service's summer survey guidance for current definitions of suitable habitat [https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html].

    Yes

12. Have P/A surveys for the Indiana bat, NLEB, or TCB been conducted within the suitable summer habitat located within your project action area? This refers to mist-netting or acoustic surveys, not bridge assessments.

    Note: See the Service's survey guidance https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html

    No

13. Will the project involve the removal or trimming of trees within suitable habitat for the Indiana bat, NLEB, or TCB?

    Yes

14. Will any tree removal or trimming occur during the bat pup season?

    Note: For more information about bat pup seasons please visit https://www.fws.gov/sites/default/files/documents/2024-10/2024_usfws_rangewide_ibat-nleb_survey_guidelines.pdf

    No

15. Will the removal or trimming of trees occur **within documented habitat** for the Indiana bat, NLEB, or TCB?

    Note: For the definition of documented habitat, refer to Appendix A: https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat

    No

16. Will all tree removal or trimming occur within 100 feet of the road or rail surface?

    Yes

17. Does your project include activities involving the temporary or permanent exclusion of Indiana bats, NLEBs, or TCBs from a bridge/culvert or structure that is occupied by a large number of covered bats (>5)?

    Note: exclusion is conducted to deny bats' entry or reentry into a bridge/culvert or structure. To be effective and to avoid harming bats, it should be done according to established standards. Coordinate with the local Service Field Office for additional assistance.

    No

18. Does your project involve the use of temporary lighting within Indiana bat, NLEB, or TCB suitable habitat?

    Note: For the definition of lighting, refer to Appendix A: https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat

    No

19. Will the project substantially increase baseline light conditions via the use of permanent lighting (replacement or new/additional) in suitable habitat.

    No

20. Will your project include percussive activities?

    Note: Refer to Stressor #2 Noise/Vibration on page 109 of the PBO/PCO.

    Yes

21. Are the percussive activities only related to tree removal/trimming or bridge/culvert structural work?

    Yes

22. Will the project include **bridge** removal, replacement, and/or alteration activities?

    No

23. Does the project include **culvert** removal, replacement, and/or alteration activities?

    Yes

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

    Yes

25. Does the culvert equal or exceed 23 feet (7.0 meters) in length?

    Yes

26. Are the interior dimensions of the culvert less than 4 ft in diameter/height?

    No

27. Has a Culvert Bat Assessment been conducted within the last 24 months to determine if the culvert is being used by the Indiana bat, NLEB, or TCB? If yes, upload assessment.

    Note: Refer to the Service's current survey guidance for acceptable assessment practices and validity timeframe of bridge/culvert and structure bat assessments: https://www.fws.gov/library/collections/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    Yes

    SUBMITTED DOCUMENTS

    - *StructureInspection_2002233.pdf https://ipac.ecosphere.fws.gov/project/SDBVLCMDDBE4XGJJGIKNUF5IRE/projectDocuments/177451142*

28. Please select one of the following results of the Culvert Bat Assessment:

    c) Did not detect any signs of Indiana bats, NLEBs, or TCBs roosting in/under the culvert (bats, guano, etc.)

29. Does the project include **structure** removal, replacement, and/or alteration activities?

    No

30. Will the project involve the removal or trimming of more than 20 acres of Indiana bat, NLEB, or TCB suitable habitat per 5-mile section of road/rail?

    No

31. Will the removal or trimming of trees occur within 0.5 miles of a known Indiana bat, NLEB, or TCB hibernaculum?

    No

32. Will the removal or trimming of these trees occur during the active season?

    Note: For the definition of active season, refer to Appendix A: https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat

    No

33. Will the removal or trimming of trees occur **beyond 100 feet** of the existing road/rail surfaces?

    No

34. Does the Action Area intersect the species list area of the Indiana bat?

    Automatically answered
    Yes

35. Does the Action Area intersect the species list area of the tricolored Bat (TCB)?

    Automatically answered
    No

PROJECT QUESTIONNAIRE

1. How many acres of trees are proposed for removal/trimming **outside of documented habitat** for the Indiana bat, NLEB, or TCB within 100 feet of the existing road/rail surfaces during the active season **(outside the pup season and not between Dec 15th-Feb 15th in Zone 1 of the NLEB and TCB YR active areas)** (LAA)?

   Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0

2. How many acres of trees are proposed for removal/trimming **outside of documented habitat** for the Indiana bat, NLEB, or TCB within 100 feet of the existing road/rail surfaces during the pup season **(trees must be <9 in DBH, and not between Dec 15th-Feb 15th in Zone 1 of the NLEB and TCB YR active areas)** (LAA)?

   Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0

3. How many acres of trees are proposed for removal/trimming **either outside or within documented habitat** for the Indiana bat, NLEB, or TCB between 100-300 feet of the existing road/rail surfaces during the active season **(outside the pup season, and not between Dec 15-Feb 15 in Zone 1 of the NLEB and TCB YR active areas)** (LAA)?

   Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0

4. How many acres of trees are proposed for removal/trimming **either outside or within documented habitat** for the Indiana bat, NLEB, or TCB beyond 300 feet of the existing road/rail surfaces during the active season **(outside the pup season, and not between Dec 15th-Feb 15th in Zone 1 of the NLEB and TCB YR active areas)** (LAA)?

   Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0

5. Please enter the date of the culvert assessment.

   September 16, 2025

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

GAMM1

Ensure all operators, employees, and contractors working in areas of Indiana bat, NLEB, or TCB suitable habitat are aware of all Transportation Agency environmental commitments, including all applicable AMMs.

TRTAMM1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal/trimming in excess of what is required to implement the project safely.

TRTAMM2
Ensure tree removal/trimming 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 removal/trimming to ensure contractors stay within clearing limits

TRTAMM3
Ensure tree removal/trimming is limited to the inactive season, occurs within 100 ft of the road/rail surface, and is outside of documented habitat for the Indiana bat, NLEB, and TCB

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

This key was last updated in IPaC on April 08, 2026. 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) and may affect the federally listed endangered Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), and/or federally proposed endangered tricolored bat (*Perimyotis subflavus*).

This decision key should only be used to verify project applicability with the Service's Programmatic Biological Opinion/Conference Opinion for Transportation Projects in the Range of the Indiana bat, northern long-eared bat, and tricolored bat, dated December 13, 2024. The programmatic consultation limited transportation activities that may affect the covered bat species and addresses situations that are both likely and not likely to adversely affect the covered bat species. This decision key will assist in identifying the effect of a specific project/activity and the applicability of the programmatic consultation. The programmatic consultation is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic consultation, or that may affect ESA-listed species other than the Indiana bat, northern long-eared bat, or tricolored bat, or their designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation
Name: Maya Hefty
Address: 5333 Hatfield Rd
City: Fort Wayne
State: IN
Zip: 46808
Email mhefty@indot.in.gov
Phone: 2609698302

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

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

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
June 8, 2026 - 11:30 AM	Des. No. 2002233	SR 9	LaGrange
Federal Structure ID	**Structure Coordinates** (latitude and longitude)	**Structure Height** (approximate)	**Structure Length**
CV 009-044-181.03	41.554751 -85.366716	6 feet	55 feet

Structure Type (check one)

Bridge Construction Style

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss (Side View)
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ⊙ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ⊙ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☒ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☒ Closed vegetation
☒ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☒ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☒ Riparian/wetland
☐ Residential-rural	☐ Mixed use
☒ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures**: soffits, rafters, attic areas	☐ Not present: No bat evidence observed	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Concrete surfaces (open roosting on concrete)	☐ Not present: No bat evidence observed	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck (Gap, Railing)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ All guiderails	☐ Not present: No bat evidence observed	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Jason A. Stone

Signature: Jason Stone

INDIANA DEPARTMENT OF TRANSPORTATION

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

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

April 3, 2023

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

Re: Early Coordination Request
SR 9 Small Structure Project, 7.27 Miles North of US 6 in LaGrange County
Indiana Department of Transportation
INDOT Des. No. 2002233 DLZ No. 2161-2802-50

Dear Ms. McCloskey:

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a small structure project in LaGrange County. This letter is part of the early coordination phase of the environmental review process. DLZ Indiana, LLC (DLZ) is under contract to advance environmental documentation for the referenced project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with these projects. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts.

This project is located along SR 9, approximately 7.27 miles north of US 6 in LaGrange County. Within the project area, SR 9 is a two-lane rural minor arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 2-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area. One driveway is located within the project limits.

The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure has a length of approximately 54 feet. There is currently guardrail at the structure.

The condition of the structure warrants improvements. As noted in the Culvert Inspection Report (2022), there are areas of honeycomb (a construction defect) with bad patching over the top on the box ceiling. Near the middle of the ceiling, a spall with exposed rebar is present. There are numerous cracks with heavy efflorescence in the northwest and southwest corners. The roof slab is failing at the far west end (severe spalling with exposed rebar). There is minor surface scaling to the box side walls. The west headwall has fallen off structure. The northwest and southwest wingwalls exhibit heavy deterioration (delamination, spalling, cracking) and cracks with efflorescence were noted on the southeast and northeast wingwalls.

The preferred alternative involves replacement of the existing small structure with a 9-foot wide by 6-foot tall box culvert that is 132 feet in length, and grading the embankment sideslopes so they are traversable; thus, eliminating the need for guardrail. The existing horizontal and vertical alignments of SR 9 at this location will be maintained.

INDIANA DEPARTMENT OF TRANSPORTATION

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

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

SR 9 will be designed based on the posted speed limit of 55 mph. Roadway approach work may extend along SR 9 up to 120 feet north and 175 feet south of the structure. The proposed typical section will consist of two 12-foot travel lanes, 3-foot paved shoulder widths with 2-foot aggregate shoulder widths, for a total width of 5-foot usable shoulders. Existing drainage patterns will be perpetuated. The project's right of way needs have not yet been determined; however, it is anticipated that more than 0.5 acre will be acquired. SR 9 will be closed during construction. The detour route will use US 6, SR 3 and US 20. Access to properties within the project limits will be maintained during construction. Land in agricultural and residential use and a church abut the project area.

The IPaC Official Species List generated on October 5, 2021 indicated that the Eastern massasauga rattlesnake (*Sistrurus catenatus*) may be present in this project area. All work will take place within 75 feet of the edge of pavement. The project will involve impacts to an unnamed tributary to Martin Lake and adjacent wetlands and upland areas. Construction activities that may affect the Eastern massasauga rattlesnake include installation of the proposed, longer culvert, grading of the roadway slopes, construction access and dewatering.

The project will adhere to INDOT standard specifications, including those pertaining to erosion and sedimentation control, clearing of vegetation, channel and in-stream work and revegetation of disturbed areas. Trees will not be removed during the active season (April 1 through September 30).

Because the project will involve impacts to habitat that may be utilized by the Eastern massasauga rattlesnake, a preliminary determination of "May Affect, Not Likely to Adversely Affect" has been made. Please provide a response indicating whether the USFWS concurs with this preliminary determination.

If you have any questions regarding this matter, please feel free to contact Jason A. Stone, DLZ Indiana, LLC, 2211 E. Jefferson Blvd., South Bend, Indiana 46615, Telephone - 574 245-1674, E-mail – jstone@dlz.com, or Alex Zembala, INDOT Project Manager, 5333 Hatfield Rd., Fort Wayne, Indiana 46808, Telephone – 260 969-8293, E-mail – azembala@indot.in.gov.

Thank you in advance for your input.

DLZ INDIANA, LLC

Jason A. Stone
Environmental Scientist

cc: MAK, DLZ file
emc: FHWA, INDOT Ft. Wayne District

Note: Graphics have been removed to avoid duplication.

United States Department of the Interior
Fish and Wildlife Service

Indiana Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

May 1, 2023

Mr. Jason A. Stone
DLZ Indiana, LLC
c/o Indiana Department of Transportation
100 North Senate Avenue, Room N758-ES
Indianapolis, Indiana 46304

Project No.: Des. 2002233
Project: SR 9 Small Structure Replacement
Location: LaGrange County

Dear Mr. Stone:

This responds to your letter dated April 3, 2023, requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (l6 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of l969, the Endangered Species Act of l973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The proposed project consists of the replacement of an existing box culvert with a slightly larger similar structure at the same location. The culvert carries an unnamed tributary of Martin Lake under SR 9 about 100 feet south of the intersection of County Road East 600 South. Additional right-of-way may be required in order to widen the highway footprint and grade the sideslopes so that guardrails are not needed.

ENDANGERED SPECIES

The proposed project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and the threatened eastern massasauga rattlesnake (*Sistrurus catenatus*); the candidate Monarch butterfly (*Danaus plexippus*) may be present. As a candidate species, the Monarch butterfly is not afforded legal

protection under the authorities of the Endangered Species Act and we have no specific comments/recommendations concerning this species at this time. If the Monarch is listed as either threatened or endangered prior to the construction of the project, it would need to be addressed in project planning. The impacts on the 2 bat species will be addressed through the Section 7 Range-wide Programmatic Consultation process.

Eastern massasauga are known within the watershed of Olin Lake/Oliver Lake, which are downstream of Martin Lake; they are also known at other locations downstream of Oliver Lake. However, they have not been reported within the vicinity of the SR 9 culvert. The proposed erosion control measures, particularly silt fences, can also serve as measures to keep massasauga and other small species out of the active construction area; the fences should be inspected daily to ensure that they are functioning as required. Animals found on the work side of the fencing should be moved to the non-work side. If massasuaga or other Indiana-listed species are found, a qualified biologist with Federal and State permits would need to be available to move the individuals. With these requirements in place, the USFWS concurs with the determination that the proposed project is not likely to adversely affect the eastern massasauga.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of l973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

We appreciate the opportunity to comment on this proposed project. For further discussion, please contact Elizabeth McCloskey at elizabeth_mccloskey@fws.gov.

Sincerely yours,

/s/ *Elizabeth S. McCloskey*

for Susa E. Cooper
Supervisor

Sent via email May 1, 2023; no hard copy to follow.

APPENDIX D

Section 106 Documentation

SECTION 1

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

Part 1: Project Information-Completed by Applicant (Consultant/PM/Project Sponsor/INDOT District Staff)*

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

Original Submission Date: August 2, 2022 **Amended Submission Date*:**

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

Submitted By (Provide Name and Firm/Organization): Jason A. Stone / DLZ Indiana, LLC

Project Designation Number: 2002233

Route Number: SR 9

Feature crossed (if applicable): Unnamed Tributary to Martin Lake

City/Township: Johnson Township **County:** LaGrange

Project Description:*

**Provide a full project description—include the same level of specificity and detail as expected in the NEPA document—in order to ensure a timely review by INDOT-CRO staff. For bridge and culvert projects, include specific details on the rehab or replacement including potential changes to width, height and materials. Be sure to include the specific elements listed below as applicable.*

This INDOT project is located along SR 9, approximately 7.27 miles north of US 6 in LaGrange County. Within the project area, SR 9 is a two-lane Minor Arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 2-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area. One driveway is located within the project limits.

The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure has a length of approximately 54 feet. There is currently guardrail at the structure.

The condition of the structure warrants improvements. As noted in the Culvert Inspection Report (2019), there are areas of honeycomb (a construction defect) with bad patching over the top on the box ceiling. Near the middle of the ceiling, a spall with exposed rebar is present. There are numerous cracks with heavy efflorescence in the northwest and southwest corners. The roof slab is failing at the far west end (severe spalling with exposed rebar). There is minor surface scaling to the box side walls. The west headwall has fallen off structure. The northwest and southwest wingwalls exhibit heavy deterioration (delamination, spalling, cracking) and cracks with efflorescence were noted on the southeast and northeast wingwalls.

The preferred alternative involves replacement of the existing small structure. The proposed typical section will consist of two 12-foot travel lanes, 3-foot paved shoulder widths with 2-foot aggregate shoulder widths, for a total

width of 5-foot usable shoulders. The proposed usable shoulder width is less than the 8-foot minimum for this roadway classification; therefore, a Level One design exception will be required. The existing guardrail at the structure will be removed. The proposed structure will be extended to eliminate the need for guardrail. The side slopes will be changed to 4:1 slopes. Flat bottom ditches (4-foot-wide) will be installed in all four quadrants. This will include realigning the existing ditches along the west side of the roadway and installing new ditches along the east side of the roadway. The backslopes for the proposed ditches will be 3:1. The lane and paved shoulder cross slopes will be constructed to 2% within the project limits. The aggregate shoulders will have a 6% cross slope.

The proposed structure is a 9-foot span by 6-foot rise concrete box culvert with a 6-inch sump. The proposed structure will be 132 feet long and will be skewed 17 degrees to align the inlet and outlet of the structure with the existing stream. The structure will be extended for the side slope to reach the flowline of the stream to eliminate the need for wingwalls and headwalls. The top of the structure will be kept buried within the 24-foot clear zone to eliminate the need for guardrail. Revetment riprap over geotextile will be placed at the outlet of the structure for scour protection.

Preliminary estimates indicate the project will require approximately 0.99 acre of permanent right-of-way, of which 0.30 acre is reacquisition of apparent existing right of way and 0.69 acre is new right-of-way beyond the apparent existing. It is anticipated that SR 9 will be closed during construction. The detour route would likely use US 6, SR 3 and US 20. Access to properties within the project limits will be maintained during construction.

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

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type: Unnamed Tributary to Martin Lake, Structure Number CV 009-044-181.03, NBI Number 93001902, concrete box culvert.

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

☐ **Yes** ☐ **No**

If yes, did the inventory determine the bridge eligible for or listed in the National Register of Historic Places? Please provide page # of entry in Historic Bridge Inventory.
☐ **Yes** ☐ **No**
Inventory Page #_____

Will there be right-of-way acquisition as part of this project?
☒ **Yes** ☐ **No**

If yes was checked above, please check all that apply:
☒ **Permanent** ☐ **Temporary** ☒ **Reacquisition**

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way: Documentation of the apparent existing right of way is not available. New permanent right of way is proposed in all four project quadrants, and totals to approximately 0.69 acre. In addition, 0.30 acre of apparent existing SR 9 right of way will be reacquired. No temporary right of way is proposed. New permanent right of way is needed for regrading of the roadway slopes and ditch banks, and channel work.

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

☐ **Yes** ☒ **No**

Archaeology (check one):

☐ **All proposed activities are presumed to occur in previously disturbed soils***

**INDOT-CRO will notify you if project area incudes undisturbed soils and requires an archaeological reconnaissance.*

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

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

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

**Include full category text, including any conditions. INDOT-CRO will finalize categories upon their review.*

Category B

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

Condition A (Archaeological Resources)

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

i. Work occurs in previously disturbed soils; *OR*

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

Condition B (Above-Ground Resources)

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

i. Work does not involve installation of a new culvert and other drainage structure, and there are no impacts to unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under one of the following conditions *(Condition a, Condition b, or Condition c must be satisfied)*:

a. The structure exhibits no wood, stone, or brick structures or parts therein; *OR*

b. The structure exhibits only modern wood, stone, or brick structures or parts therein; *OR*

c. The structure exhibits non-modern wood, stone, or brick structures or parts therein and the following conditions are met *(BOTH Condition 1 AND Condition 2 must be met):*

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

2. The structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and

approved by INDOT Cultural Resources Office.

ii. Work involves the installation of a new culvert and other drainage structures AND/OR there may be impacts to unusual features, including historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under the following conditions *(BOTH Condition a and Condition b must be satisfied)*:

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

b. The subject structure exhibits one of the characteristics described below *(Condition 1, Condition 2 or Condition 3 must be satisfied)*.

1. The structure exhibits no wood, stone, or brick structures or parts therein; *OR*

2. The structure exhibits only modern wood, stone, or brick structures or parts therein; *OR*

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

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

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

Part II: Completed by INDOT-CRO

Amendments will be shown in red font.

Information reviewed (please check all that apply):

General project location map ☐ USGS map ☐ Aerial photograph ☐ Soil survey data ☐

General project area photos ☐ Archaeology Reports ☒ Historic Property Reports ☐

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

Bridge inspection information/BIAS ☒ Historic Bridge Inventory Database ☒

SHAARD ☒ SHAARD GIS ☒ Streetview Imagery ☒ County GIS Data/Property Cards ☒

Other (please specify):

Snell, Samuel P.
2022 Phase Ia Archaeological Reconnaissance for the SR 9 Small Structure over the Unnamed Tributary to Martin Lake Replacement Project (INDOT Des. No. 2002233), 7.27 Miles North of US 6, Johnson Township, LaGrange County, Indiana. Project number 21-0021-5, Metric Environmental, Indianapolis.

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-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 LaGrange County. No listed resources are present within 0.10 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 *LaGrange County Interim Report* (2007) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD information was checked against the interim report hard-copy maps. The following IHSSI-surveyed resource is recorded within 0.10 mile of the project location: 1) #087-690-40062 (Farm; 6185 S. SR 9; rated 'contributing'). No other surveyed LaGrange County resources were recorded within 0.10 mile of the project location.

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 in the project area includes agricultural, residential and religious uses; the area immediately adjacent to the subject structure consists of agricultural fields and a small pond. Based on a review of available online street-view imagery, aerial photography and county GIS/property records data, three (3) above-ground resources are present within 0.10 mile of the project location. Of these three (3)—a number that includes the previously referenced IHSSI #087-690-40062---only one (1) is or will be 50 years of age by the project's proposed 2024 letting. The property, 5995 S. SR 9, is a c.-1890 single-story, frame house of indeterminate style. Over time, the resource has undergone physical alterations to the extent that it completely lacks material integrity. If surveyed for the IHSSI in 2022, the resource would not receive a 'contributing' rating.

According to BIAS, the subject structure (CV 009-044-181.03) is a four-sided concrete box culvert. Its year of construction is c.-1930. The structure was not surveyed for or included in the 2007 *LaGrange County Interim Report*. Due to its functional classification as a box culvert, the structure was not included in the 2009 INDOT-sponsored Historic Bridge Inventory (HBI). Based on an examination of BIAS reports and photographs, the structure exhibits no wood, stone, or brick structures or parts therein. In addition, there is no evidence to suggest that it possesses historical or engineering significance. No unusual features are present that may be impacted by the project.

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 SJCA, Inc. (Snell 2022). No archaeological sites were previously recorded within or adjacent to the project area.

A 1.9-acre survey area was examined through a combination of systematic shovel probing (n=6), pedestrian survey in an agricultural field, and visual inspection of disturbed areas. No archaeological sites were documented as a result of the survey and no further investigation is recommended (Snell 2022).

Therefore, there are no archaeological concerns provided 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 INDOT-CRO and the Division of Natural Resources-Division of Historic Preservation and Archaeology (DNR-DHPA) will be notified immediately.

INDOT-CRO staff reviewer(s): Susan Branigin and Matt Coon

INDOT Approval Date: September 28, 2022

Amendment Approval Date (if applicable):

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

Please attach the following to this form:

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

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

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

Graphics that accompanied this document have been removed. Similar graphics are presented in Appendix B.

APPENDIX E

Red Flag Investigation

INDIANA DEPARTMENT OF TRANSPORTATION

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

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

Eric Holcomb, Governor
Michael Smith,
Commissioner

Date: March 15, 2022

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

From: DLZ Indiana, LLC
2211 East Jefferson Boulevard
South Bend, IN 46615

Re: RED FLAG INVESTIGATION
DES #2002233, State Project
Project Description: Small Structure Replacement
State Road 9, Approximately 7.27 Miles North of US 6
LaGrange County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The project is for the replacement of the existing small structure, a 54-foot long, 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover, with a larger small structure. In addition to replacement of the existing structure, revisions may be made to the proposed roadway typical section and embankment side slopes so they are traversable, thus eliminating the need for guardrail. The proposed structure length will be determined when it is known whether the project will revise the embankment slopes. The existing horizontal and vertical alignments of SR 9 will be maintained. Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section will consist of two 12-foot lanes with 4-foot paved shoulders where there is guardrail (assuming guardrail is maintained at the site.) The existing drainage patterns will be perpetuated.

Bridge and/or Culvert Project: Yes ☒ No ☐ Structure # CV 009-044-181.03

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 <0.5 Permanent ☒ # Acres <0.5, Not Applicable ☐

Type and proposed depth of excavation: Maximum depth of excavation is not expected to exceed 14 feet.

Maintenance of traffic: Road closure with detour.

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

State Project: ☒ LPA: ☐

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

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

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

Explanation:

Religious Facilities

One (1) religious facility is located within the 0.5 mile search radius. Although mapped on the GIS layer as adjacent to the northeast corner of the project area, Five Corners Baptist Church is actually located adjacent to the project area at the northwest corner of the State Road 9 and County Road E600S intersection. Coordination with Five Corners Baptist Church will occur.

Pipelines

One (1) pipeline segment is located within the 0.5 mile search radius. The segment, belonging to the Northern Indiana Public Service Company (NIPSCO), is located approximately 0.08 mile west of the project area. No impact is expected.

Railroads

One (1) railroad segment is located within the 0.5 mile search radius. The inactive segment, belonging to the Norfolk Southern Railroad, is located approximately 0.26 mile east of the project area. No impact is expected.

Trails

One (1) trail segment is located within the 0.5 mile search radius. The segment, of the Central LaGrange N/S abandoned rail corridor trail, is located approximately 0.26 mile east of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	**N/A**	Canal Routes - Historic	**1**
Karst Springs	**N/A**	NWI - Wetlands	**22**
Canal Structures – Historic	**N/A**	Lakes	**15**
NPS NRI Listed	**N/A**	Floodplain - DFIRM	**N/A**
NWI-Lines	**N/A**	Cave Entrance Density	**N/A**
IDEM 303d Listed Streams and Lakes (Impaired)	**N/A**	Sinkhole Areas	**N/A**
Rivers and Streams	**12**	Sinking-Stream Basins	**N/A**

Explanation:

Rivers and Streams
Twelve (12) stream segments are located within the 0.5 mile search radius. One (1) segment is located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting will occur.

NWI - Wetlands
Twenty-two (22) NWI wetlands are located within the 0.5 mile search radius. Two (2) wetlands are located adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting will occur.

Lakes
Fifteen (15) lakes are located within the 0.5 mile search radius. The nearest is located approximately 0.13 mile west of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Explanation:

No mining or mineral exploration resources were identified within the 0.5 mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	**N/A**	Manufactured Gas Plant Sites	**N/A**
RCRA Generator/ TSD	**N/A**	Open Dump Waste Sites	**N/A**
RCRA Corrective Action Sites	**N/A**	Restricted Waste Sites	**N/A**
State Cleanup Sites	**N/A**	Waste Transfer Stations	**N/A**
Septage Waste Sites	**N/A**	Tire Waste Sites	**N/A**
Underground Storage Tank (UST) Sites	**N/A**	Confined Feeding Operations (CFO)	**N/A**
Voluntary Remediation Program	**N/A**	Brownfields	**N/A**
Construction Demolition Waste	**N/A**	Institutional Controls	**N/A**
Solid Waste Landfill	**N/A**	NPDES Facilities	**N/A**
Infectious/Medical Waste Sites	**N/A**	NPDES Pipe Locations	**N/A**
Leaking Underground Storage (LUST) Sites	**N/A**	Notice of Contamination Sites	**N/A**

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

Explanation:

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

ECOLOGICAL INFORMATION SUMMARY

The LaGrange County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities are provided at https://www.in.gov/dnr/naturepreserves/files/np_lagrange.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 agricultural fields. The October 26, 2020 inspection report for Culvert #009-044-181.03 states that no evidence of bats was seen or heard in the culvert. The range-wide programmatic consultation for the Indiana Bat and the Northern Long-eared Bat will be completed according to the most recent "Using 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:

Religious Facilities: One (1) religious facility is located adjacent to the project area. Coordination with Five Corners Baptist Church will occur.

WATER RESOURCES:

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

- One (1) stream segment, an unnamed tributary of Dove Creek, flows through the project area.
- Two (2) wetlands are located adjacent to the project area.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION:

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

INDOT ESD concurrence: Nicole Fohey-Breting Digitally signed by Nicole Fohey-Breting Date: 2022.03.15 11:12:13 -04'00' (Signature)

Prepared by:
Bradley W. Smith
Survey Mapping Assistant
DLZ Indiana, LLC

Graphics:

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

SITE LOCATION: YES

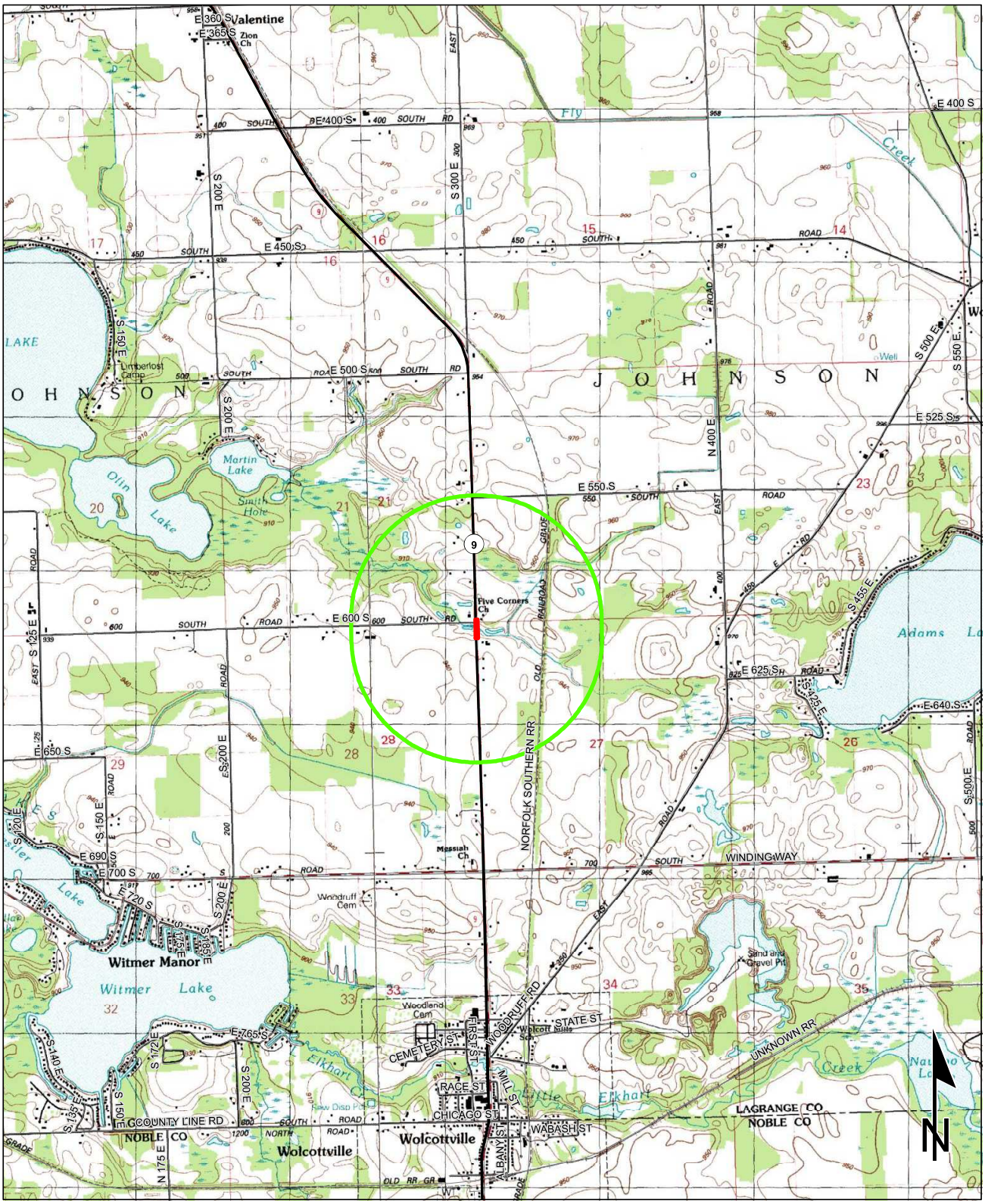
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

Red Flag Investigation - Site Location
SR 9, Approximately 7.27 Miles North of US 6
Des. No.2002233, Small Structure Replacement
LaGrange County, Indiana



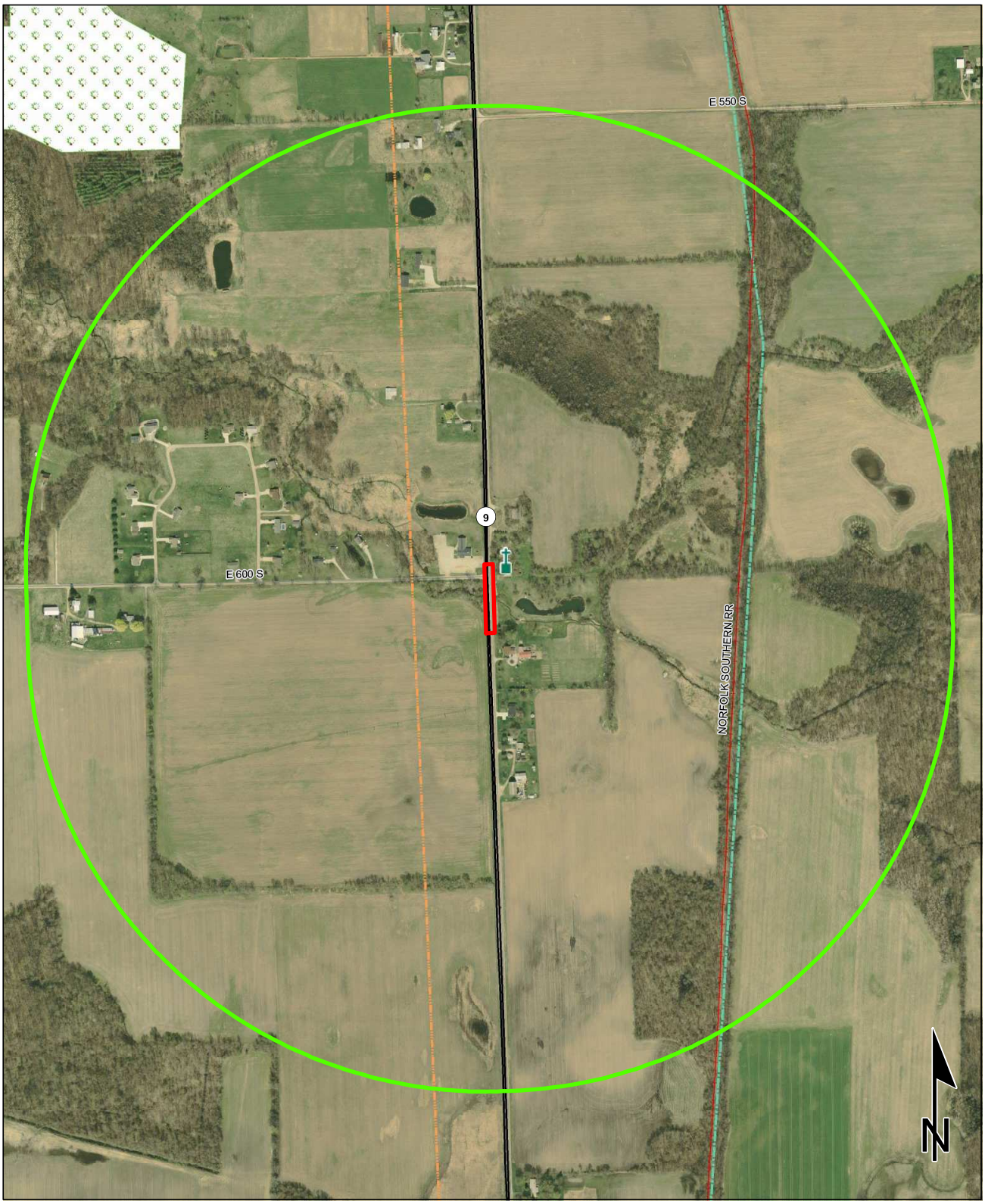
0.5 0.25 0 0.5 Miles

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

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

WOLCOTTVILLE QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Infrastructure
SR 9, Approximately 7.27 Miles North of US 6
Des. No.2002233, Small Structure Replacement
LaGrange County, Indiana



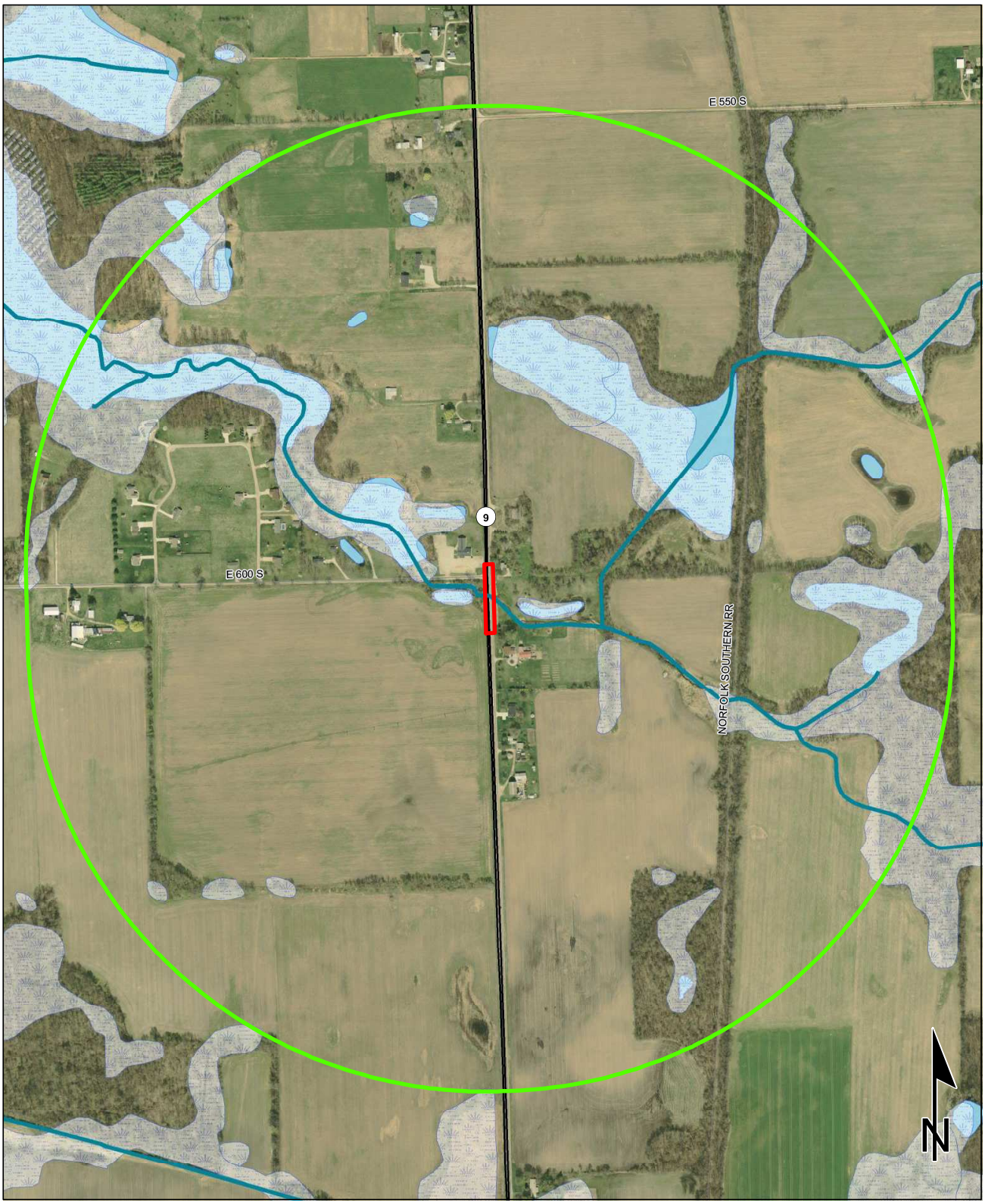
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Sources:
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

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

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

Red Flag Investigation - Water Resources
SR 9, Approximately 7.27 Miles North of US 6
Des. No.2002233, Small Structure Replacement
LaGrange County, Indiana



0.1 0.05 0 0.1 Miles

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

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

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

APPENDIX F

Water Resources

Approved 8.12.22

WATERS REPORT

SR 9 in LaGrange County, Indiana
Small Structure Replacement over UNT to Martin Lake
7.27 Miles North of US 6
Des. No.: 2002233
Asset ID No.: 93001902
Structure No.: CV 009-044-181.03

Prepared By:

DLZ Indiana, LLC
2211 E. Jefferson Blvd.
South Bend, IN 46615

August 2, 2022

Waters Report
SR 9 in LaGrange County, Indiana
Small Structure Replacement over UNT to Martin Lake
7.27 Miles North of US 6
INDOT Des. No.: 2002233
Asset ID No.: 93001902
Structure No.: CV 009-044-181.03

Prepared by: Dan Stevens, Environmental Scientist
Contact Information: dstevens@dlz.com, 574-236-4400
DLZ Indiana, LLC
Completed Date: August 2, 2022

Date of Field Reconnaissance: September 16, 2021

Location:
Sections 21, 22, 27 and 28, Township 36N, Range 10E
Wolcottville, Indiana, Quadrangle
LaGrange County, Indiana
Latitude: 41.554751°, Longitude: -85.366716°

Project Description:
This SR 9 small structure replacement project (Des. No.: 2002233) is located along SR 9, approximately 7.27 miles north of US 6 (See Figure 1). The project is also located 100 feet south of CR 600S. Within the project area, SR 9 is a two-lane Minor Arterial roadway with an existing roadway typical section consisting of two 12-foot lanes with 2-foot paved shoulders and additional 2-foot aggregate shoulders beyond the paved shoulder. Roadway drainage is via sheet flow. The existing small structure (Str. No. CV 009-044-181.03) conveys an unnamed tributary (UNT) to Martin Lake which flows east to west under the SR 9 roadway. The apparent existing right-of-way is 60 feet wide, centered on the roadway, throughout the project area. One driveway is located within the project limits. The existing small structure (Str. No. CV 009-044-181.03) is an 8-foot wide by 6-foot tall box culvert under approximately 5 feet of cover. The structure has a length of approximately 54 feet. There is currently guardrail at the structure.

The preferred alternative involves replacement of the existing small structure with a larger small structure, and possibly revising the proposed typical section and embankment sideslopes so they are traversable; thus, eliminating the need for guardrail. The proposed structure length will be determined when it is known whether the project will revise the embankment slopes. The existing horizontal and vertical alignments of SR 9 at this location will be maintained. SR 9 (including the embankments and structure) will be designed based on the posted speed limit of 55 mph. Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section consists of two 12-foot lanes with 4-foot paved

shoulders where there is guardrail (assuming guardrail is maintained at the site). Existing drainage patterns will be perpetuated.

The Wolcottville, IN USGS Quadrangle Map shows UNT to Martin Lake as a perennial blue-line drainage feature in the study limits (Figure 2-1 and Figure 2-2).

The project is not located within the limits of the Federal Emergency Management Agency (FEMA) mapped floodplain or floodway (Figure 3).

The National Hydrography Dataset (NHD) was examined (See Figure 3). The Streams (NHD) layer and the Streams (Local Resolution NHD) layer both show UNT to Martin Lake as a stream feature. In addition, the Lakes (NHD) layer shows lake features east and west of the study limits.

Soils:
According to the Soil Survey Geographic (SSURGO) Database for LaGrange County, Indiana, the project area does contain soil areas with nationally listed hydric soils (Figure 4). The hydric soils in the project area are indicated in the table below.

Table 1: Soil Summary

Soil Name	Map Abbreviation	Hydric Range
Conover loam, 0 to 3 percent slopes	CrA	Predominantly Nonhydric
Houghton muck, undrained, 0 to 1 percent slopes	Ht	Hydric
Martinsville sandy loam, 1 to 6 percent slopes	MbB	Nonhydric
Wawasee fine sandy loam, 2 to 6 percent slopes	WeB	Predominantly Nonhydric

National Wetland Inventory (NWI) Information:
NWI features are located in proximity to the study limits as described in the following table and are shown on Figure 5. UNT to Martin Lake is shown as a R5UBH feature in the project limits.

Table 2: NWI Summary

Wetland/Water Feature Type		Location
PEM1C	Palustrine, Emergent, Persistent, Seasonally Flooded	870 feet northeast
PEM1C	Palustrine, Emergent, Persistent, Seasonally Flooded	560 feet southeast
PSS1/EM1C	Palustrine, Scrub-shrub, Broad-Leaved Deciduous/Emergent, Persistent, Seasonally Flooded	200 feet northwest
PUBGs	Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated	80 feet east
PUBGs	Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated	West adjacent
R5UBH	Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded	Project crossing

HUC-12:
040500011503 (Oliver Lake-Little Elkhart Creek)

Attached documents:
- Maps (Project Location, Topographic, Floodplain/NHD, Soils, NWI, Drainage Area Map, Aerial Photograph)
- Photographs with location/orientation map
- Wetland Data Sheets
- Preliminary Jurisdictional Determination

Field Reconnaissance:
The project study limits contain the existing roadway and small structure (Str. No. CV 009-044-181.03), and residential and undeveloped land. One stream (UNT to Martin Lake) and five jurisdictional wetland features (Wetland A, Wetland B, Wetland C, Wetland D and Wetland E) were identified in the study limits and are described below. The small structure was evaluated and no evidence of bird or bat use was observed.

The delineation procedures and wetland criteria outlined in the 1987 Corps of Engineers Wetland Delineation Manual were used for this study. In addition, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) was applied to the project location. The findings of the wetland sample points are described under the wetlands section below and summarized in Table 4 and Table 5.

Stream Feature(s):

<u>UNT to Martin Lake</u>
Field reconnaissance identified UNT to Martin Lake in the study limits. This is a perennial drainage feature. The estimated drainage area of UNT to Martin Lake at the project site is approximately 3.026 square miles. UNT to Martin Lake displays an ordinary high water mark (OHWM). Approximately 1.3 miles downstream from the project site, UNT to Martin Lake joins Martin Lake. Martin Lake is connected to a chain of lakes consisting of Olin Lake, Oliver Lake, Hackenburg Lake and Messick Lake that join the North Branch Elkhart River, which joins Elkhart River, which joins St. Joseph River, a traditional navigable water. UNT to Martin Lake is considered a Water of the US because it conveys perennial flow to a traditionally navigable waterway. There is approximately 202 linear feet or 0.058 acre of UNT to Martin Lake within the study limits. The maximum width at the OHWM is approximately 20 feet in an area of scour downstream (west) of the project culvert. Further downstream and outside the influence of the project culvert, the typical width at the OHWM is approximately 9.5 feet (measured at Latitude 41.554757° and Longitude -85.367031°). The depth at the OHWM is approximately 1.5 foot. The substrate consists of gravel and silt. UNT to Martin Lake provides in-stream habitat including riffles and pools; however, the stream quality is considered average since the banks exhibit erosion. The OHWM of UNT to Martin Lake was field flagged and is shown on **Figure 7**.

Table 3: Stream Summary

Stream Name	Photos	Lat (N)	Lon (W)	OHWM		USGS Blue line?	Stream type (Perennial, Intermittent, Ephemeral)	Substrate	Riffles Pools?	Quality	Likely Water of U.S.?
				Width (feet)	Depth (feet)						
UNT to Martin Lake	3, 8, 27, 28, 29, 30, 31, 32, 33, 34	41.554751°	-85.366716°	9.5	1.5	Yes	Perennial	Gravel/Silt	Yes	Average	**Yes**

Wetlands:

Five wetland features (Wetlands A, B, C, D and E) were identified in the study limits (Figure 7). Nine representative sample points were studied for the presence of wetlands. Wetland Data Sheets are attached (Appendix B). Summaries of each sample point are provided below.

Wetland A (Sample Point A1)

Wetland A is located along the east side of SR 9 and to the north of UNT to Martin Lake. Wetland A is dominated by wetland plants consisting of sandbar willow (*Salix interior*, FACW), rice cutgrass (*Leersia oryzoides*, OBL) and touch-me-not (*Impatiens capensis*, FACW). The plant community type is scrub-shrub wetland. The quality of Wetland A is considered average due to its low species diversity and location near the roadway. Wetland hydrology was evidenced by the presence of the primary indicator of Saturation (A3). In addition, the secondary indicator of the FAC-Neutral Test (D5) was observed. The soil showed Munsell Soil Colors of 10YR 2/1 muck from 0 to 20 inches. The presence of the hydric soil indicator of 2cm Muck (A10) demonstrates that the site contains hydric soils. This area therefore meets the three jurisdictional wetland criteria. The size of Wetland A within the study limits is approximately 0.096 acre. The boundary of Wetland A was determined by observing the change in plant community and corresponding change in topography. Wetland A is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake. However, the U.S. Army Corps of Engineers will make the determination of this feature's regulatory status.

The contrasting upland sample point (Sample Point A2) did not meet all three wetland criteria. The dominant plants were sugar maple (*Acer saccharum*, FACU), tall fescue (*Schedonorus arundinaceus*, FACU), dandelion (*Taraxacum officinale*, FACU) and English plantain (*Plantago lanceolata*, FACU). These plants do not the hydrophytic plant criteria and no hydrology indicators were observed. The soil showed Munsell Soil Colors of 10YR 3/3 silt loam from 0 to 20 inches. This is not a hydric soil profile. This plot does not meet the three wetland criteria and is not a wetland.

Wetland B (Sample Point B1)

Wetland B is located along the east side of SR 9 and to the south of UNT to Martin Lake. Wetland B is dominated by cattail (*Typha latifolia*, OBL), a wetland plant. This plant community meets the hydrophytic plant criteria. The plant community type is emergent wetland. The quality of Wetland B is considered average due to its low species diversity and location near the roadway. Wetland hydrology was evidenced by the presence of the primary indicator of Saturation (A3). In addition, the secondary indicator of the FAC-Neutral Test (D5) was observed. The soil showed Munsell Soil Colors of 10YR 2/1 muck from 0 to 20 inches. The presence of the hydric soil indicator of 2cm Muck (A10) demonstrates that the site contains hydric soils. This area therefore meets the three jurisdictional wetland criteria. The size of Wetland B within the study limits is approximately 0.084 acre. The boundary of Wetland B was determined by observing the change in plant community and corresponding change in topography. Wetland B is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake. However, the U.S. Army Corps of Engineers will make the determination of this feature's regulatory status.

The contrasting upland sample point (Sample Point B2) did not meet all three wetland criteria. The dominant plants were Norway spruce (*Picea abies*, UPL), tall fescue (*Schedonorus arundinaceus*, FACU) and bluegrass (*Poa pratensis*, FAC). These plants do not meet the hydrophytic plant criteria and no hydrology indicators were observed. The soil showed Munsell Soil Colors of 10YR 4/3 silt loam from 0 to 18 inches. A gravel layer was encountered at 18 inches. This is not a hydric soil profile. This plot does not meet the three wetland criteria and is not a wetland.

Wetland C (Sample Point C1)

Wetland C is located along the west side of SR 9 and to the north of UNT to Martin Lake. Wetland C is dominated by wetland plants consisting of rice cut grass (*Leersia oryzoides*, OBL) and reed canarygrass (*Phalaris arundinacea*, FACW). The plant community type is emergent wetland. The quality of Wetland C is considered poor due to its low species diversity and since it is dominated by reed canarygrass, an invasive species. Wetland hydrology was evidenced by the presence of the primary indicators of High Water Table (A2) and Saturation (A3) and the secondary indicator of the FAC-Neutral Test (D5). The soil showed Munsell Soil Colors of 10YR 2/1 muck from 0 to 20 inches. The presence of the hydric soil indicator of 2cm Muck (A10) demonstrates that the site contains hydric soils. This area therefore meets the three jurisdictional wetland criteria. The size of Wetland C within the study limits is approximately 0.011 acre. The boundary of Wetland C was determined by observing the change in plant community and corresponding change in topography. Wetland C is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake. However, the U.S. Army Corps of Engineers will make the determination of this feature's regulatory status.

The contrasting upland sample point (Sample Point C2) did not meet all three wetland criteria. The dominant plants were slippery elm (*Ulmus rubra*, FAC), box elder (*Acer negundo*, FAC), smooth brome (*Bromus inermis*, FACU), burdock (*Arctium lappa*, UPL) and American black nightshade (*Solanum americanum*, FACU). These plants do not meet the hydrophytic plant criteria. No hydrology indicators were observed. The soil showed Munsell Soil Colors of 10YR

4/3 silt loam from 0 to 20 inches with no mottles. No hydric soil indicators were observed. This plot does not meet the three wetland criteria and is not a wetland.

Wetland D (Sample Point D1)

Wetland D is located west of SR 9 and to the north of UNT to Martin Lake. Wetland D is dominated by wetland plants consisting of rice cut grass (*Leersia oryzoides*, OBL) and touch-me-not (*Impatiens capensis*, FACW). The plant community type is emergent wetland. The quality of Wetland D is considered average due to its low species diversity and small size. Wetland hydrology was evidenced by the presence of the primary indicator of Saturation (A3). In addition, the secondary indicator of the FAC-Neutral Test (D5) was observed. The soil showed Munsell Soil Colors of 10YR 3/1 muck from 0 to 12 inches and 10YR 2/1 muck from 12 to 20 inches. The presence of the hydric soil indicator of 2 cm Mcuk (A10) demonstrates that the site contains hydric soils. This area therefore meets the three jurisdictional wetland criteria. The size of Wetland D within the study limits is approximately 0.025 acre. The boundary of Wetland D was determined by observing the change in plant community and corresponding change in topography. Wetland D is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake. However, the U.S. Army Corps of Engineers will make the determination of this feature's regulatory status.

The contrasting upland sample point is the same upland sample point utilized for Wetland C (Sample Point C2) since it located on an upland feature near Wetland C and Wetland D. As noted above, this plot does not meet the three wetland criteria and is not a wetland.

Wetland E (Sample Point E1)

Wetland E is located west of SR 9 and to the south of UNT to Martin Lake. Wetland E is dominated by wetland plants consisting of black willow (*Salix nigra*, OBL), reed canarygrass (*Phalaris arundinacea*, FACW) and dark green bulrush (*Scirpus atrovirens*, OBL). The plant community type is forested wetland. The quality of Wetland E is considered poor since it is located near the roadway and is dominated by reed canarygrass, an invasive species. Wetland hydrology was evidenced by the presence of the primary indicator of Saturation (A3). In addition, the secondary indicator of the FAC-Neutral Test (D5) was observed. The soil showed Munsell Soil Colors of 10YR 3/1 clay loam from 0 to 10 inches and 10YR 4/1 clay loam with 10YR 5/6 mottles from 10 to 20 inches. The presence of the hydric soil indicators of Depleted Below Dark Surface (A11) and Depleted Matrix (F3) demonstrate that the site contains hydric soils. This area therefore meets the three jurisdictional wetland criteria. The size of Wetland E within the study limits is approximately 0.038 acre. The boundary of Wetland E was determined by observing the change in plant community and corresponding change in topography. Wetland E is considered a jurisdictional Water of the U.S. because it abuts UNT to Martin Lake. However, the U.S. Army Corps of Engineers will make the determination of this feature's regulatory status.

The contrasting upland sample point (Sample Point E2) did not meet all three wetland criteria. The dominant plants were box elder (*Acer negundo*, FAC), cottonwood (*Populus deltoides*, FAC), mulberry (*Morus alba*, FAC), staghorn sumac (*Rhus typhina*, UPL), smooth brome (*Bromus inermis*, FACU), corn (*Zea mays*, UPL) and giant foxtail (*Setaria faberi*, FACU). These plants do not

meet the hydrophytic plant criteria. No hydrology indicators were observed. The soil showed Munsell Soil Colors of 10YR 4/3 silt loam from 0 to 20 inches with no mottles. No hydric soil indicators were observed. This plot does not meet the three wetland criteria and is not a wetland.

Table 4: Wetland Summary Table

Wetland ID	Photos	Lat (N)	Lon (W)	Type	Total Area (acres)	Quality	Likely Water of U.S.?
Wetland A	1, 2, 3, 35, 36, 37, 38, 39	41.554891°	-85.366571°	Scrub-shrub	0.096 acre	Average	Yes
Wetland B	4, 5, 21, 45, 46, 47, 48, 49	41.554484°	-85.366546°	Emergent	0.084 acre	Average	Yes
Wetland C	9, 10, 55, 56, 57, 58, 59	41.554844°	-85.366849°	Emergent	0.011 acre	Poor	Yes
Wetland D	65, 66, 67, 68, 69	41.554848°	-85.367045°	Emergent	0.025 acre	Average	Yes
Wetland E	6, 7, 70, 71, 72, 73, 74	41.554586°	-85.366829°	Forested	0.038 acre	Poor	Yes

Table 5: Wetland Sample Point Summary Table

Plot				
	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within a wetland
SP-A1	Yes	Yes	Yes	Yes
SP-A2	No	No	No	No
SP-B1	Yes	Yes	Yes	Yes
SP-B2	No	No	No	No
SP-C1	Yes	Yes	Yes	Yes
SP-C2	No	No	No	No
SP-D1	Yes	Yes	Yes	Yes
SP-E1	Yes	Yes	Yes	Yes
SP-E2	No	No	No	No

Other Features:

Roadside Ditches

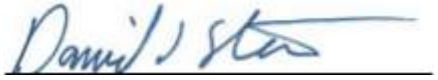
No roadside ditch features were observed in the study limits.

Conclusions:
The Wolcottville, IN USGS Quadrangle Map shows UNT to Martin Lake as a perennial blue-line drainage feature in the study limits. In addition, field reconnaissance identified five jurisdictional wetland features (Wetland A, Wetland B, Wetland C, Wetland D and Wetland E). No roadside ditches were observed in the study limits. The bridge was evaluated and no evidence of bird or bat use was observed.

These waterways are likely Waters of the U.S. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the Corps.

Acknowledgement:
This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience, and professional judgement in conformance with the *1987 U.S. Army Corps of Engineers* (USACE) *Wetland Delineation Manual (Technical Report Y-87-1)*, the *2010 U.S. Army Corps of Engineers Midwest Regional Supplement, the USACE Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines.

Daniel J. Stevens



Date: 8/2/2022

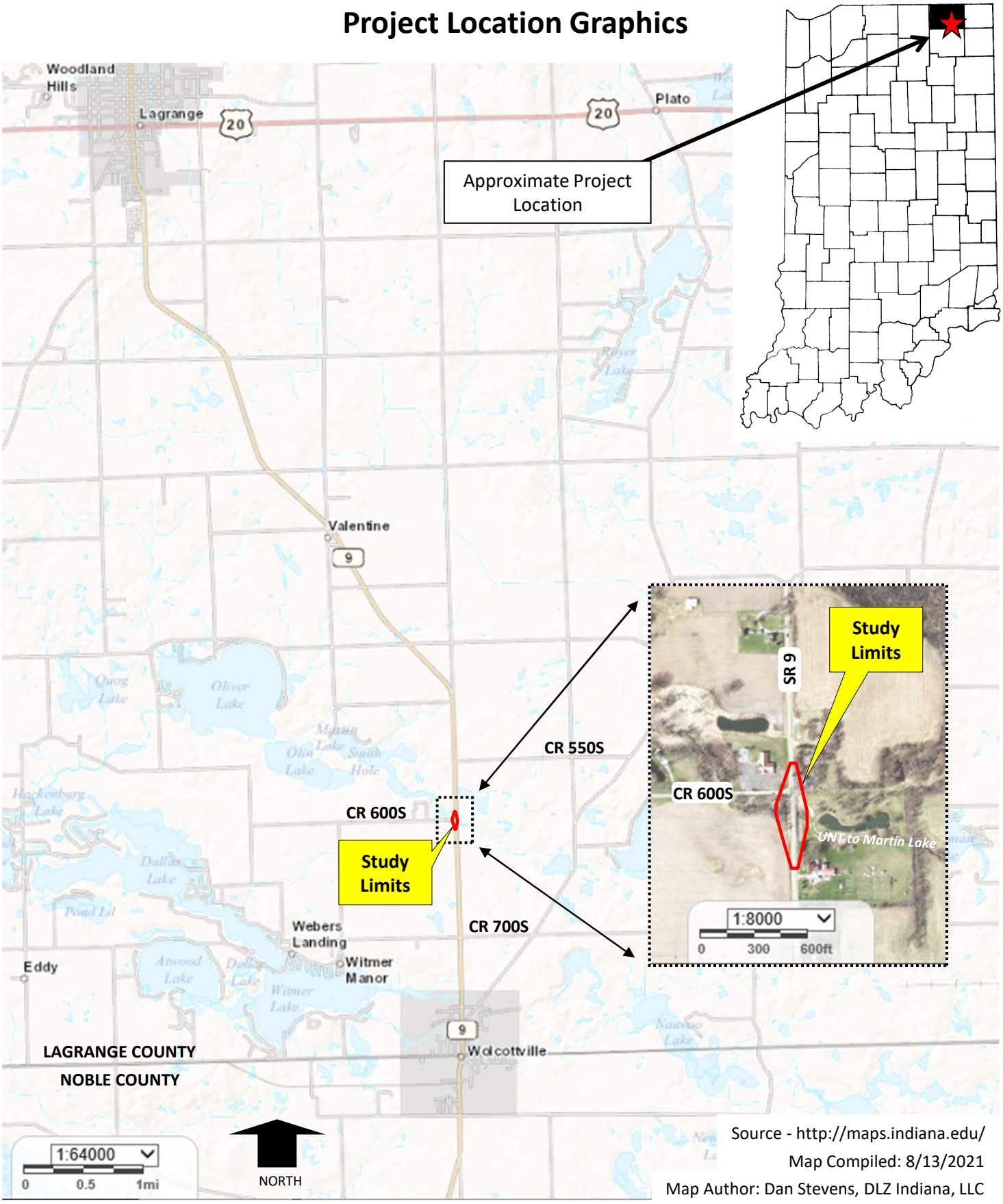
Environmental Scientist
DLZ Indiana, LLC

Supporting Documentation:

- Maps:
  - Figure 1 - Project Location Map
  - Figure 2-1 and 2-2 – Topographic Map
  - Figure 3 – Floodplain/NHD Map
  - Figure 4 – Soils Map
  - Figure 5 – NWI Map
  - Figure 6 – Drainage Area Map
  - Figure 7-1 – Site Map and Aerial Photograph

- Appendix A - Photographs with Location/Orientation Map
- Appendix B - Wetland Data Sheets
- Appendix C – Preliminary Jurisdictional Determination

Project Location Graphics



Source - http://maps.indiana.edu/
Map Compiled: 8/13/2021
Map Author: Dan Stevens, DLZ Indiana, LLC

DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: See Map Figure: 1

USGS Quadrangle Map



Wolcotville, Indiana 7.5 Minute Quadrangle

Source - http://gisdb.uits.indiana.edu/singlefile/map/IN24k_quad_index_1147_m10000.html

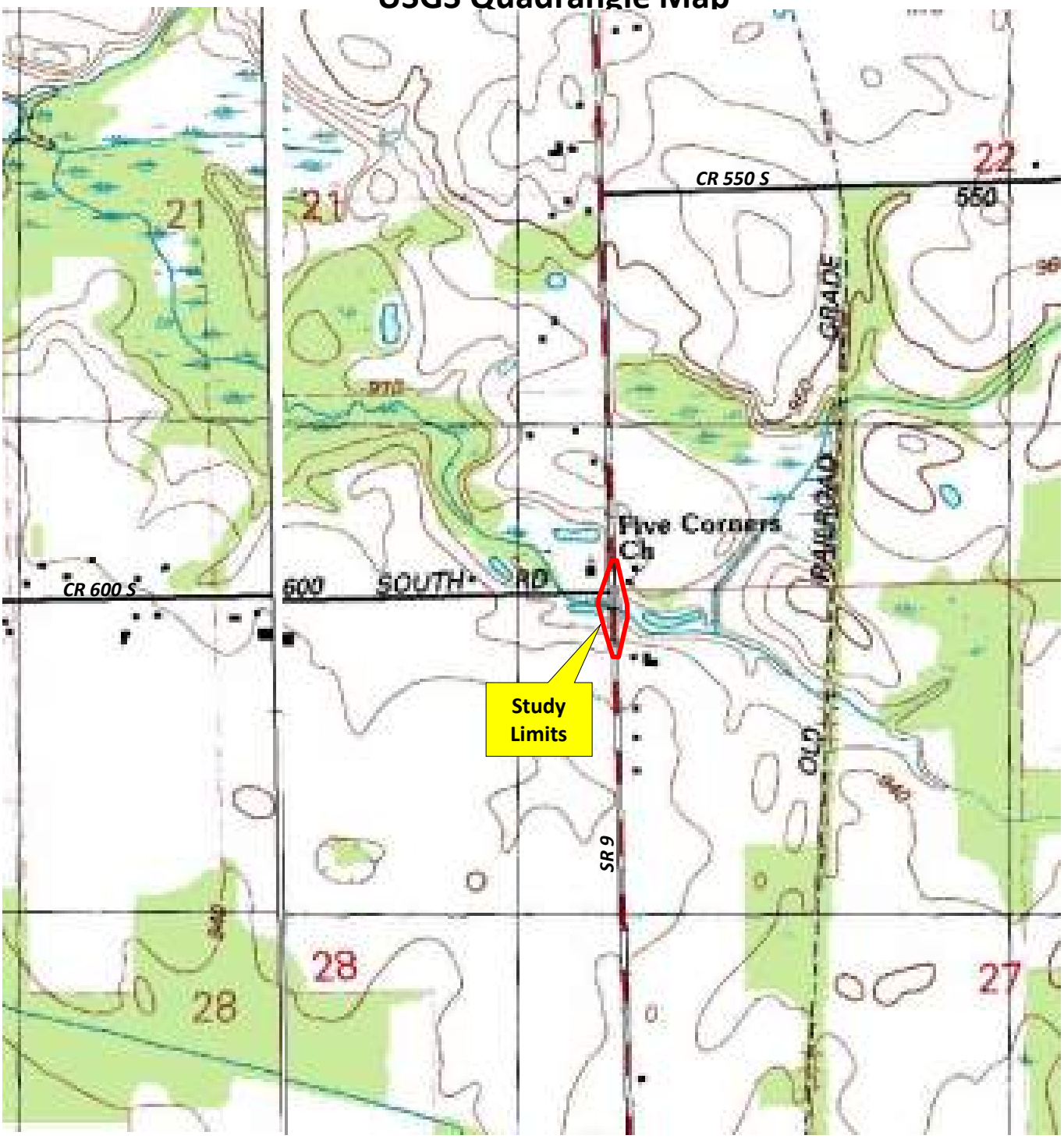
Map Compiled: 8/13/2021

Map Author: Dan Stevens, DLZ Indiana, LLC

NORTH

DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: 1”=2000’ Figure: 2-1

USGS Quadrangle Map



Wolcotville, Indiana 7.5 Minute Quadrangle

Source - http://gisdb.uits.indiana.edu/singlefile/map/IN24k_quad_index_1147_m10000.html

Map Compiled: 8/13/2021

Map Author: Dan Stevens, DLZ Indiana, LLC

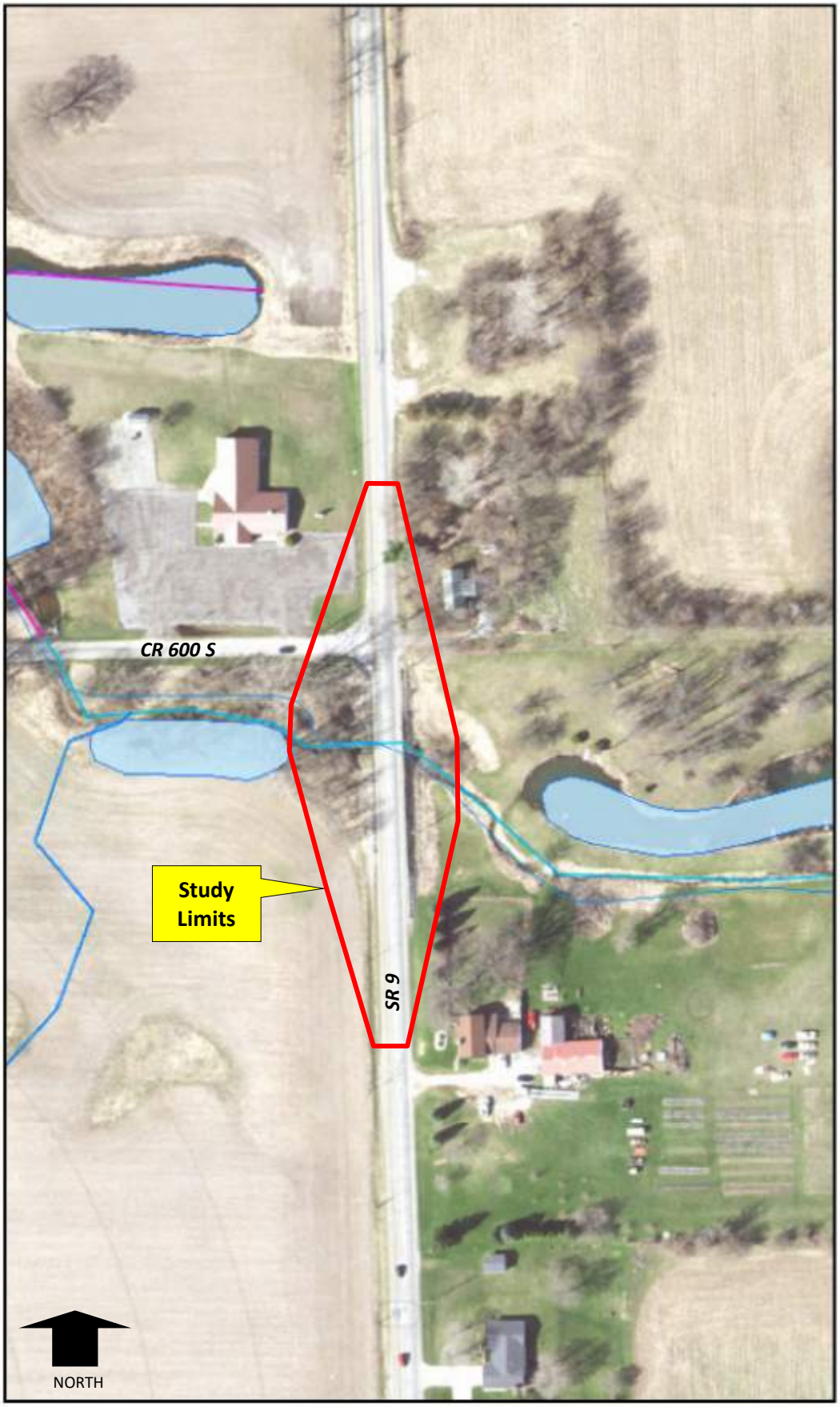
NORTH

DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: 1”=1000’ Figure: 2-2

Floodplain/NHD Map

DES. NUMBER: 2002233

Date: 1/27/2022



Legend

Floodplains - FIRM (Mar 2020)

- Floodway
- 1% Annual Chance Flood Hazar
- 0.2% Annual Chance, Protected
- 0.2% Annual Chance Flood Haz
- Unclassified Drainage Flowlines

Streams (Local-Resolution NHD)

- ArtificialPath
- CanalDitch
- Coastline
- Connector
- Pipeline
- StreamRiver
- Underground Conduit
- Streams (NHD)
- Rivers (NHD)
- Lakes (NHD)
- 2017 Orthophotography - Placeh

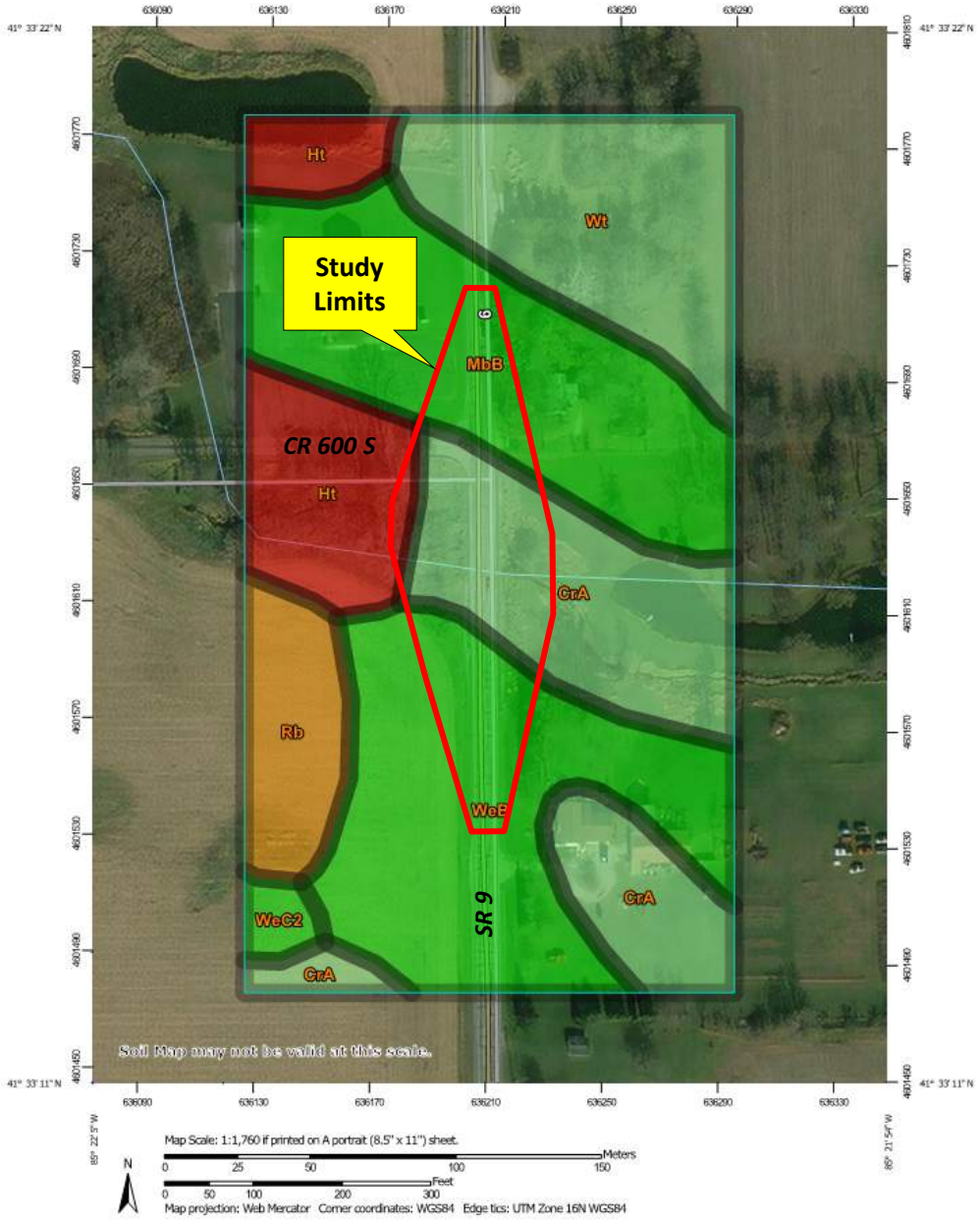
Author: Dan Stevens, DLZ

0 0.04 mi

IndianaMAP

Figure: 3

Soil Survey

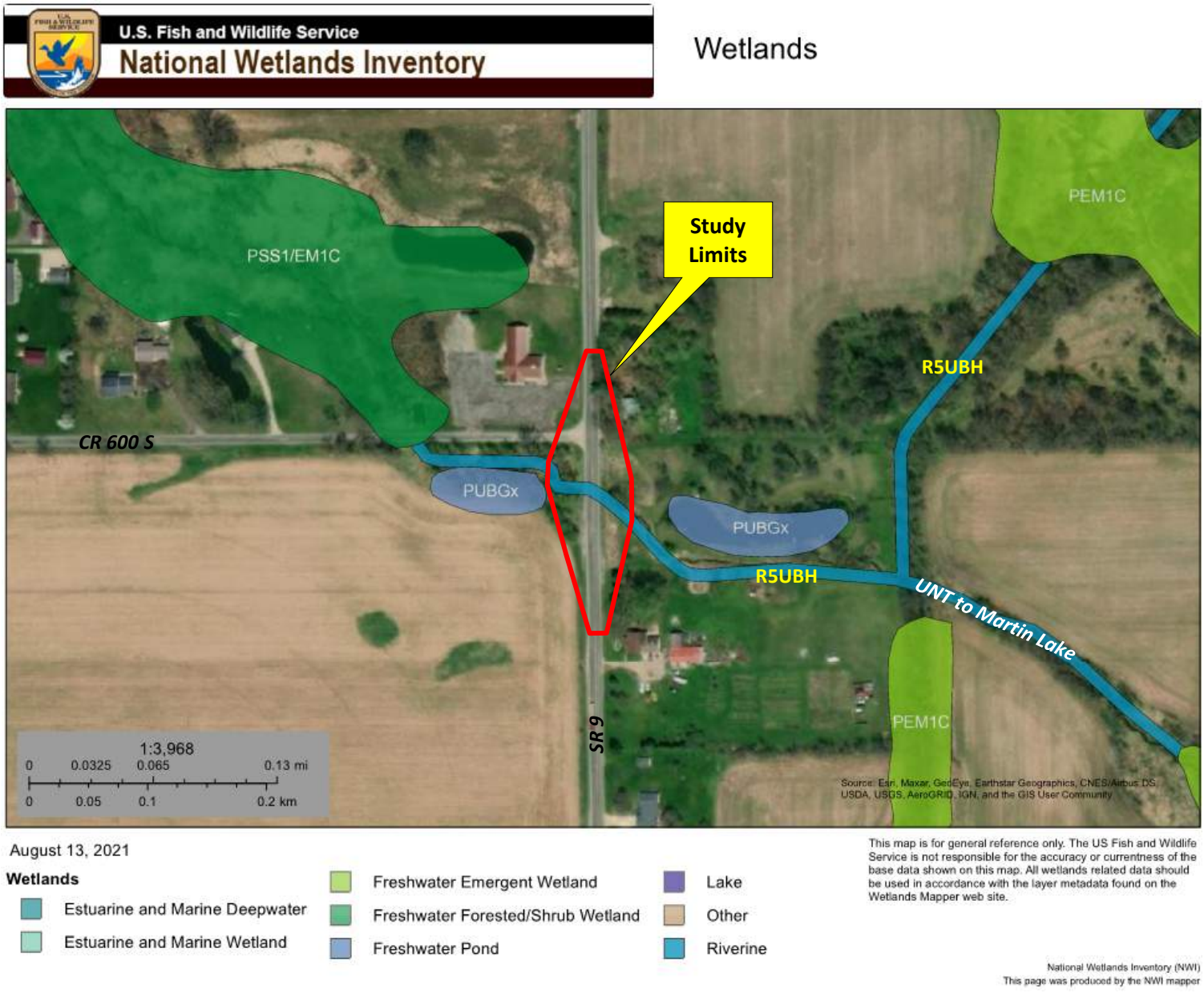


Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrA	Conover loam, 0 to 3 percent slopes	3	2.6	20.8%
Ht	Houghton muck, undrained, 0 to 1 percent slopes	100	1.4	11.0%
MbB	Martinsville sandy loam, 1 to 6 percent slopes	0	2.7	21.7%
Rb	Rensselaer loam, 0 to 1 percent slopes	88	0.8	6.4%
WeB	Wawasee fine sandy loam, 2 to 6 percent slopes	0	3.0	23.6%
WeC2	Wawasee fine sandy loam, 6 to 12 percent slopes, eroded	0	0.2	1.3%
Wt	Whitaker sandy loam	3	1.9	15.1%

Figure: 4

Map Author: Dan Stevens, DLZ Indiana, LLC

NWI Map



NORTH

R5UBH

Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded

PSS1/EM1C

Palustrine, Scrub-Shrub, Broad-Leaved Deciduous / Palustrine, Emergent, Persistent, Seasonally Flooded

PEM1C

Palustrine, Emergent, Persistent, Seasonally Flooded

PUBGx

Palustrine, Unconsolidated Bottom , Intermittently Exposed, Excavated

Dan Stevens, DLZ

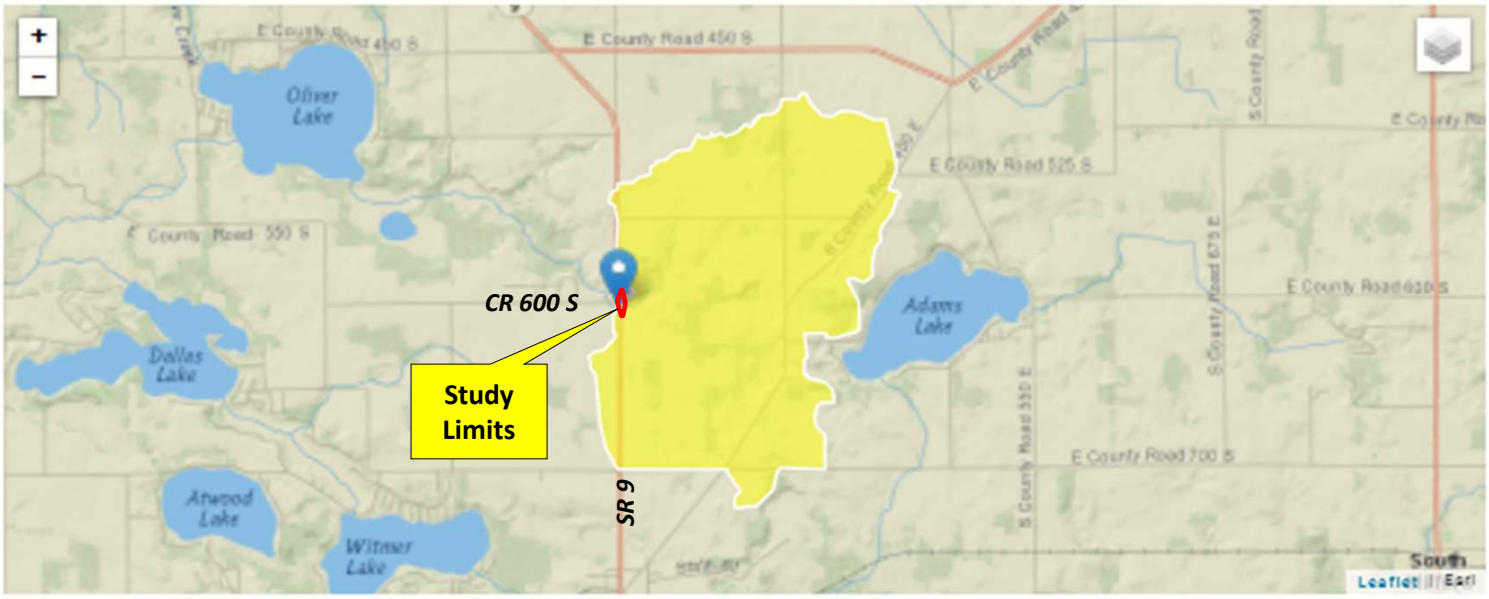
Figure: 5

Drainage Area Map

DES. NUMBER: 2002233

StreamStats Report

Region ID:	IN
Workspace ID:	IN20220512201933649000
Clicked Point (Latitude, Longitude):	41.55468, -85.36671
Time:	2022-05-12 16:20:03 -0400



Basin Characteristics

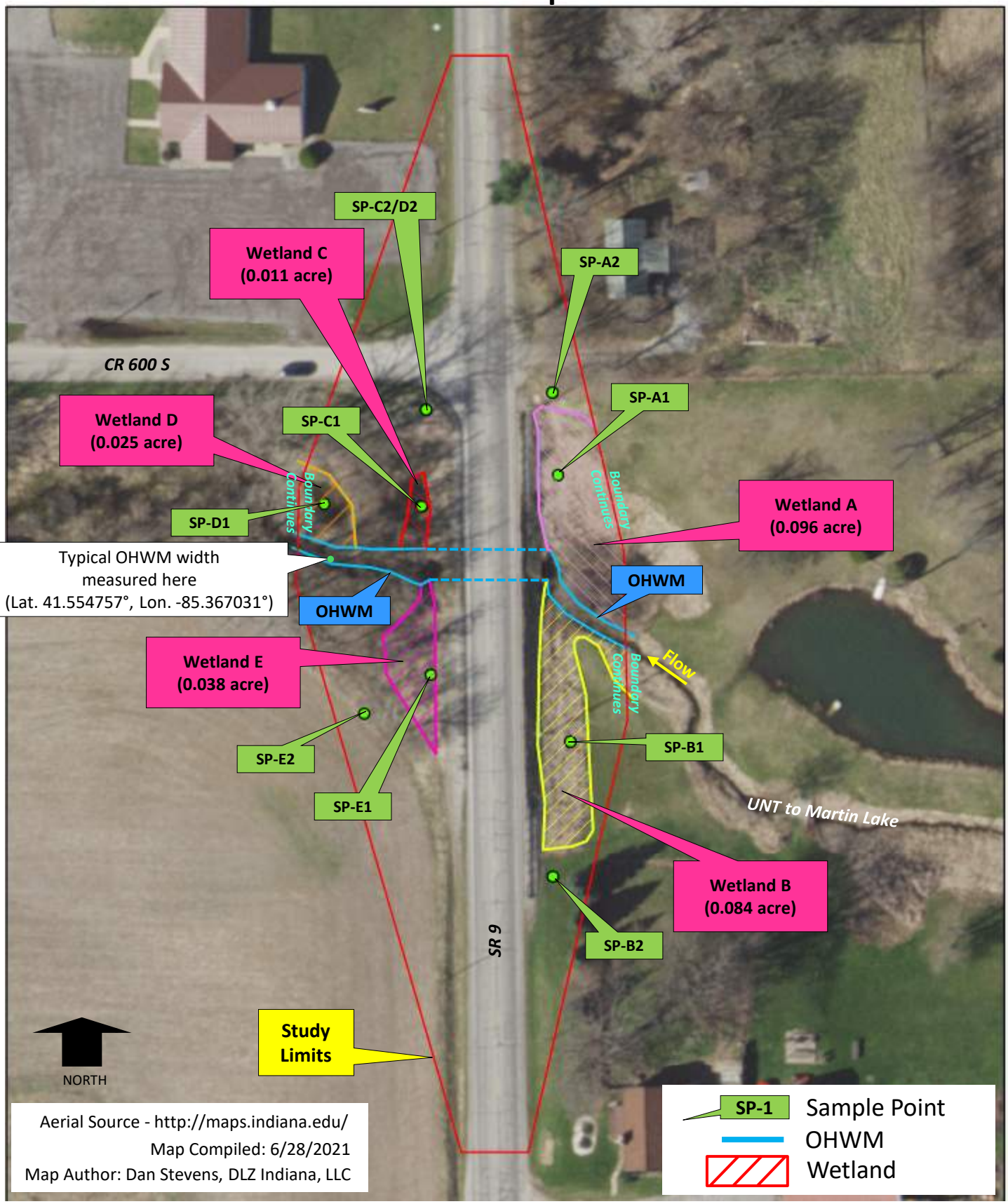
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	3.026	square miles
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	36	ft per day
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	4.1	percent
LOWREG	Low Flow Region Number	1728	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	15467.94	dimensionless
T2INDNR	Average transmissivity (ft2/d) for the full depth of unconsolidated deposits from InDNR well database.	3292	square feet per day

NORTH

Dan Stevens, DLZ

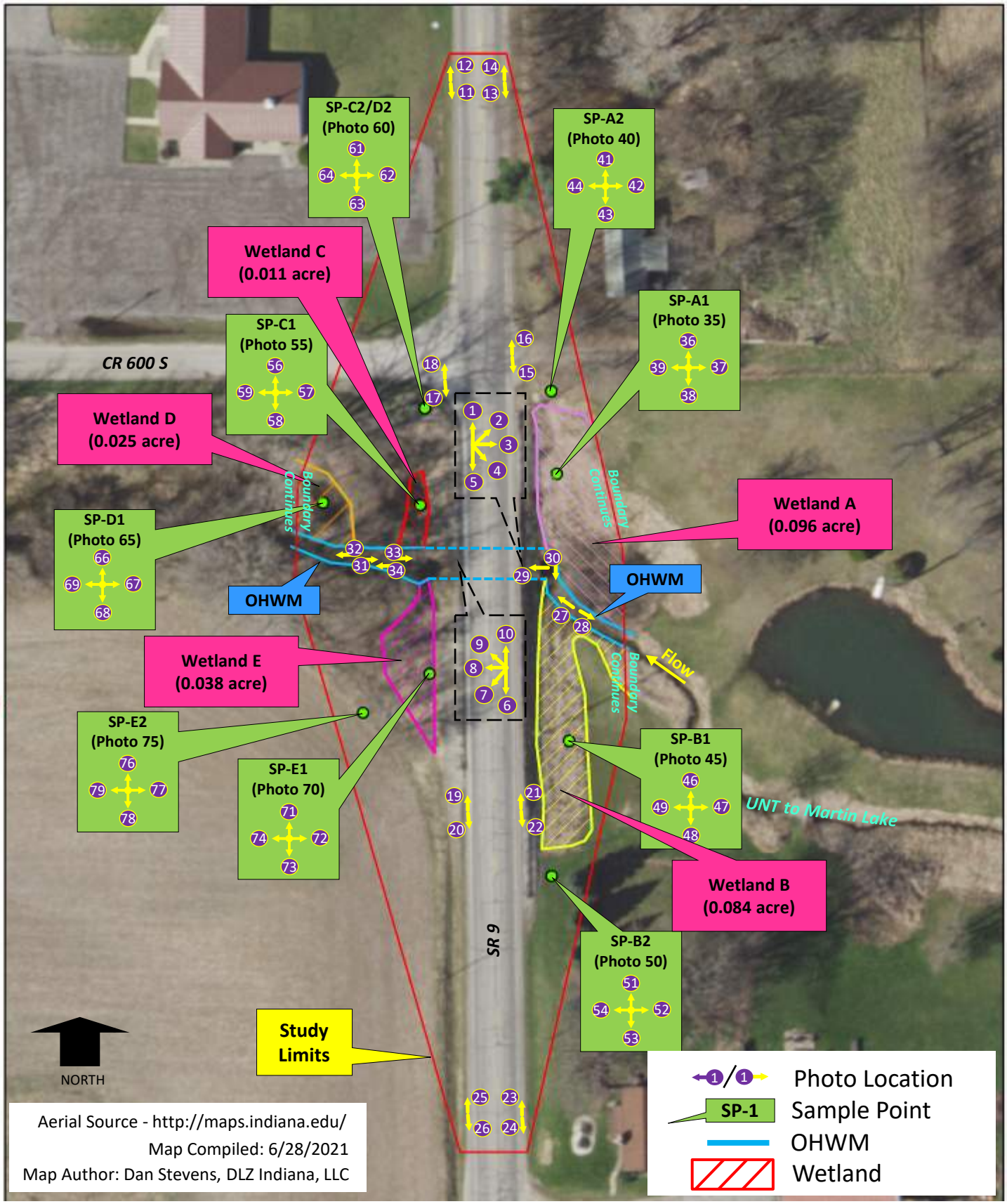
Figure: 6

Site Map



DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: 1”=75’ Figure: 7

Photolog



DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: 1”=75’ Appendix A-1



Photo 1: View north from the small structure along the east side of SR 9. Wetland A is also shown.



Photo 2: View northeast from the small structure along the east side of SR 9. Wetland A is also shown.



Photo 3: View east from the small structure along the east side of SR 9. UNT to Martin Lake and Wetland A are also shown.



Photo 4: View southeast from the small structure from SR 9. Wetland B is also shown.



Photo 5: View south along the east side of SR 9 from the small structure. Wetland B is also shown.



Photo 6: View south from the small structure along the west side of SR 9. Wetland E is also shown.



Photo 7: View southwest from the small structure along the west side of SR 9. Wetland E is also shown.



Photo 8: View west from the small structure along the west side of SR 9. UNT to Martin Lake is also shown.

DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: NTS Appendix A-3



Photo 9: View northwest from the small structure along the west side of SR 9. Wetland C is also shown.



Photo 10: View north from the small structure along the west side of SR 9. Wetland C is also shown.



Photo 11: View south along the west side of SR 9 from near the north study limit.



Photo 12: View north along the west side of SR 9 from near the north study limit.



Photo 13: View south along the east side of SR 9 from near the north study limit.



Photo 14: View north along the east side of SR 9 from near the north study limit.



Photo 15: View south along the east side of SR 9 from north of the small structure.



Photo 16: View north along the east side of SR 9 from north of the small structure.



Photo 17: View south along the west side of SR 9 from north of the small structure.



Photo 18: View north along the west side of SR 9 from north of the small structure.



Photo 19: View north along the west side of SR 9 from south of the small structure.



Photo 20: View south along the west side of SR 9 from south of the small structure.



Photo 21: View north along the east side of SR 9 from south of the small structure. Wetland B is also shown.



Photo 22: View south along the east side of SR 9 from south of the small structure.



Photo 23: View north along the east side of SR 9 from near the south study limit.



Photo 24: View south along the east side of SR 9 from near the south study limit.



Photo 25: View north along the west side of SR 9 from near the south study limit.



Photo 26: View south along the west side of SR 9 from near the south study limit.



Photo 27: View northwest (downstream) along UNT to Martin Lake on the east side of SR 9.



Photo 28: View southeast (upstream) along UNT to Martin Lake on the east side of SR 9.



Photo 29: View west (downstream) along UNT to Martin Lake on the east side of SR 9 showing small structure (CV 009-044-181.03).



Photo 30: View south (upstream) along UNT to Martin Lake on the east side of SR 9.



Photo 31: View east (upstream) along UNT to Martin Lake on the west side of SR 9.



Photo 32: View west (downstream) UNT to Martin Lake on the west side of SR 9. The typical OHWM width was measured here (Lat. 41.554757°, Lon. -85.367031°)

DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: NTS Appendix A-9



Photo 33: View east (upstream) along UNT to Martin Lake on the west side of SR 9 showing small structure (CV 009-044-181.03).



Photo 34: View west (downstream) along UNT to Martin Lake on the west side of SR 9.



Photo 35: View of SP-A1 soil profile, within Wetland A.



Photo 36: View north from SP-A1, within Wetland A.

DLZ	**WATERS REPORT** SR 9 in LaGrange County, Indiana Small Structure Replacement over UNT to Martin Lake 7.27 Miles North of US 6 Des: 2002233, Asset ID: 93001902, Structure: CV 009-044-181.03	Scale: NTS Appendix A-10



Photo 37: View east from SP-A1, within Wetland A.



Photo 38: View south from SP-A1, within Wetland A.



Photo 39 View west from SP-A1, within Wetland A.



Photo 40: View of SP-A2, upland data point.



Photo 41: View north from SP-A2, upland data point.



Photo 42: View east from SP-A2, upland data point.



Photo 43: View south from SP-A2, upland data point.



Photo 44: View west from SP-A2, upland data point.



Photo 45: View of SP-B1 soil profile, within Wetland B.



Photo 46: View north from SP-B1, within Wetland B.



Photo 47: View east from SP-B1, within Wetland B.



Photo 48: View south from SP-B1, within Wetland B.



Photo 49: View west from SP-B1, within Wetland B.



Photo 50: View of SP-B2, upland data point.



Photo 51: View north from SP-B2, upland data point.



Photo 52: View east from SP-B2, upland data point.



Photo 53: View south from SP-B2, upland data point.



Photo 54: View west from SP-B2, upland data point.



Photo 55: View of SP-C1 soil profile, within Wetland C.



Photo 56: View north from SP-C1, within Wetland C.



Photo 57: View east from SP-C1, within Wetland C.



Photo 58: View south from SP-C1, within Wetland C.



Photo 59: View west from SP-C1, within Wetland C.



Photo 60: View of SP-C2/D2, upland data point.



Photo 61: View north from SP-C2/D2, upland data point.



Photo 62: View east from SP-C2/D2, upland data point.



Photo 63: View south from SP-C2/D2, upland data point.



Photo 64: View west from SP-C2/D2, upland data point.



Photo 65: View of SP-D1 soil profile, within Wetland D.



Photo 66: View north from SP-D1, within Wetland D.



Photo 67: View east from SP-D1, within Wetland D.



Photo 68: View south from SP-D1, within Wetland D.



Photo 69: View west from SP-D1, within Wetland D.



Photo 70: View of SP-E1 soil profile, within Wetland E.



Photo 71: View north from SP-E1, within Wetland E.



Photo 72: View east from SP-E1, within Wetland E.



Photo 73: View south from SP-E1, within Wetland E.



Photo 74: View west from SP-E1, within Wetland E.



Photo 75: View of SP-E2, upland data point.



Photo 76: View north from SP-E2, upland data point.



Photo 77: View east from SP-E2, upland data point.



Photo 78: View south from SP-E2, upland data point.



Photo 79: View west from SP-E2, upland data point.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: A1

Investigator(s): Dan Stevens | Section, Township, Range: S27, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554891° | Long: -85.366571° | Datum: WSG 84

Soil Map Unit Name: CrA (Conover loam, 0 to 3 percent slopes) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
The sample point does meet the three wetland criteria and is considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. *Salix interior*	40	Yes	FACW
2.			
3.			
4.			
5.			
	40 =Total Cover		
Herb Stratum (Plot size: 5')			
1. *Leersia oryzoides*	40	Yes	OBL
2. *Impatiens capensis*	40	Yes	FACW
3. *Phalaris arundinacea*	20	No	FACW
4. *Scirpus atrovirens*	20	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	160 (A)		260 (B)

Prevalence Index = B/A = 1.63

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was met.

SOIL

Sampling Point: A1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Muck	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- x Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___
Water Table Present?	Yes ___	No x	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes x	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake City/County: LaGrange Sampling Date: 9-16-2021

Applicant/Owner: INDOT State: IN Sampling Point: A2

Investigator(s): Dan Stevens Section, Township, Range: S27, T36N, 10E

Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): none

Slope (%): 2% Lat: 41.555018° Long: -85.366582° Datum: WSG 84

Soil Map Unit Name: MbB (Martinsville sandy loam, 1 to 6 percent slopes) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
The sample point does not meet the three wetland criteria and is not considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	10	Yes	FACU
2.			
3.			
4.			
5.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Schedonorus arundinaceus*	50	Yes	FACU
2. *Taraxacum officinale*	30	Yes	FACU
3. *Plantago lanceolata*	30	Yes	FACU
4. *Trifolium repens*	20	No	FACU
5. *Arctium lappa*	10	No	UPL
6.			
7.			
8.			
9.			
10.			
	140	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	140	x 4 =	560
UPL species	10	x 5 =	50
Column Totals:	150 (A)		610 (B)
Prevalence Index = B/A =			4.07

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was not met.

SOIL

Sampling Point: A2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/3	100					Loamy/Clayey	Silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were not observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___
Water Table Present?	Yes ___	No x	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No x	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were not observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: B1

Investigator(s): Dan Stevens | Section, Township, Range: S27, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554484° | Long: -85.366546° | Datum: WSG 84

Soil Map Unit Name: CrA (Conover loam, 0 to 3 percent slopes) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
The sample point does meet the three wetland criteria and is considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Typha latifolia*	80	Yes	OBL
2. *Pontederia cordata*	20	No	OBL
3. *Verbena hastata*	5	No	FACW
4. *Glyceria striata*	5	No	OBL
5. *Carex vulpinoidea*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	115	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	105	x 1 =	105
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		125 (B)

Prevalence Index = B/A = 1.09

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was met.

SOIL

Sampling Point: B1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Muck	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- x Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___
Water Table Present?	Yes ___	No x	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes x	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: B2

Investigator(s): Dan Stevens | Section, Township, Range: S27, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554277° | Long: -85.366582° | Datum: WSG 84

Soil Map Unit Name: WeB (Wawasee fine sandy loam, 2 to 6 percent slope) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
The sample point does not meet the three wetland criteria and is not considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Picea abies*	10	Yes	UPL
2.			
3.			
4.			
5.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Schedonorus arundinaceus*	40	Yes	FACU
2. *Poa pratensis*	40	Yes	FAC
3. *Trifolium repens*	20	No	FACU
4. *Taraxacum officinale*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	110	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	70	x 4 =	280
UPL species	10	x 5 =	50
Column Totals:	120 (A)		450 (B)
Prevalence Index = B/A =			3.75

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was not met.

SOIL

Sampling Point: B2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100					Loamy/Clayey	Silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: gravel pack

Depth (inches): 18

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were not observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___
Water Table Present?	Yes ___	No x	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No x	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were not observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: C1

Investigator(s): Dan Stevens | Section, Township, Range: S28, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554844° | Long: -85.366849° | Datum: WSG 84

Soil Map Unit Name: CrA (Conover loam, 0 to 3 percent slopes) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
The sample point does meet the three wetland criteria and is considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Leersia oryzoides*	70	Yes	OBL
2. *Phalaris arundinacea*	40	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	110 (A)		150 (B)

Prevalence Index = B/A = 1.36

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was met.

SOIL

Sampling Point: C1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Muck	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- x High Water Table (A2)
- x Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___
Water Table Present?	Yes x	No ___	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes x	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: C2

Investigator(s): Dan Stevens | Section, Township, Range: S28, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554992° | Long: -85.366839° | Datum: WSG 84

Soil Map Unit Name: CrA (Conover loam, 0 to 3 percent slopes) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
The sample point does not meet the three wetland criteria and is not considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus rubra*	10	Yes	FAC
2. *Acer negundo*	10	Yes	FAC
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Bromus inermis*	90	Yes	FACU
2. *Arctium lappa*	30	Yes	UPL
3. *Solanum americanum*	30	Yes	FACU
4. *Parthenocissus quinquefolia*	20	No	FACU
5. *Phytolacca americana*	10	No	FACU
6.			
7.			
8.			
9.			
10.			
	180	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	150	x 4 =	600
UPL species	30	x 5 =	150
Column Totals:	200 (A)		810 (B)

Prevalence Index = B/A = 4.05

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was not met.

SOIL

Sampling Point: C2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/3	100					Loamy/Clayey	Silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were not observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___
Water Table Present?	Yes ___	No x	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No x	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were not observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: D1

Investigator(s): Dan Stevens | Section, Township, Range: S28, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554848° | Long: -85.367045° | Datum: WSG 84

Soil Map Unit Name: Ht (Houghton muck, undrained, 0 to 1 percent slopes) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
The sample point does meet the three wetland criteria and is considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Leersia oryzoides*	70	Yes	OBL
2. *Impatiens capensis*	30	Yes	FACW
3. *Phalaris arundinacea*	20	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	50	x 2 =	100
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		170 (B)

Prevalence Index = B/A = 1.42

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was met.

SOIL

Sampling Point: D1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100					Muck	
12-20	10YR 2/1	100					Muck	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- x Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___
Water Table Present?	Yes ___	No x	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes x	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: E1

Investigator(s): Dan Stevens | Section, Township, Range: S28, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554586° | Long: -85.366829° | Datum: WSG 84

Soil Map Unit Name: CrA (Conover loam, 0 to 3 percent slopes) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
The sample point does meet the three wetland criteria and is considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	10	Yes	OBL
2.			
3.			
4.			
5.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Phalaris arundinacea*	70	Yes	FACW
2. *Scirpus atrovirens*	30	Yes	OBL
3. *Typha latifolia*	20	No	OBL
4. *Impatiens capensis*	20	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	140	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	150 (A)		240 (B)

Prevalence Index = B/A = 1.60

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was met.

SOIL

Sampling Point: E1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	100					Loamy/Clayey	
10-20	10YR 4/1	90	10YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- x Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No x Depth (inches): ___

Water Table Present? Yes ___ No x Depth (inches): ___

Saturation Present? Yes x No ___ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 9 over UNT to Martin Lake | City/County: LaGrange | Sampling Date: 9-16-2021

Applicant/Owner: INDOT | State: IN | Sampling Point: E2

Investigator(s): Dan Stevens | Section, Township, Range: S28, T36N, 10E

Landform (hillside, terrace, etc.): terrace | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 41.554526° | Long: -85.366965° | Datum: WSG 84

Soil Map Unit Name: WeB (Wawasee fine sandy loam, 2 to 6 percent slopes) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
The sample point does not meet the three wetland criteria and is not considered a jurisdictional wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	30	Yes	FAC
2. *Populus deltoides*	10	Yes	FAC
3. *Morus alba*	10	Yes	FAC
4.			
5.			
	50	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rhus typhina*	30	Yes	UPL
2.			
3.			
4.			
5.			
	30	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Bromus inermis*	70	Yes	FACU
2. *Zea mays*	30	Yes	UPL
3. *Setaria faberi*	30	Yes	FACU
4. *Oenothera biennis*	10	No	FACU
5. *Phytolacca americana*	5	No	FACU
6. *Parthenocissus quinquefolia*	5	No	FACU
7. *Abutilon theophrasti*	5	No	FACU
8.			
9.			
10.			
	155	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 42.9% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	125	x 4 =	500
UPL species	60	x 5 =	300
Column Totals:	235 (A)		950 (B)

Prevalence Index = B/A = 4.04

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criteria was not met.

SOIL

Sampling Point: E2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/3	100					Loamy/Clayey	Silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Hydric soil indicators were not observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No x Depth (inches): ___

Water Table Present? Yes ___ No x Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No x Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators were not observed.

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: August 2, 2022

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Daniel J. Stevens
DLZ Indiana, LLC
2211 E. Jefferson Blvd.
South Bend, IN 46615
Phone: 574-236-4400

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

DLZ conducted a Waters of the United States determination on September 16, 2021 for the project involving the replacement of the small structure (Str. No. CV 009-044-181.03) that conveys an unnamed tributary (UNT) to Martin Lake which flows east to west under the SR 9 roadway. This project (Des. No.: 2002233) is located along SR 9, approximately 7.27 miles north of US 6. The project is also located 100 feet south of CR 600S. The project is located in Sections 21, 22, 27 and 28, Township 36N, Range 10E in LaGrange County, Indiana. The preferred alternative involves replacement of the existing small structure with a larger small structure, and possibly revising the proposed typical section and embankment sideslopes so they are traversable; thus, eliminating the need for guardrail. The proposed structure length will be determined when it is known whether the project will revise the embankment slopes. The existing horizontal and vertical alignments of SR 9 at this location will be maintained. SR 9 (including the embankments and structure) will be designed based on the posted speed limit of 55 mph. Roadway approach work may extend along SR 9 up to 200 feet north and south of the structure. The proposed roadway typical section consists of two 12-foot lanes with 4-foot paved shoulders where there is guardrail (assuming guardrail is maintained at the site). Existing drainage patterns will be perpetuated.

State: Indiana County/parish/borough: LaGrange County City: n/a

Center coordinates of site (lat/long in degree decimal format):

Lat.: 41.554751° Long.: -85.366716°

Universal Transverse Mercator: 16T, 636205.76 m E, 4601630.63 m N

Name of nearest waterbody: Unnamed Tributary to Martin Lake

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
UNT to Martin Lake	41.554751°	-85.366716°	202 linear feet or 0.058 acre	Non-Wetland Water	Section 404
Wetland A	41.554891°	-85.366571°	0.096 acre	Wetland	Section 404
Wetland B	41.554484°	-85.366546°	0.084 acre	Wetland	Section 404
Wetland C	41.554844°	-85.366849°	0.011 acre	Wetland	Section 404
Wetland D	41.554848°	-85.367045°	0.025 acre	Wetland	Section 404
Wetland E	41.554586°	-85.366829°	0.038 acre	Wetland	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- [x] Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
  Map: Project location, Topographic, Floodplain/NHD, Soils, NWI, Site, and Drainage Area maps
- [x] Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - [ ] Office concurs with data sheets/delineation report.
  - [ ] Office does not concur with data sheets/delineation report. Rationale:_____.
- [ ] Data sheets prepared by the Corps:_____.
- [ ] Corps navigable waters' study:_____.
- [ ] U.S. Geological Survey Hydrologic Atlas:_____.
  - [ ] USGS NHD data.
  - [ ] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: Wolcottville (1:24,000).
- [x] Natural Resources Conservation Service Soil Survey. Citation:
  Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/)
- [x] National wetlands inventory map(s). Cite name: USFWS Wetlands Mapper (https://www.fws.gov/wetlands/data/mapper.html).
- [ ] State/local wetland inventory map(s):_____.
- [x] FEMA/FIRM maps: IndianaMap (FIRM Floodplains and Flood Hazard Zones in Indiana, IDNR).
- [ ] 100-year Floodplain Elevation is:_____.(National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): 2018 IndianaMap.
  or [x] Other (Name & Date): Site photographs, 9/16/2022.
- [ ] Previous determination(s). File no. and date of response letter:_____.
- [ ] Other information (please specify):_____.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Daniel J Stec August 2, 2022

Signature and date of Regulatory staff member completing PJD

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

APPENDIX G

Public Involvement

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

August 19, 2021

Sample Notice of Entry for Survey Letter

RE: Survey Notice for SR 9 Small Structure Project
LaGrange County, IN
INDOT Des. No. 2002233
DLZ Project #2161-2802-50

Dear Property Owner:

Our firm has been retained by the Indiana Department of Transportation (INDOT) to perform a topographic survey for the proposed SR 9 small structure improvements (INDOT Des. No. 2002233).

Our information indicates that you either own or occupy property near this proposed street project. Our employees will be conducting a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is allowed by law in accordance with Indiana Code IC 8-23-7-26 (see attached). They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

The survey work will include locating such features as sidewalks, curbs, driveways, ditches, buildings, trees, fences, utilities, sewer structures, and obtaining ground elevations. We will also be re-establishing public road right-of-way lines by looking for and locating property corners and section corners. This survey is needed for the proper planning and design of this project.

Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any problems do occur, please contact our field crew or myself at (260) 702-4835. A copy of IC-8-23-7-26 thru 28 is provided to help with your understanding of the process. In accordance with IC 8-23-7-28, any request for damages shall be made in writing to the Indiana Department of Transportation, Matthew Witt - Project Manager, 5333 Hatfield Road, Fort Wayne, IN 46808.

Sincerely,

DLZ INDIANA, LLC



Aaron E. Springer, PS

CC: MK, SJ, Matthew Witt -INDOT Project Manager

APPENDIX H

Air Quality Documentation

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

U.S. Department of Transportation

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

August 28, 2025

Ms. Lyndsay Quist
Commissioner
Indiana Department of Transportation
100 N Senate Ave. N955
Indianapolis, IN 46204

SUBJECT: Indiana FY2026-2030 STIP Approval and Associated Federal Planning Finding

Dear Ms. Quist:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the FY2026-2030 Indiana Statewide Transportation Improvement Program (INSTIP), which was submitted by the Indiana Department of Transportation (INDOT) request letter dated June 6, 2025.

Based on our review of the information provided, certifications of the Statewide and Metropolitan transportation planning processes for and within the state of Indiana, and our participation in those transportation planning processes (including planning certification reviews conducted in Transportation Management Areas), FHWA and FTA are jointly approving the FY2026-2030 STIP, including the Metropolitan Planning Organization (MPO) Transportation Improvement Programs (TIPs) incorporated into the STIP by reference, subject to the corrective action identified in the attached Federal Planning Finding (FPF) report. FHWA and FTA consider the projects in the 5th year for informational purposes only, and our approval does not exceed four years per 23 CFR 450.220(c).

FHWA and FTA are required under 23 CFR 450.220(b) to document and issue an FPF in conjunction with the approval of the FY2026-2030 STIP. At a minimum, the FPF verifies that the development of the STIP is consistent with the provisions of both the Statewide and Metropolitan transportation planning requirements. FHWA and FTA find that the Indiana FY2026-2030 STIP substantially meets the transportation planning requirements and are approving the STIP subject to the corrective action outlined in the FPF. This approval is effective August 22, 2025, and is given with the understanding that an eligibility determination of individual projects for funding must be met, and INDOT must ensure the satisfaction of all administrative and statutory requirements, as well as address the corrective actions outlined in the attached report.

If you have questions or need additional information concerning our approval and the FPF, please contact Ms. Erica Tait of the FHWA Indiana Division at (317) 226-7481, or by email at erica.tait@dot.gov, or Mr. Anthony Greep of the FTA Region 5 Office at (312) 353-2866, or by email at anthony.greep@dot.gov.

Sincerely,

KELLEY BROOKINS

Digitally signed by KELLEY BROOKINS
Date: 2025.08.27 08:09:52 -05'00'

Kelley Brookins
Regional Administrator
FTA Region V

Sincerely,



Digitally signed by CHRISTOPHER J HALL
Date: 2025.08.28 10:04:48 -05'00'

Christopher J. Hall
Interim Division Administrator
FHWA Indiana Division

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-Executive Office
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Mike Braun, Governor
Lyndsay Quist, Commissioner

June 6, 2025

Mr. Christopher J Hall, Interim Division Administrator
FHWA Indiana Division
575 North Pennsylvania St., Room 254
Indianapolis, IN 46204

Ms. Kelley Brookins, Regional Administrator
FTA Region 5
200 West Adams St.
Suite 320
Chicago, IL 60606-5253

Dear Mr. Hall /Ms. Brookins:

The Indiana Department of Transportation is pleased to submit its Draft FY 2026-2029 Statewide Transportation Improvement Program (STIP) for review and comment by your offices.

Included in the final submitted document is a listing of the state's expansion/preservation and local small urban and rural and rural transit projects. The following Metropolitan Planning Organization TIP's will be included in the FY 2024-2028 STIP by reference.

Area Plan Commission of Tippecanoe County (APCTC) FY 2026-2030
- APCTC TIP FY2026-2030

Bloomington-Monroe County Metropolitan Planning Organization (BMCMPO) FY 2026-2030
- BMCMPO TIP FY2026-2030

Columbus Area Metropolitan Planning Organization (CAMPO) FY 2026-2030
- CAMPO TIP FY2026-2030

Delaware-Muncie Metropolitan Plan Commission (DMMPC) FY 2026-2030
- DMMPC TIP FY2026-2030

Evansville Metropolitan Planning Organization (EMPO) FY 2026-2030
- EMPO TIP FY2026-2030

Indianapolis Metropolitan Planning Organization (IMPO) FY 2026-2029
- IMPO TIP FY2026-2029
- IMPO Project Listing FY2026-2029

Kokomo-Howard County Governmental Coordinating Council (KHCGCC) FY 2026-2030
- KHCGCC TIP FY2026-2030

Kentuckiana Regional Planning and Development Agency (KIPDA) FY 2025-2028
- KIPDA TIP FY2025-2028

Michiana Area Council of Governments (MACOG) FY 2026-2030
- MACOG TIP FY2026-2030

Madison County Council of Governments (MCCOG) FY 2026-2030
- MCCOG TIP FY2026-2030

Northeastern Indiana Regional Coordinating Council (NIRCC) FY 2026-2030
- NIRCC TIP FY2026-2030

Northwestern Indiana Regional Planning Commission (NIRPC) FY 2026-2030
- NIRPC TIP FY2026-2030

Ohio-Kentucky-Indiana Regional Council of Governments (OKI) FY 2026-2029
- OKI TIP FY2026-2029

Terre Haute Area Metropolitan Planning Organization (THAMPO) TIP FY 2026-2030
- THAMPO TIP FY2026-2029

We greatly appreciate FHWA/FTA support in the development of the STIP 2026-2029 and look forward to working together to achieve our mutual goals. Should you have any questions pertaining to this amendment, please contact April Leckie, STIP Administration at 317-232-5466 or at aleckie@indot.in.gov.

Sincerely,

Lyndsay Quist

Lyndsay Quist, Commissioner
Indiana Department of Transportation

cc: (w/enclosure): Angelica Salgado, FTA
Cecilia Crenshaw, FTA
Anthony Greep, FTA
Bill Wheeler, FTA
Kelley Brookins, FTA
Matt Kane, FTA
Susan Weber, FTA
Erica Tait, FHWA
Paige Story, FHWA
Lyndsay Quist, INDOT
Blake Martain, INDOT
Kathy Eaton-McKalip, INDOT
Louis Feagans, INDOT
April Leckie, INDOT
Roy Nunnally, INDOT
Larry Buckel, INDOT
Jay Mitchell, INDOT
Jason Casteel, INDOT
Ryan Pennington, INDOT
Michael McNeil, INDOT

Indiana Department of Transportation (INDOT)

State Preservation and Local Initiated Projects FY 2026 - 2030

SPONSOR	CONTRACT # / LEAD DES	PROJECT GROUP #	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Toal Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2026	2027	2028	2029	2030
Indiana Department of Transportation	45348 / 2002233	2	Init.	SR 9	Small Structure Replacement	Fort Wayne	0	STBG	$1,354,632.00	Bridge Construction	CN	$721,025.60	$180,256.40			$901,282.00		
Performance Measure Impacted: Bridge Condition																		
Location: over UNT Dove Creek, 7.27 miles N of US 6 and SR 3 bridge over Pigeon River, 3.02 mile N US 20																		
Comments:Include DES 2002233, 2400456																		
Indiana Department of Transportation	45569 / 2400553	1	Init.	SR 9	HMA Overlay / Preventive Maintenance	Fort Wayne	.73	STBG	$1,265,000.00	District Other - Construction	CN	$1,012,000.00	$253,000.00		$1,265,000.00			
Performance Measure Impacted: Pavement Condition																		
Location: From 0.33 mile S of I-80/90 (Fawn River) to 0.40 mile N of I-80/90																		
Comments:Include DES 2400553																		

LaGrange County Total

Federal: $7,660,862.00 Match :$1,642,028.00 2026: $449,000.00 2027: $1,901,968.00 2028: $2,710,422.00 2029: $4,241,500.00 2030:

*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

APPENDIX I

Additional Information

Excerpt from INDOT list of Indiana LWCF Properties (https://www.in.gov/indot/engineering/environmental-services/environmental-policy/), Accessed on February 28, 2023.

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)			
ProjectNumber	SubProjectCode	County	Property
1800221	1800221	LaGrange	Olin Lake Nature Preserve
1800346	1800346	LaGrange	LaGrange Town Park
1800405	1800405C	LaGrange	Big Long Lake Public Access Site
1800405	1800405R	LaGrange	Olin Lake Nature Preserve
1800458	1800458	LaGrange	Lagrange County Nature Preserve/Nature Center
1800476	1800476	LaGrange	Dallas Lake Park
1800529	1800529	LaGrange	Shipshewana North Park
1800549	1800549	LaGrange	Red Mill County Park
1800556	1800556	LaGrange	Pine Knob Park
1800568	1800568	LaGrange	Pine Knob Park
1800585	1800585	LaGrange	Dallas Lake Park
1800629	1800629	LaGrange	Pine Knob Park

Excerpt from Culvert Inspection Report

Culvert Inspection Report

CV 009-044-181.03

SR 9
over
UNT DOVE CREEK



Inspection Date: 10/26/2022

Inspected By: Carlyle Moore

Inspection Type(s): Culvert

Structure Number: *CV 009-044-181.03* **Inspector:** Moore,Carlyle

Large Culvert Inspection Report

(8) Asset Code:	*93001902*	(27) Year Built:	*1930*
Asset Name:	*CV 009-044-181.03*	(90) Inspection Date:	*10/26/2022*
OLD Culvert ID:	*009-44-181.03*	(91) Inspection Frequency:	*24*
Team Assignment:	*02*	☐ Additional Treatment Exists	

Identification

(2) Highway Agency District:	*02*	(3) County Code:	*044*
Sub District:	*2200*	Ramp ID:	
(42B) Type of Service (Under):	*5*	☐ Adjacent to Roadway	

(7) Facility Carried: *SR 9* (6) Features Intersected: *UNT DOVE CREEK*

(9) Location: *7.27 MI N of US 6* (9.01) Location Additional Description: *0.02 miles south of LaGrange CR 600 S; 2.02 miles north of Noble County Line;*

(11) Milepoint: *1.99* (16) Latitude: *41.55473* (17) Longitude: *-85.36671*

Classification:

(104) Highway System of the Inventory Route: *0* (26) Functional Classification of Inventory Route: *06*

Geometric Data

Culvert: Kind of Material: *1. Concrete* Culvert: Type of Structure: *19. 4 Sided Box Culvert* Min Est Fill Cover (ft): *5.00*

Culvert: Max. Horizontal Opening (ft.): *8.00* Culvert: Max. Vertical Opening (ft.): *6.00* (34) Skew: *00*

Barrel Length (ft.): *54.00* Original Culvert Shape: *Box*

Measurement Remarks: *Unknown Contract {~1930}: 8' (W) x 6' (H) x 54' (L) -- no skew -- RC Box*

Structure Additional Description: *Reinforced Concrete Box; unknown build date; built prior to 1937 road contract (before plans drawn up in 1932); Scheduled to be replaced (R-43287--Des2002233-- 09/11/2024)*

Openings:

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

Openings Comments:

☐ **Follow Up Required:**

**If checked, please describe for follow up:

Endangered Species

Bats: seen or heard under structure? *	*N*
Birds/swallows/nests seen? Empty nests present?	*N*

* If yes, add one photo to the dropdown field

General Condition Ratings

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

Culvert:

(62) Culvert - Rating: *5*

(62) Culvert Rating Comments: *Box: roof slab has areas of honeycomb (with bad patching) and others with cracks and efflorescence; a few spalls with exposed rebar on roof slab; numerous cracks with heavy efflorescence in NW & SW corners; roof slab failing at far west end (severe spalling with exposed rebar); minor surface scaling to side walls; unable to see floor slab (1'+ gravel and sand atop floor throughout most); Only 4 to 5 feet of height through out the Box.*

Deck:

(58) Deck: *N*

(58a) Deck Comments: *Scheduled to be replaced (R-43287--Des2002233-- 09/11/2024)*

Superstructure:

(59) Superstructure: *N*

(59.01) Superstructure Comments:

Substructure:

(60) Substructure: *N*

(60.01) Substructure Comments: *Head Walls: west head wall has fallen off structure;*
Wing Walls: heavy deterioration (delamination, spalling, cracking) to NW & SW wings; a few cracks with efflorescence on SE & NE wings;

CV-Headwall/Anchor Rating *3*

CV-Wingwalls Rating *5*

Channel:

(61) Channel and Channel Protection: *6*

(61.01) Channel and Channel Protection Comments: *channel flows east-to-west through structure; heavy erosion around both ends; partial slope failure on west side due to loss of head wall; heavy erosion behind SE wing; channel has odd bend in front of east inlet; large tree and lots of vegetation along NE bank; 1'+ of gravel and silt atop floor slab (throughout most of structure);*

Bank Erosion Rating: *6*

Drift/Sediment Rating *6*

Channel Alignment Rating *7*

☑ **Check this box if culvert has OBSTRUCTED flow**

Describe Obstruction:

Excerpt from Abbreviated Engineer's Assessment

ABBREVIATED ENGINEER'S ASSESSMENT

June 8, 2022

Project No.:	2002233
Des. Nos.:	2002233
Contract No.:	R-43287
Structure No.:	CV 009-044-181.03
Route No.:	SR 9 at RP 181+03
Latitude:	41° 33' 17" N
Longitude:	85° 22' 00" W
County:	LaGrange
Federal Oversight:	Not Required

Project Location:

This project involves the replacement of the existing small structure on SR 9 over UNT of Dove Creek with approximately 70 feet of roadway work and 220 feet of incidental construction. The UNT of Dove Creek is considered a legal drain by the LaGrange County Surveyor. The stream is also referred to as UNT of North Branch Elkhart River or UNT of Martin Lake. The structure is located approximately 7.27 miles north of US 6 in Sections 27 and 28, of Township 36N, Range 10E, in Johnson Township, LaGrange County, Indiana.

Project Need and Purpose:

The need for this project is due to the poor condition of the existing structure and its poor alignment with the existing stream. The existing structure is exhibiting severe spalling with exposed reinforcement, and not being aligned with the existing stream is causing erosion of the roadway embankment, as documented in the Culvert Inspection Report prepared by INDOT. The purpose of this project is to replace the existing structure with a new structure that is consistent with current INDOT standards and realigns the structure with the existing stream.

Existing Facility:

The existing typical section within the project limits consists of a rural, two-lane, minor arterial carrying two 12-foot travel lanes. The existing shoulders consist of a 2.5-foot paved shoulder with a 4.5-foot usable shoulder along the west side of the roadway and a 3-foot paved shoulder with a 5-foot usable shoulder along the east side of the roadway, for a total clear width of 33.5 feet at the structure. There is existing W-beam guardrail on both sides of the roadway at the structure. UNT of Dove Creek flows from the southeast, crosses under SR 9 and continues to the northwest to discharge into Martin Lake. The stream is scouring out the southeast bank causing the stream to briefly flow parallel to the roadway. There is a small existing V-ditch in the southwest quadrant and an existing flat bottom ditch in the northwest quadrant. There are no ditches on the east side of the roadway. The existing roadway side slopes are approximately 2:1. The intersection of CR 600 S with SR 9 is located approximately 100 feet north of the existing structure.

The existing horizontal alignment of SR 9 is tangent over the structure with a crown section consisting of 1.5% – 4% cross slopes.

The existing vertical profile consists of a sag curve over the structure with approximate slopes of -2.0% entering from the south and -0.5% exiting to the north.

The existing structure is an 8-foot by 6-foot box culvert with about 5 feet of cover and a length of 55 feet. The structure is perpendicular to SR 9.

Traffic Data:

Functional Classification:	Rural Minor Arterial
A.A.D.T. (2024 project):	5,273 V.P.D.
A.A.D.T. (2044 projected):	5,566 V.P.D.
D.H.V. (2044 projected):	504 V.P.H.
Comm. Vehicles:	17% A.A.D.T.
	12% D.H.V.

Identification of Proposal:

SR 9 is considered a rural minor arterial throughout the project section with a design speed of 55 mph. The total project length, including incidental construction is approximately 290 feet.

The horizontal and vertical alignments will be maintained within the project limits.

The proposed typical section will consist of two 12-foot travel lanes, 3-foot paved shoulder widths with 2-foot aggregate shoulder widths, for a total width of 5-foot usable shoulders. The proposed usable shoulder width is less than the 8-foot minimum for this roadway classification, therefore a Level One design exception will be required. The existing guardrail at the structure will be removed. The proposed structure will be extended to eliminate the need for guardrail. The side slopes will be changed to 4:1 slopes. Flat bottom ditches (4-foot-wide) will be installed in all four quadrants. This will include realigning the existing ditches along the west side of the roadway and installing new ditches along the east side of the roadway. The backslopes for the proposed ditches will be 3:1. The lane and paved shoulder cross slopes will be constructed to 2% within the project limits. The aggregate shoulders will have a 6% cross slope.

The INDOT Hydraulic Memo listed three proposed replacement options. The INDOT Fort Wayne District did not want the corrugated metal pipe arch option. The 3-sided arch top structure option has a 3 foot longer span than the reinforced concrete option, and based on engineering judgement and past history, it will cost more than the reinforced concreted box option. Therefore, the 3-sided option was not considered. Therefore, the proposed structure will be a 9-foot span by 6-foot rise concrete box culvert with a 6-inch sump as recommended by the District.

The proposed structure will be 132 feet long and will be skewed 17 degrees to the right to align the inlet and outlet of the structure with the existing stream. The structure will be extended for the side slope to reach the flowline of the stream to eliminate the need for wingwalls and headwalls. The top of the structure will be kept buried within the 24-foot clear zone to eliminate the need for guardrail. The structure will be “sumped” 6-inches to comply with hydraulic requirements. Revetment riprap over geotextile will be placed at the outlet of the structure for scour protection.

Cost Estimate:

Preliminary Engineering (2022):	$	222,500
Right of Way (2022):	$	40,000
Construction (2024):	$	742,000
Wetland Mitigation:	$	64,800
Total Cost:	**$**	**1,069,300**

Environmental Issues:

A CE Level 1 is being prepared for this project.

The investigation that is part of the Waters of the US Determination Report for this project has identified five wetland areas within the project area. The field work for the Waters Report investigation has been completed and the report has been submitted for INDOT review. At least one wetland area was identified in all four quadrants of the existing structure along the toe of the roadway embankment. The fifth wetland area is in the northwest quadrant of the existing structure, located 40 feet from the toe of the existing roadway embankment along the stream. The four wetland areas at the toe of the existing roadway embankment will be impacted. Preliminary estimates indicate approximately 0.06 acres of scrub shrub wetland, 0.10 acres of emergent wetland, and 0.04 acres of forested wetland will be impacted, for a total impact of 0.20 acres. This will exceed the 0.1 acre of maximum impact for not needing mitigation, thus requiring mitigation. Given the IDNR standard minimum mitigation ratios of 3:1 for scrub-shrub wetlands, 2:1 for emergent wetlands, and 4:1 for forested wetlands, this will result in 0.54 acre of wetland mitigation via the IDNR in-lieu fee mitigation program.

It is anticipated that this project will impact less than 300 linear feet of existing streams considered to be waters of the United States. Stream mitigation is not anticipated to be required as a part of this project.

It is anticipated that stream flow will be maintained via a pump around with a velocity dissipater. Dewatering will occur with using a filter bag and secondary containment measure.

It is anticipated that the project will impact less than 1 acre of land; therefore, an IDEM Construction Stormwater General permit will not be required.

It is anticipated that IDEM Section 401 Individual, USACE Section 404, and LaGrange County Drainage Board permits will be required for the construction of this project. Prior to the start of any permit preparation, a permit determination request will be submitted to INDOT to confirm the need of the permits listed above. The drainage area is greater than 1 square mile, but less than 50 square miles and outside of an incorporated area; therefore, it qualifies under the IDNR exemption and an IDNR Construction in a Floodway permit will not be required.

Utilities:

CenturyLink/LUMEN has overhead and underground facilities located along the west side of SR 9 and underground facilities located along the north side of CR 600 S. It is anticipated the overhead and underground lines along SR 9 will need to be relocated.

Intelligent Fiber Network/Zayo has an underground facility located along the east side of SR 9. It is anticipated the underground line will need to be relocated.

NIPSCO electric has an overhead facility located along the east side of SR 9 and along the north side of CR 600 S. It is anticipated the electric lines along SR 9 will need to be relocated.

NIPSCO gas has an underground facility located along the west side of SR 9 and along the south side of CR 600 S. There is also a cabinet for the gas line at the southwest corner of the CR 600 S and SR 9 intersection. It is anticipated the gas line will need to be relocated.

AEP Telecom may have facilities in this area, awaiting verification.

Mediacom, LLC may have facilities in this area, awaiting verification.

Right-of-way Impact:

The apparent existing right-of-way will have to be re-acquired. Based on existing plans, the right-of-way was 60 feet wide along SR 9 through the project limits and 40 feet along CR 600 S. Additional right-of-way will be required outside of the limits of apparent right-of-way. Preliminary estimates indicate the project will require approximately 0.99 acres of permanent right-of-way of which 0.30 acres is being re-acquired and 0.69 acres is new right-of-way beyond the apparent existing.

Geotechnical Investigation:

The Geotechnical investigation will need to include borings for the structure replacement and pavement cores for the approach work.

Traffic Maintenance during Construction:

It is anticipated that SR 9 will be closed during construction. The proposed detour route will use US 6 to SR 3 to US 20. This detour route has been confirmed with Fort Wayne District personnel. Further coordination will be required if there are conflicts with other projects in the area occurring at the same time. Based on District guidance and the Determination of Significant Work Zone Impacts worksheet, this closure has been determined to be Significant and will require a Traffic Management Plan. Given the current traffic volumes and the large seasonal fluctuations in traffic volumes during lake season, impacts are anticipated to be Significant. A closure will be the most efficient and safest way to perform the work.

Attachments:

Appendix A – Hydraulic Memo
Appendix B – Abbreviated Engineers Report Field Check Meeting Minutes
Appendix C – Significant Work Zone Determination Worksheet
Appendix D – Culvert Inspection Report

Des. No. 2002233
June 8, 2022

Concurrence

Prepared by:



Date: 06-08-2022

Pedro Trana, P.E.
Bridge Department Manager
DLZ Indiana, LLC

Reviewed by:

Nathan Edwards

Date: 7/20/2022

Nathan Edwards, P.E.
System Asset Manager
INDOT – Fort Wayne District

Susan J. Doell

Date: 07-07-2022

Susan J. Doell, P.E.
District Scoping Manager
INDOT – Fort Wayne District

Alex J. Bombala

Date: 7/14/22

Alex Zembala, P.E.
Project Manager
INDOT – Fort Wayne District

Brandon C Forrest

Date: 7/7/2022

Brandon C. Forrester, P.E.
Culvert Asset Engineer
INDOT – Fort Wayne District

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642-BR
Indianapolis, Indiana 46204

PHONE: (317) 233-2096
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Eric Holcomb, Governor
Joe McGuinness,
Commissioner

March 3, 2020

TO: Keith Lytton
Fort Wayne District Bridge Asset Engineer

FROM: Darrin Miller, P.E.
Hydraulics Engineer

Darrin K. Miller

DARRIN K. MILLER REGISTERED No. 10606102 STATE OF INDIANA PROFESSIONAL ENGINEER

THROUGH: Anthony D. Cox, P.E.
Hydraulics Engineer

Anthony D. Cox
2020.03.27
16:04:52 -04'00'

SUBJECT: Hydraulic Review
Des. #: No Des
Structure #: CV 009-044-181.03
County: Lagrange
Location: 7.2 miles north of US 6
Crossing: over UNT North Branch Elkhart River
DNR CIF Permit Required: No
Legal Drain: Yes

Site Parameters		
Drainage Area	3.03	sq. mi.
Q_{100} Discharge	58	cfs
Q_{50} Discharge	52	cfs
Q_{100} Water Surface Elevation (tailwater)	920.22	ft.
Design Roadway Serviceability Elevation	927.76	ft.

	Culvert Properties							
Parameter	**Existing**		**Proposal 1**		**Proposal 2**		**Proposal 3**	
Structure Size & Type	8 x 6 ft RCB		117" x 79" CMPA with square headwall		9 ft RCB		12 ft, 3-sided concrete arch top	
Q_{100} Headwater Elevation	920.08	ft.	920.08	ft.	920.07	ft.	919.99	ft.
$Q_{(50)}$ Headwater Elevation	919.97	ft.	919.97	ft.	919.97	ft.	919.89	ft.
Meets Roadway Serviceability @ $Q_{(100)}$ (Y/N)	Yes		Yes		Yes		Yes	
Backwater	0.24	ft.	0.24	ft.	0.23		0.15	ft.
Minimal Low Structure Elevation	923.52	ft.	923.6	ft.	923.02		923.02	ft.
Assumed Flowline Elevation	917.52	ft.	917.52	ft.	917.52		917.52	ft.
Sump Depth	0	in.	6	in.	6		n/a	in.

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Eric Holcomb, Governor
Joe McGuinness,
Commissioner

All elevations provided in this memo are based on field survey data related to LiDAR data and a LiDAR tailwater cross section, which is sufficient for this analysis, but should not be used for other purposes.

Riprap Design Recommendations

Riprap Properties								
Parameter	**Existing**		**Proposal 1**		**Proposal 2**		**Proposal 3**	
Outlet Velocity @ $Q_{(50)}$	2.91	ft/s	2.6	ft/s	2.66	ft/s	1.91	ft/s
Outlet Riprap Size	N/A		Revetment		Revetment		Revetment	
Inlet Riprap Needed (Y/N)	N/A		No		No		No	
Natural Channel Velocity @ $Q_{(50)}$	1.57 ft/s							
Minimal Inlet Riprap Size	Revetment							

For the replacement proposals 1, 2, and 3 Revetment riprap on geotextiles should be used at the outlet and placed according to IDM Figure 203-2J. Data collected for this analysis does not indicate riprap is needed at the structure inlet. If it is determined at a later date riprap is needed at the inlet, revetment can be used. Alternative scour protection designs should be submitted to the INDOT Office of Hydraulics for review and approval.

If you have any questions or comments, please contact Darrin Miller at 317-234-5422 or darmiller@indot.in.gov.

cc: file

Jason Stone

From: Forrester, Brandon <BForrester@indot.IN.gov>
Sent: Wednesday, March 1, 2023 12:14 PM
To: Zembala, Alex; Jason Stone
Cc: Samuel Rose
Subject: RE: INDOT, SR 9 Small Structure, Des No 2002233

EXTERNAL: Message origin is from an external network. Use proper judgment and caution when opening attachments, clicking links, or responding to this email.

I also show the 3/3/2020 memo as the only memo for this structure. In this case, the RCB does not require a headwall, where the CMPA does. RCB's can provide a longer service life and better hydraulic efficiency.

Thank you,

Brandon C Forrester PE
Culvert Asset Engineer
INDOT – Fort Wayne District
5333 Hatfield Rd
Fort Wayne IN 46808
(260) 399-7351

From: Zembala, Alex <AZembala@indot.IN.gov>
Sent: Tuesday, February 28, 2023 2:51 PM
To: Jason Stone <jstone@dlz.com>; Forrester, Brandon <BForrester@indot.IN.gov>
Cc: Samuel Rose <srose@dlz.com>
Subject: Re: INDOT, SR 9 Small Structure, Des No 2002233

The latest Hydro Report I have for 2002233 is 3/3/2020.

Typically the District prefer not to utilize the CMP due to sooner than desired maintenance. Brandon, do you have any comment as to why we would choose a box culvert over a CMP Arch.

Thanks,

Alex Zembala, PE, PMP

Senior Project Manager

Indiana Dept. of Transportation

5333 Hatfield Road

Fort Wayne, IN 46808