FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	State Road (SR) 66/Spencer County
Designation Number(s):	2000131
Project Description/Termini:	Slide Correction Project/SR 66, 1.35 and 0.90 miles west of SR 70 Junction (Jct); from 1.42 miles to 1.28 miles and from 0.98 mile to 0.90 mile west of SR 70 Jct

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

Approval

INDOT DE Signature and Date

INDOT ESD Signature and Date

FHWA Signature and Date

Release for Public Involvement

RF 2/4/2025

INDOT DE Initials and Date

INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Name and Organization of CE/EA Preparer: Kelsey Boss– Lochmueller Group, Inc.

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 April 13, 2023, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in Appendix G, page 1.

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

Public Controversy on Environmental Grounds

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

At the 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: Vincennes

Local Name of the Facility: SR 66

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.

Des. No. 2000131 is located on SR 66 in Spencer County, Indiana, approximately 1.35 and 0.90 miles west of SR 70 Jct. The need for this project stems from two overhead slides occurring off the westbound shoulder of SR 66. Both slides are causing pavement distresses, primarily in the shoulder with potential to extend into the westbound travel lane.

The purpose of the project is to prevent further damage to the roadway and to reduce maintenance needs in the area.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Spencer Municipality:

Limits of Proposed Work: SR 66, 1.35 and 0.90 miles west of SR 70 Jct; from 1.42 miles to 1.28 miles and from 0.98 mile to 0.90 mile west of SR 70 Jct

Total Work Length: 0.14 Mile(s) Total Work Area: 0.47 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.

INDOT and the Federal Highway Administration (FHWA) intend to proceed with a slide correction project on SR 66, 1.35 and 0.90 miles west of SR 70 Jct in Spencer County.

The project is located in Section 17, Township 6 South, Range 4 West in Huff Township as depicted on the Tell City U.S. Geological Survey 1:24,000 scale quadrangle (Appendix B, page 2).

Within the project area, SR 66 is functionally classified as a rural, minor arterial road. The typical cross section consists of two 12-foot travel lanes (one in each direction) with a mix of both 1-foot aggregate and 2-foot paved shoulders. The surrounding area is primarily forested, agricultural, and rural residential properties. Slides have developed and have deformed the existing roadway, causing uplift along the shoulder of the westbound travel lane. If left untreated, the effects of the slide will extend into the westbound lane.

The preferred alternative will correct the overhead slides occurring off the westbound shoulder of SR 66 by cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. Some areas of roadway will require full depth patching. The shoulder work will consist of patching as needed and the installation of a 4-foot aggregate shoulder along the westbound lanes in front of the lagging retaining walls. A 15-inch corrugated metal pipe (driveway culvert) located approximately 5 feet from the westbound travel lane at the western end of the slide located 1.35 miles west of SR 70 will be removed and replaced with in-kind.

Approximately 1.56 acres of permanent right-of-way (ROW) and 0.35 acre of re-acquired right-of-way will be required for this project. Impacts associated with this project include removal of approximately 1.15 acres of trees and 0.028 acre of wetland impacts. Tree removal will be within 100 feet of the roadway and will occur during the inactive season (October 1- March 31). Avoidance and minimization measures (AMMs) will be required for the project and will include tree removal AMMs. Every effort to avoid, minimize, and/or mitigate project impacts will be made. Please refer to Appendix B for maps depicting the project area (pages 1-6), photographs of the project area (pages 7-11), and preliminary design plans (pages 12-18).

The proposed maintenance of traffic (MOT) plan includes a road closure with a detour. The detour will utilize US 231 and SR 70 (Appendix B, page 16). Please refer to the Maintenance of Traffic (MOT) During Construction section of this document for details.

The project will meet the objectives of its purpose and need by repairing the slide, thereby reducing the potential for future slide activity and maintenance needs in the area, and halting/stopping further degradation to the road.

The project is not dependent upon the completion of any other project to meet the objectives of its purpose and need; therefore, the project exhibits independent utility. The project termini are logical because they only encompass the sections of SR 66 affected by the slide.

OTHER ALTERNATIVES CONSIDERED:

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

No Build:
This alternative would not have repaired the slide. While this alternative would have eliminated cost and any environmental impacts, it would not have met the objectives of the purpose and need of the project. Therefore, this alternative was discarded from further consideration.

Reduce Slope Angle
This alternative would have removed material and vegetation from the overhead slide, which would reduce the driving force of the slide. Drainage and ground cover to prevent erosion would also need to be considered with this treatment. This alternative was discarded from further consideration because slope reduction would not completely address the need and may not be viable at both locations.

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):	

ROADWAY CHARACTER:

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

Name of Roadway	SR 66				
Functional Classification:	Rural Minor Arterial Road				
Current ADT:	2,701	VPD (2023)	Design Year ADT:	3,512	VPD (2045)
Design Hour Volume (DHV):	351	Truck Percentage (%)	14%		
Designed Speed (mph):	55	Legal Speed (mph):	55		

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Through Travel Lanes, one in each direction		Through Travel Lanes, one in each direction	
Pavement Width:	12	ft.	12	ft.
Shoulder Width:	1-2	ft.	2-6	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): Unnamed Driveway Culvert Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	1-foot Corrugated Metal Pipe (CMP)		1-foot CMP	
Number of Spans:	N/A		N/A	
Weight Restrictions:	N/A	ton	N/A	Ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	N/A	ft.
Shoulder Width:	N/A	ft.	N/A	ft.

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.

No bridges are located within the project area. One pipe is present within the project area. The existing driveway culvert is a 1-foot CMP and carries a roadside ditch underneath a residential driveway. The unnamed CMP is not listed as being a historic culvert. This CMP will be replaced in kind.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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

The MOT for the project will require a road closure of SR 66 with an official INDOT detour. The detour will utilize US 231 and SR 70 for a total length of 13.33 miles (Appendix B, page 16). The detour is anticipated to be in place for approximately ten months. The road will re-open to thru-traffic immediately upon project completion to minimize traffic disruption to the maximum possible extent. Adjacent property owners will retain access to their properties throughout the construction process.

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

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ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: $ 144,100* (2024) Right-of-Way: $ 38,000* (2024) Construction: $ 10,054,000* (2025)

*Total costs for bundled Contract R-43515**

**Contract R-43515 was the contract with which Des 2000131 was incorporated into the Statewide Transportation Improvement Program (STIP). Des 2000131 is currently on Contract R-45752, which is not what is shown on the STIP.

Anticipated Start Date of Construction: February 2026

RIGHT OF WAY:

Land Use Impacts	Permanent	Temporary	Re-acquired
Residential	0	0	0
Commercial	0	0	0
Agricultural	0	0	0
Forest	1.52	0	0
Wetlands	0.04	0	0
Other: Pavement	0	0	0.35
TOTAL	1.56	0	0.35

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 right-of-way under the SR 66 roadway within the project area was not recorded legally or within 1 year; therefore, there is no existing right-of-way and the area must be reacquired. This reacquired area of right-of-way is approximately 0.35 acre for this project and consists of existing roadway.

A total of 1.91 acres of right-of-way will be required for this project. Approximately 1.56 acres of new permanent right-of-way consisting of forest and wetlands and 0.35 acre of reacquired right-of-way consisting of existing roadway will be acquired from along SR 66 and northwest of SR 66. Impacts within reacquired right-of-way are included in the environmental analysis. No temporary right-of-way will be required for this project.

Following acquisition and reacquisition, right-of-way will consist of the existing pavement and reach a maximum of 85 feet northwest of the edge of pavement.

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 to the following agencies on September 25, 2024 (Appendix C, pages 1-3).

Agency	Date Sent	Date Response Received	Appendix
FHWA – Indiana Division	September 25, 2024	No response received	
Indiana Department of Environmental Management (IDEM) Groundwater	September 25, 2024	September 25, 2024 (online review)	
Indiana Geological and Water Survey (IGWS)	September 25, 2024	September 25, 2024 (automated response)	Appendix C, pages 4-9
Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife (DFW)	September 25, 2024	October 25, 2024	Appendix C, pages 11-12
US Department of Housing and Urban Development	September 25, 2024	No response received	
INDOT, Vincennes District Environmental	September 25, 2024	September 30, 2024	Appendix C, page 10
INDOT, Project Manager	September 25, 2024	No response received	
Natural Resources Conservation Service (NRCS)	September 25, 2024	December 15, 2024	Appendix C, pages 13-14
US Army Corps of Engineers, Louisville District	September 25, 2024	No response received	
Spencer County Plan Commission, Floodplain Administrator	September 25, 2024	No response received	
Spencer County Board of Commissioners	September 25, 2024	No response received	
Spencer County Surveyor's Office	September 25, 2024	No response received	
Spencer County Highway Department	September 25, 2024	No response received	
Spencer County Common Council	September 25, 2024	No response received	
Spencer County Sheriff's Department	September 25, 2024	No response received	
Spencer County Emergency Management Agency	September 25, 2024	No response received	
Spencer County Emergency Ambulance Service, Inc.	September 25, 2024	No response received	

South Spencer County School Corporation	September 25, 2024	No response received	
Grandview Volunteer Fire Department	September 25, 2024	No response received	

All applicable recommendations are included in the Environmental Commitments section of this Categorical Exclusion (CE) document.

SECTION B – ECOLOGICAL RESOURCES:

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

Total stream(s) in project area: 0 Linear feet Total impacted stream(s): 0 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)

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 maps of the project area (Appendix B, pages 3-4), and the RFI report (Appendix E, page 7) there are nineteen streams, rivers, watercourse or other jurisdictional features within the 0.5 mile search radius. There are no streams, rivers, watercourse, or other jurisdictional features within or adjacent to the project area. That number could not be confirmed or updated by the site visit on August 17, 2023, by Lochmueller Group, Inc. as the field work for the project did not encompass the entire 0.5 mile search radius. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology, Waterway Permitting, and Stormwater Office (EWPSO) on July 18, 2024. Please refer to Appendix F, page*s* 3-41 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that no streams, rivers, watercourse, or other jurisdictional features are located within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

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

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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 (Appendix B, pages 3-4), and the RFI report (Appendix E, page 7), there are five open water features within the 0.5 mile search radius. There are no open water features within or adjacent to the project area. That number could not be confirmed or updated by the site visit on August 17, 2023, by Lochmueller Group, Inc. as the field work for the project did not encompass the entire 0.5 mile search radius. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by EWPSO on July 18, 2024. Please refer to Appendix F, pages 3-41 for the Waters of the U.S. Determination / Wetland Delineation Report. It was determined that no open water features are present within the project area. The USACE makes all final determinations regarding jurisdiction.

	Presence	Impacts Yes	Impacts No
Wetlands	X	X	

Wetlands (*Mark all that apply*)	Documentation	ESD Approval Dates
Wetland Determination	X	July 18, 2024
Wetland Delineation	X	July 18, 2024
USACE Isolated Waters Determination		

Total wetland area: 0.064 Acre(s) Total wetland area impacted: 0.028 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)
Wetland A	PEM1	0.04	0.015	Located along SR 66 southbound in the southwest investigated area. Does not meet the definition of a Waters of the U.S. under the Clean Water Act. See Appendix F, pages 17-19.
Wetland B	PEM1	0.004	0	Located within the wooded area north of SR 66 in the southwest investigated area. Does not meet the definition of a Waters of the U.S. under the Clean Water Act. See Appendix F, pages 17-19.
Wetland C	PEM1	0.02	0.013	Located along SR 66 southbound in the northeast investigated area. Does not meet the definition of a Waters of the U.S. under the Clean Water Act. See Appendix F, pages 17-19.

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 maps of the project area (Appendix B, pages 3-4), and the RFI report (Appendix E, page 7) there are nineteen wetlands within the 0.5 mile search radius. There is one wetland adjacent to the project area. That number was updated to three wetlands within the project area based on the site visit on August 17, 2024, by Lochmueller Group, Inc.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by EWPSO on July 18, 2024. Please refer to Appendix F pages 3-41 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that three wetlands are present within the project area. The USACE makes all final determinations regarding jurisdiction.

Wetland A is an emergent wetland situated along SR 66 southbound in the southwest investigated area. Wetland A was determined to be 0.04 acre in size and is located entirely within the project area. Wetland A is considered to be of poor quality due to its size, function within the roadside ditch, and quality of vegetation. Wetland A would not likely meet the definition of a Waters of the U.S. because it is located within a roadside ditch with no connection to a jurisdictional feature. INDOT may request that USACE take jurisdiction of Wetland A. Though all of Wetland A is located within the project area, it is partially located inside of the construction limits. Approximately 0.015 acre of permanent impacts are anticipated due to ditch grading and retaining wall construction. No temporary impacts will occur. The portion of Wetland A not impacted by the construction limits will be marked “Do Not Disturb” on the plans. This is included as a firm commitment in the Environmental Commitments section of this document.

Wetland B is an emergent, excavated wetland situated within the wooded area north of SR 66 in the southwest investigated area. Wetland B was determined to be 0.004 acre in size and is located entirely within the project area. Wetland B is considered to be of poor quality due to its size, function, and excavated nature. Wetland B would not likely meet the definition of a Waters of the U.S. because it has no connection to a jurisdictional feature. INDOT may request that the USACE take jurisdiction of Wetland B. Though all of Wetland B is located within the project area, it is located entirely outside of the construction limits. Therefore, no impacts are expected. Due to Wetland B’s proximity to the construction limits it will be marked “Do Not Disturb” on the plans. This is included as a firm commitment in the Environmental Commitments section of this document.

Wetland C is an emergent wetland situated along SR 66 southbound in the northeast investigated area. Wetland C was determined to be 0.02 acre in size and is located entirely within the project area. Wetland C is considered to be of poor quality due to the size, function within the roadside, and quality of vegetation. Wetland C would not likely meet the definition of a Waters of the U.S. because it is located within a roadside ditch with no connection to a jurisdictional feature. INDOT may request that the USACE take jurisdiction of Wetland C. Though all of Wetland C is located within the project area, it is partially located inside of the construction limits. Approximately 0.013 acre of permanent impacts are anticipated due to ditch grading and retaining wall construction. No temporary impacts will occur. The portion of Wetland C not impacted by the construction limits will be marked “Do Not Disturb” on the plans. This is included as a firm commitment in the Environmental Commitments section of this document.

Every effort was made to minimize impacts to wetlands. Avoidance was not practicable because they would not allow the project to meet its purpose of repairing the slides. Mitigation is not currently anticipated but will be determined during permitting.

The IDNR DFW responded to early coordination on September 25, 2024 with recommendations to avoid or minimize impacts to fish, botanical, and wildlife resources (Appendix C, pages 11-12). IDNR DFW did not provide any applicable recommendations regarding wetlands. All applicable IDNR DFW recommendations are included in the Environmental Commitments section of this CE document.

	Presence	Impacts	
		Yes	NO
Terrestrial Habitat	X	X	

Total terrestrial habitat in project area: 4.83 Acre(s) Total tree clearing: 1.15 Acre(s)

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

Based on a desktop review, a site visit on August 17, 2023, by Lochmueller Group, Inc., and the aerial maps of the project area (Appendix B, pages 3-4), there are maintained roadside and mature woodland habitat present. Dominant vegetation species within the maintained roadside habitat consist of barnyardgrass (*Echinochloa crus-galli*), Japanese honeysuckle (*Lonicera japonica*), threelobe beggarticks (*Bidens tripartita*), American burnweed (*Erechtites hieraciifolius*), Virginia creeper (*Parthenocissus quinquefolia*), Bermudagrass (*Cynodon dactylon*), and Johnson grass (*Sorghum halepense*). Dominant vegetation species within the mature woodland habitat consist of red maple (*Acer rubrum*), chestnut oak (*Quercus montana*), American beech (*Fagus grandifolia*), and Pin Oak (*Quercus palustris*). A total of 1.52 acres of terrestrial habitat disturbance with approximately 1.15 acres of tree clearing will occur within the construction area. Avoidance alternatives would not be practicable because they would not allow the project to meet its purpose of repairing the slides. The construction limits for the project have been minimized to the greatest extent possible. Mitigation is not anticipated.

The IDNR DFW responded on October 25, 2024, with recommendations to avoid or minimize impacts to botanical, and wildlife resources (Appendix C, pages 11-12). IDNR DFW recommendations included mitigating impacts to non-wetland forest, implementing appropriately designed measures for controlling erosion and sediment, and seeding and protecting all disturbed areas. All applicable IDNR DFW recommendations are included in the Environmental Commitments section of this CE document.

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

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 Lochmueller Group, Inc. on June 21, 2024, the IDNR Spencer County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR DFW early coordination response letter dated October 25, 2024 (Appendix C, pages 11-12), the Natural Heritage Program's Database has been checked and to date, no plants 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 4, 2024. The review did not indicate the presence of endangered bat species in or within 0.5 mile of the project area.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages 15-25). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*). One other species was identified in the IPaC species list along with the Indiana bat. Refer to paragraph below.

The project qualifies for the Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB), dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on October 21, 2024, and based on the responses provided, the project was found to *"May Affect – Not Likely to Adversely Affect"* the Indiana bat and/or the NLEB (Appendix C, pages 26-38). INDOT reviewed and verified the effect finding on October 21, 2024, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. USFWS also stated that all tree removal shall occur between October 1 – March 31 to minimize the disturbance to the Indiana Bat and NLEB. AMMs required for this project include Tree Removal AMM 1, Tree Removal AMM 2, Tree Removal AMM 3, Tree Removal AMM 4, and General AMM 1. AMMs and applicable commitments are included as firm commitments in the Environmental Commitments section of this document.

As design has advanced, the amount of tree clearing decreased from 2.3 ac to 1.15 ac. Lochmueller Group Inc. coordinated with INDOT Vincennes District Environmental on December 10, 2024 on whether this decrease would impact the IPaC. INDOT Vincennes District Environmental responded that a decrease in tree clearing amount will not change IPaC's outcome and to leave IPaC as is (Appendix C, page 43).

The official species list generated from IPaC indicated four other species present within the project area. The project is within the range of the federally endangered gray bat (*Myotis grisescens*), the proposed endangered tricolored bat (*Perimyotis subflavus*), the experimental population, non-essential whooping crane (*Grus americana*), and the candidate monarch butterfly (*Danaus plexippus*). The project does not qualify for the most current INDOT/USFWS agreement due to the amount of tree clearing exceeding 0.5 acre. A standard coordination letter was prepared and submitted for INDOT review on December 10, 2024, INDOT reviewed the standard coordination letter and submitted to USFWS for review on December 11, 2024. On December 11, 2024 USFWS issued a concurrence email with the *"Not Likely to Adversely Affect"* the gray bat (Appendix C, pages 40-42). Proposed endangered, experimental population non-essential, and candidate species receive no statutory protection under the Endangered Species Act (ESA); therefore, no further coordination is needed at this time for the proposed endangered tricolored bat, experimental population, non-essential whooping crane, and candidate monarch butterfly.

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 in the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topo map of the project area (Appendix B, page 2) and the RFI report (Appendix E, page 7), there are no karst features identified within or adjacent to the project area. In the early coordination responses September 25, 2024, the IGWS did not indicate that karst features exist in the project area (Appendix C, pages 4-9). The response did indicate a high liquefaction potential, high potential for encountering bedrock resources, low potential for encountering sand and gravel resources, and petroleum exploration wells in the vicinity of the project area. The response from IGWS was communicated with the designer on September 25, 2024. 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)	X		X

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

The Indiana Department of Environmental Management's Wellhead Proximity Determinator website (http://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on September 25, 2024 by Lochmueller Group, Inc. This project is not located within a Wellhead Protection Area or Source Water Area. No impacts are expected.

The Indiana Department of Natural Resources Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on November 21, 2024, by Lochmueller Group, Inc. The nearest feature identified, a borehole drilled to bedrock, was located north of the northern project area. The feature will not be affected due to the distance of the well from the project area. Therefore, no impacts are expected. Should it be determined during the right-of-way phase that this well will be affected, a cost to cure will likely be included in the appraisal to restore the well.

Based on a desktop review of the INDOT MS4 website (https://entapps.indot.in.gov/MS4/) by Lochmueller Group, Inc. on November 6, 2024, this project is not located in an Urban Area Boundary. No impacts are expected.

Based on a desktop review, a site visit on August 17, 2023, by Lochmueller Group, Inc., the aerial map of the project area (Appendix B, pages 3-4), and the preliminary plans (Appendix B, pages 12-18), no public water systems were identified. Therefore, no impacts are expected.

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

If applicable, indicate the Floodplain Level?

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

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

Based on a desktop review of The Indiana Department of Natural Resources Indiana Floodway Information Portal website (https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e) by Lochmueller Group, Inc. on November 15, 2024, and the RFI report (Appendix E, page 7), this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, pages 1-2). The project will have a longitudinal encroachment on the floodplain. An early coordination letter was sent on September 25, 2024, to the local Floodplain Administrator. The floodplain administrator did not respond within the 30-day time frame. This project qualifies as a Category 1 per the current INDOT CE Manual, which states that although this project involves work within the horizontal limits of the 100-year floodplain, no work is being performed below the 100-year flood elevation and as a result this project does not encroach upon the base floodplain

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

Total Points (from Section VII of CPA-106/AD-1006*) **102**

**If 160 or greater, see CE Manual for guidance.*

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

Based on a desktop review, a site visit on August 17, 2023, by Lochmueller Group, Inc., and the aerial map of the project area (Appendix B, pages 3-4), the project will convert 1.46 acres of farmland as defined by the Farmland Protection Policy Act (FPPA). An early coordination letter was sent on September 25, 2024, to Natural Resources Conservation Service (NRCS). Coordination with NRCS resulted in a score of 102 on the *NRCS-CPA-106 Form* (Appendix C, pages 13-14). Although the Right of Way section above lists that no agricultural land is to be acquired as new permanent ROW, reacquired ROW, or temporary ROW, farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forestland, pastureland, cropland, or other land that is not water or urban built-up land. NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
Minor Projects PA	A-3, A-4, and B-10	November 6, 2024	

Full 106 Effect Finding

No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect ☐

Eligible and/or Listed Resources Present

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

Documentation Prepared (mark all that apply)		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	X	November 6, 2024	N/A
Archaeological Phase Ia Survey Report	X	November 6, 2024	N/A
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 January 14, 2025 the Lochmueller Group Inc. determined that this project falls within the guidelines of Category A, Types 3 and 4 under the Minor Projects Programmatic Agreement (MPPA), (Appendix D, pages 1-2). Category A, Type 3 includes replacement, repair, lining, or extension of culverts and other drainage structures that do not exhibit wood, stone or brick structures or parts therein and are in previously disturbed soils. Category A, Type 4 includes roadway work associated with surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within previously disturbed soils where replacement, repair, or installation of curbs, curb ramps, or sidewalks will not be required.

On November 6, 2024 the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 10 under the MPPA (Appendix D, pages 3-6). Category B, Type 10 covers slide corrections, slope repairs, and other erosion control measures in undisturbed soils. The Above-ground Resources section of the MPPA states “No above-ground resources are present”. An archaeological survey was required due to work in undisturbed soils. Prior to initiating the fieldwork, a records review was conducted utilizing data from the IDNR Division of Historic Preservation and Archaeology (DHPA). The review indicated that no archaeological sites were previously recorded within or adjacent to the project area. No archaeological resources were documented as a result of the survey (Appendix D, pages 7-8).

No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

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

	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 maps of the project area (Appendix B, pages 3-4), and the RFI report (Appendix E, page 2), there are no potential 4(f) resources located within the 0.5 mile search radius. According to additional research and the site visit on August 17, 2023, by Lochmueller Group, Inc., there are no potential 4(f) resources located 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 thirteen properties (owned by three separate entities) in Spencer 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: Page 378

Name of MPO (if applicable):

Location in TIP (if applicable):

Level of MSAT Analysis required?

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) 2024-2028 Statewide Transportation Improvement Program (STIP) (Appendix H, page 1). Contract R-43515 was the contract with which Des 2000131 was incorporated into the STIP. Des 2000131 is currently on Contract R-45752, which is not what is shown on the STIP.

This project is located in Spencer County, which is currently in attainment for all criteria pollutants according to the EPA Green Book website (https://www3.epa.gov/airquality/greenbook/anayo_in.html). 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 23CFR 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:

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

According to the Fairs and Festivals website (https://www.fairsandfestivals.net/), accessed on November 21, 2024, by Lochmueller Group, Inc., there are no fairs or festivals scheduled within 10 miles of the project.

The MOT may pose delays and temporary inconveniences to traveling motorists (including school buses and emergency services); however, all inconveniences will cease upon project completion. The MOT for the project is not anticipated to impact access to community events.

Spencer County has an approved Americans with Disabilities Act (ADA) Transition Plan. There are no pedestrian facilities within the project area and no pedestrian facilities will be constructed. The project will comply with the ADA and will not create additional barriers to access.

Public Facilities and Services

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

Based on a desktop review, the aerial map of the project area (Appendix B, pages 3-4), and the RFI report (Appendix E, page 2), there are no public facilities located within 0.5 mile of the project. There are no public facilities located within or adjacent to the project area, which was confirmed by the site visit on August 23, 2023, by Lochmueller Group, Inc. Access to all properties will be maintained during construction.

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

Indiana Department of Transportation

County Spencer Route SR 66 Des. No. 2000131

Environmental Justice (EJ) (Presidential EO 12898)	**Yes**	**No**
During the development of the project were EJ issues identified?		X
Does the project require an EJ analysis?	X	
If YES, then:		
Are any EJ populations located within the project area?		X
Will the project result in adversely high and disproportionate impacts to EJ populations?		X

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

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent right-of-way. The project will require 1.56 acres of permanent right-of-way. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Spencer County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 9528. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the 2022 American Survey 5-Year Estimates was obtained from the US Census Bureau website https://data.census.gov/ on November 26, 2024 by Lochmueller Group, Inc. The data collected for minority and low-income populations within the AC are summarized in the below table.

Table: Minority and Low-Income Data (2022 American Community Survey 5-Year Estimates)

	COC Spencer County, Indiana	AC-1 Census Tract 9528 Spencer County, Indiana
Percent Minority	6.06%	3.80%
125% of COC	7.57%	AC<125% COC
EJ Population of Concern		No
Percent Low-Income	7.21%	2.40%
125% of COC	9.02%	AC<125% COC
EJ Population of Concern		No

AC-1, Census Tract 9528, has a percent minority of 3.80% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain minority populations of EJ concern. AC-1, Census Tract 9528, has a percent low-income of 2.40% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain low-income populations of EJ concern.

The census data sheets, map, and calculations can be found in Appendix I, pages 2-8. This project will not cause disproportionately high and adverse effect on minority and/or low-income populations of EJ concern relative to non-EJ populations in accordance with the provisions in Executive Order 12898 and FHWA Order 6640.23A. No further environmental justice analysis is warranted.

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: 0

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

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

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): June 21, 2024

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

Based on a review of GIS and available public records, the RFI was completed on June 21, 2024 by Lochmueller Group, Inc. and INDOT SAM provided their concurrence on June 21, 2024 (Appendix E, pages 5). One NPDES facility site with hazardous material concerns (hazmat sites) or sites involved with regulated substances was identified in or within 0.5 mile of the project area. None of the hazmat sites identified will impact the project. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)	**Likely Required**
Army Corps of Engineers (404/Section10 Permit)	
Nationwide Permit (NWP)	X
Regional General Permit (RGP)	
Individual Permit (IP)	
Other	
IN Department of Environmental Management (401/Rule 5)	
Nationwide Permit (NWP)	X
Regional General Permit (RGP)	
Individual Permit (IP)	
Isolated Wetlands	
Rule 5	X
Other	
IN Department of Natural Resources	
Construction in a Floodway	

Permits (mark all that apply)	**Likely Required**
Navigable Waterway Permit	
Other	
Mitigation Required	
US Coast Guard Section 9 Bridge Permit	
Others (Please discuss in the discussion below)	

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

A total of 0.028 acre of wetland impacts are anticipated as a result of the project. Impacts will be limited to the portion of the wetlands within the construction limits of the project. A USACE Section 404 Nationwide Permit (NWP) and IDEM 401 Water Quality Certification NWP will likely be required due to impacts to Wetlands A and C. A formal jurisdictional determination has not yet been made by the USACE, which will be required during the permitting phase.

The IDNR DFW early coordination response dated September 25, 2024 stated that the project will not require their formal approval (Appendix C, pages 11-12).

The project is anticipated to disturb more than one acre of land; therefore, an IDEM Construction Stormwater General Permit may be necessary. The Construction Stormwater General Permit has replaced IDEM's Rule 5 permit.

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 Vincennes District)
2) It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
3) Wetland B and the portions of Wetlands A and C not impacted by the project will be avoided and marked as "Do Not Disturb" on the plans. (INDOT ESD)
4) Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
5) Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present (October 1-March 31), or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS & IDNR DFW)
6) Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)
7) Tree Removal AMM 4: Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year. (USFWS)

8) General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)

For Further Consideration:

9) Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in a rural area typically do not require mitigation or additional plantings beyond seeding and stabilizing disturbed areas, though there are exceptions for high quality habitat sites. (IDNR DFW)

Categorical Exclusion

Appendix A

INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

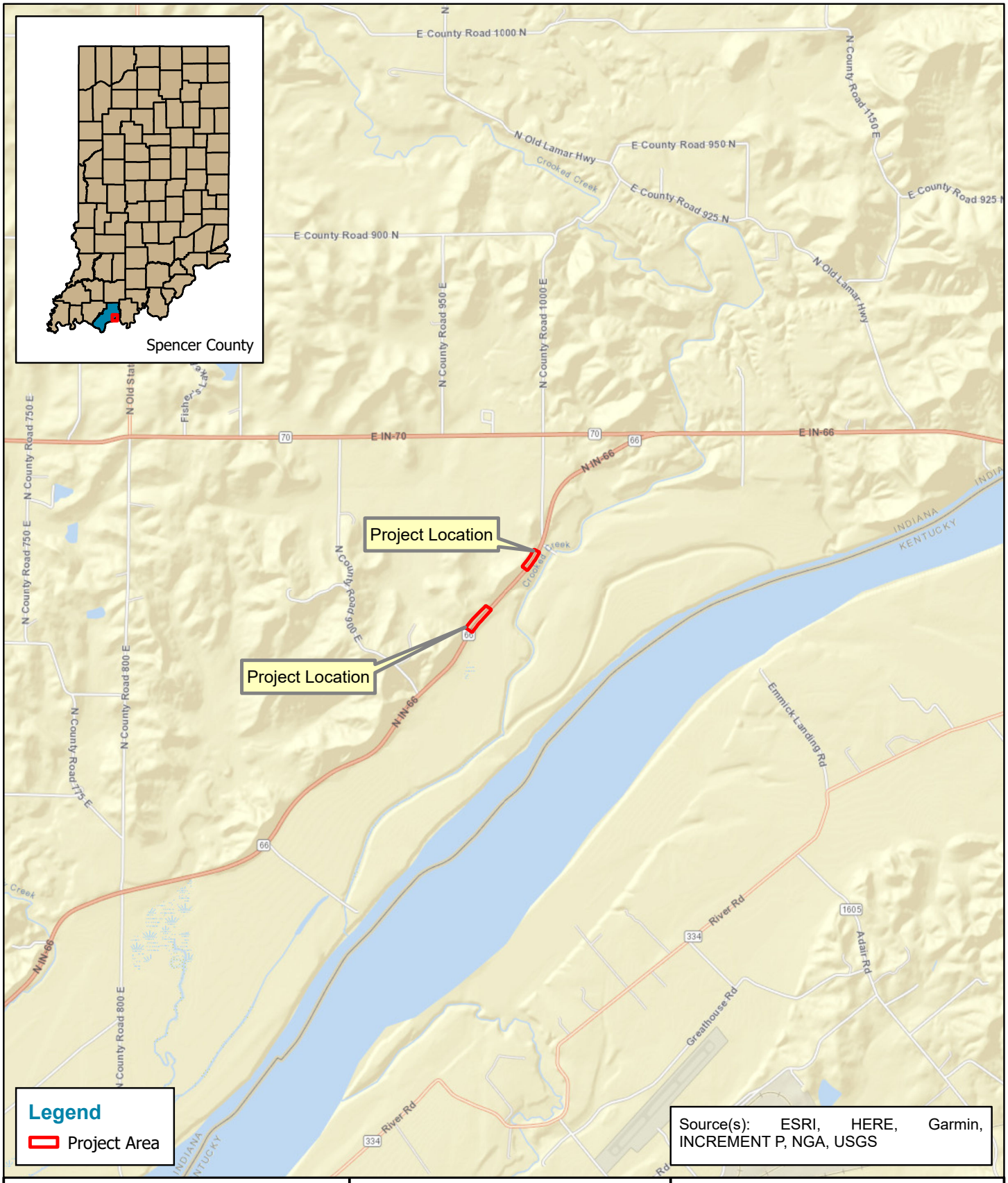
	PCE	Level 1	Level 2	Level 3	Level 4[1]
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect" Or Historic Bridge involvement[2]
Stream Impacts[3]	No construction in waterways or water bodies	< 300 linear feet of stream impacts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

[1] Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.
[2] Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.
[3] Total permanent impacts to streams (linear feet) and wetlands (acres).
[4] US Army Corps of Engineers Individual 404 Permit
[5] Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.
[6] If any relocations are within an area with a known or suspected Environmental Justice (EJ) or disadvantaged population, or has greater than 5 relocations, a conversation with FHWA, through INDOT ESD, is needed to confirm NEPA classification and outreach plan for the project.
[7] Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.
[8] Projects that do not fall under a Species Specific Programmatic and results in a "Likely to Adversely Affect". Other findings can be processed as a lower-level CE.
[9] Potential for causing a disproportionately high and adverse impact.
[10] Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.
[11] Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.
* Includes the threatened/endangered species critical habitat
Note: Substantial public or agency controversy may require a higher-level NEPA document.

Categorical Exclusion

Appendix B

Graphics



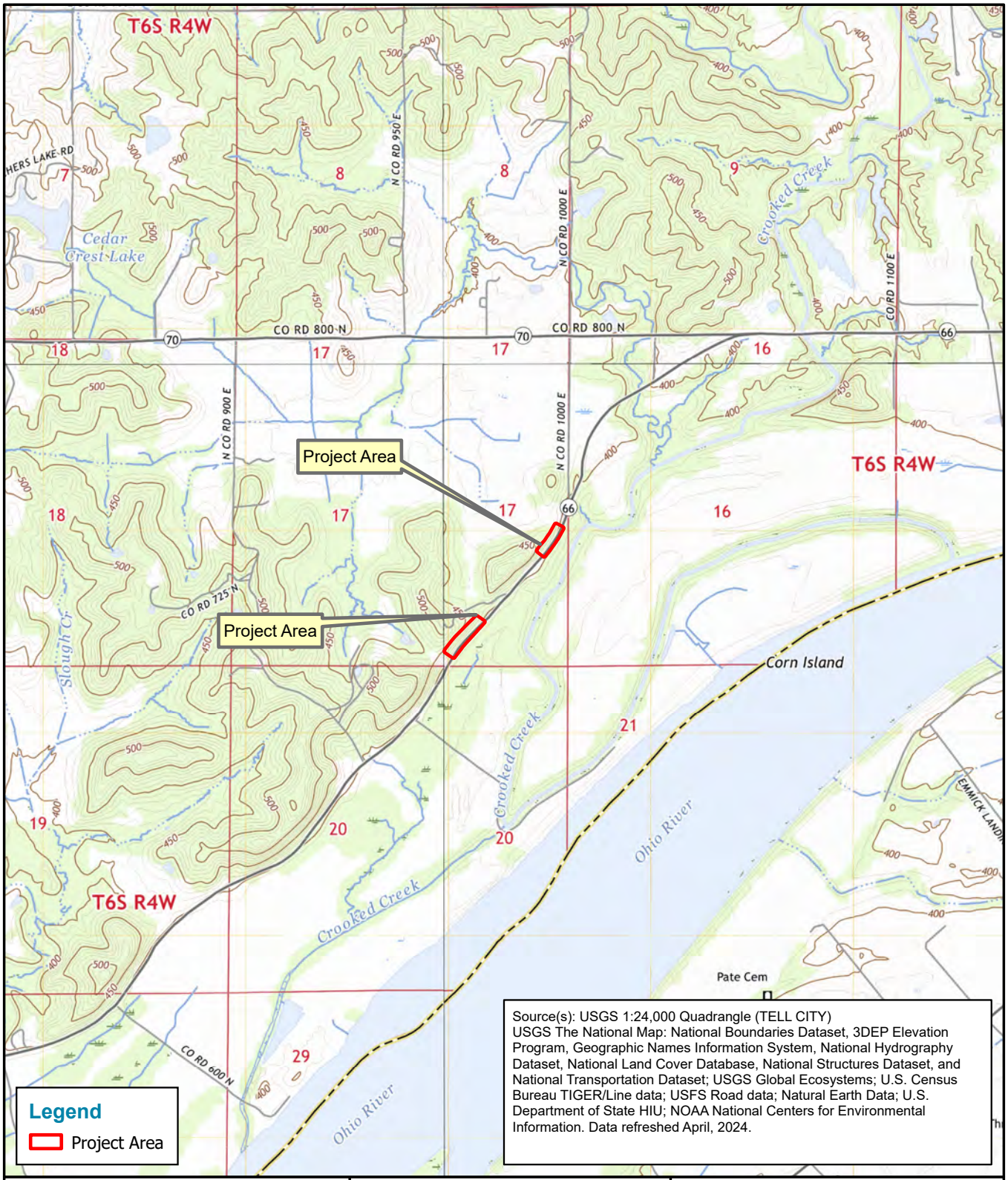
LOCHMUELLER GROUP

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

General Location Map
Des. No. 2000131

County: Spencer
Township: Huff
State: Indiana

SR 66, 1.35 and 0.90 Mi W of SR 70 Jct.
Slide Correction Project
Created: 1/14/2025, Kelsey.Boss



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

USGS Topographic Map
Des. No. 2000131

0 0.25 0.5 Miles

County: Spencer
Township: Huff
State: Indiana

SR 66, 1.35 and 0.90 Mi W of SR 70 Jct. Slide Correction Project
Created: 12/11/2024, Kelsey.Boss

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

Project Map
Des. No. 2000131
Map 1 of 2

0 75 150 Feet

N

County: Spencer
Township: Huff
State: Indiana

SR 66, 1.35 and 0.90 Mi W of SR 70 Jct. Slide Correction Project
Created: 12/11/2024, Kelsey.Boss

LOCHMUELLER GROUP

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

Project Map
Des. No. 2000131
Map 2 of 2

0 50 100 Feet

N

County: Spencer
Township: Huff
State: Indiana

SR 66, 1.35 and 0.90 Mi W of SR 70 Jct. Slide Correction Project
Created: 12/11/2024, Kelsey.Boss

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

Photo Location Map
Des. No. 2000131
Map 1 of 2

0 75 150 Feet
N

County: Spencer
Township: Huff
State: Indiana

SR 66, 1.35 and 0.90 Mi W of SR 70 Jct. Slide Correction Project
Created: 12/11/2024, Kelsey.Boss

LOCHMUELLER GROUP

6200 Vogel Road
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Phone: (812) 479-6200
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Photo Location Map
Des. No. 2000131
Map 2 of 2

0 50 100 Feet

N

County: Spencer
Township: Huff
State: Indiana

SR 66, 1.35 and 0.90 Mi W of SR 70 Jct. Slide Correction Project
Created: 12/12/2024, Kelsey.Boss

1. View of SR 66 northbound lane within the southwest investigated area boundary facing northeast

2. View of slide area within southwest investigated area north of SR 66 facing southwest

3. View of the roadside north of SR 66 facing northeast

4. View of slide area along north side of SR 66 facing northeast

5. View of the roadside along residential driveway north of SR 66 facing southwest

6. View into project area north of SR 66 facing northeast

7. View of the project area south of SR 66 facing northeast

8. View of the project area north of SR 66 facing southwest

9. View of the project area within northeast investigated area along SR 66 facing northeast

10. View of Wetland C along SR 66 southbound facing northeast

PROJECT	DESIGNATION
2000131	2000131
CONTRACT	STRUCTURE NO.
R - 43515	N/A

KIN PROJECT INFORMATION

DESIGNATION	PROJECT DESCRIPTION
TBD	TBD

INDIANA DEPARTMENT OF TRANSPORTATION

TRAFFIC DATA

A.A.D.T. 2023	2701 V.P.D.
A.A.D.T. 2045 PROJECTED	3512 V.P.D.
D.H.V. 2045	351 V.P.H.
DIRECTIONAL DISTRIBUTION	71(EB)/29(WB) %
TRUCKS	14 % A.A.D.T.
	14 % D.H.V.

DESIGN DATA

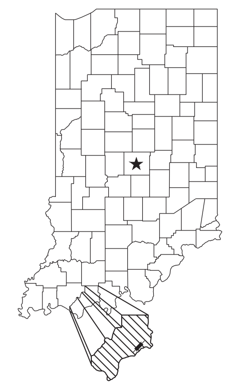
PROJECT DESIGN CRITERIA	3R
DESIGN SPEED	55 MPH
FUNCTIONAL CLASSIFICATION	(2 LANE) MINOR ARTERIAL
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE

ROADWAY PLANS

STATE ROAD 66 SLIDE CORRECTION

PROJECT NO.	2000131	P.E.
	2000131	R/W
	2000131	CONST.

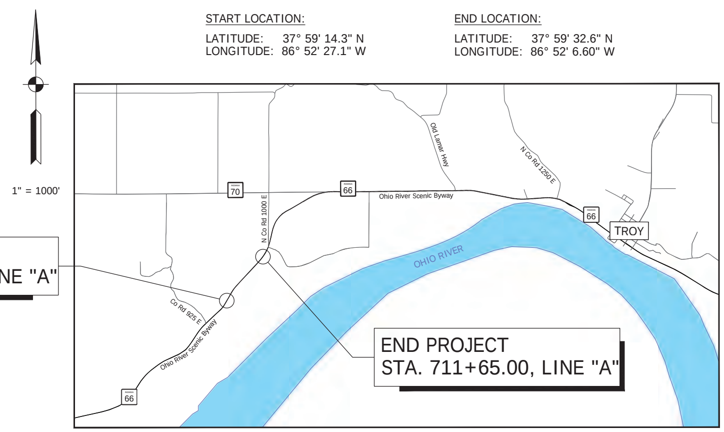
SLIDE CORRECTION ON SR 66, LOCATED 1.35 & 0.90 MILES WEST OF SR 70 JUNCTION, IN SECTIONS 17, T-6-S, R-4-W, HUFF TOWNSHIP, SPENCER COUNTY, INDIANA.



LATITUDE: 37°59'14.6" N LONGITUDE: 86°52'27.1" W

START LOCATION:
LATITUDE: 37° 59' 14.3" N
LONGITUDE: 86° 52' 27.1" W

END LOCATION:
LATITUDE: 37° 59' 32.6" N
LONGITUDE: 86° 52' 6.60" W



LOCATION MAP
Huff Township
Spencer County

BRIDGE LENGTH:	N/A MILE
GROSS LENGTH:	0.47 MILE
NET LENGTH:	0.14 MILE
MAX. GRADE:	-1.97 %

HUC 14 - 05140201080050

Stage 2 Plans 08/20/2024

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

VS ENGINEERING
223 NW 2nd St. Suite 201
Evansville, IN 47708
P: (812) 401-0303
vsei@vsengineering.com
www.vsengineering.com

PLANS PREPARED BY: VS ENGINEERING, INC. FAX: 317.293.4737 TEL: 812.401.0303 PHONE NUMBER
CERTIFIED BY: ____________ , P.E. INDIANA REG. NO. ________ DATE
APPROVED FOR LETTING: INDOT DATE

STAGE 2 PLANS NOT FOR CONSTRUCTION

BRIDGE FILE	
N/A	
DESIGNATION	
2000131	
SHEETS	
1 of 48	
CONTRACT	PROJECT
R-43515	2000131

Preliminary

UTILITIES

NOTE: LISTED BELOW ARE THE INDIANA UNDERGROUND PROTECTION SERVICES CONTACTS; OTHERS NOT LISTED MAY EXIST.

AT&T Distribution
Contact: Deborah Sturgeon
Phone: (812) 213-6626
Address: 134 NW 6th Street
Evansville, IN 47708
Email: DS9726@ATT.COM
Finch Newton Water Inc.
Contact: Don Evrard
Phone: (812) 362-8497
Address: 23B Market Street
Chrinsney, IN 47611
Email: EVRARDCONS@GMAIL.COM
Ohio Valley Gas Corp
Contact: Greg Bailey
Phone: (765) 584-6842
Fax: (765) 546-0527
Address: P.O. Box 469
Winchester, IN 47394
Email: GREG.BAILEY@OVGAS.COM

Perry Spencer Rural Telephone
Contact: Jim Ferguson
Phone: (812) 357-2123
Address 1: 11877 E State Road 62
Address 2: P.O. Box 126
St. Meinrad, IN 47577
Email: JFERGUSON@PSCFIBER.NET
Southern Indiana Power
Contact: Dale Kaufman
Phone: (812) 323-2316
Cell: (812) 719-0549
Address: 1776 10th Street
Tell City, IN 47586
Email: DKAUFMAN@SOUTHERNINDIANAPOWER.COM

NOTE: UNDERGROUND UTILITY LOCATION HOTLINE: 1-800-382-5544

NOTE: The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities comprise all such utilities in th earea, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.

REVISIONS

SHEET NO's.	DATE	REVISION DESCRIPTION

GENERAL NOTES

- All earth shoulders, median areas and cut and fill slopes shall be plain or mulch seeded except where sodding is specified.
- The final cross-sections of the grading contract will be the original cross-sections of the paving contract. However, partial or complete cross-sections shall be taken if necessary to determine the actual excavation quantities.
- The Contractor must accept the plan quantities of subbase as given on the Estimate of Quantities sheet subject to the conditions as set out in 304.07 of the Standard Specifications per INDOT.
- All design shall be in accordance with the standard specifications for structural supports for highway signs, luminaries and traffic signals, - latest edition.

DRAWING INDEX

DIRECTORY....Z:\Shared\Documents\Projects\2023\2305273 SR 66 Slide Correction - 2000131\30 SheetDrawings\01 Title and Index\
FILE...............5273-IND.dwg
DIMSCALE..1 LTSCALE....1
PLOTTED BY..AJBuzza
DATE............Aug 16,2024 - 9:51am

VS ENGINEERING
223 NW 2nd St. Suite 201
Evanville, IN 47708
P: (812) 401-0303
vsei@vsengineering.com
www.vsengineering.com

STAGE 2 PLANS NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL ____ #### DESIGN ENGINEER DATE

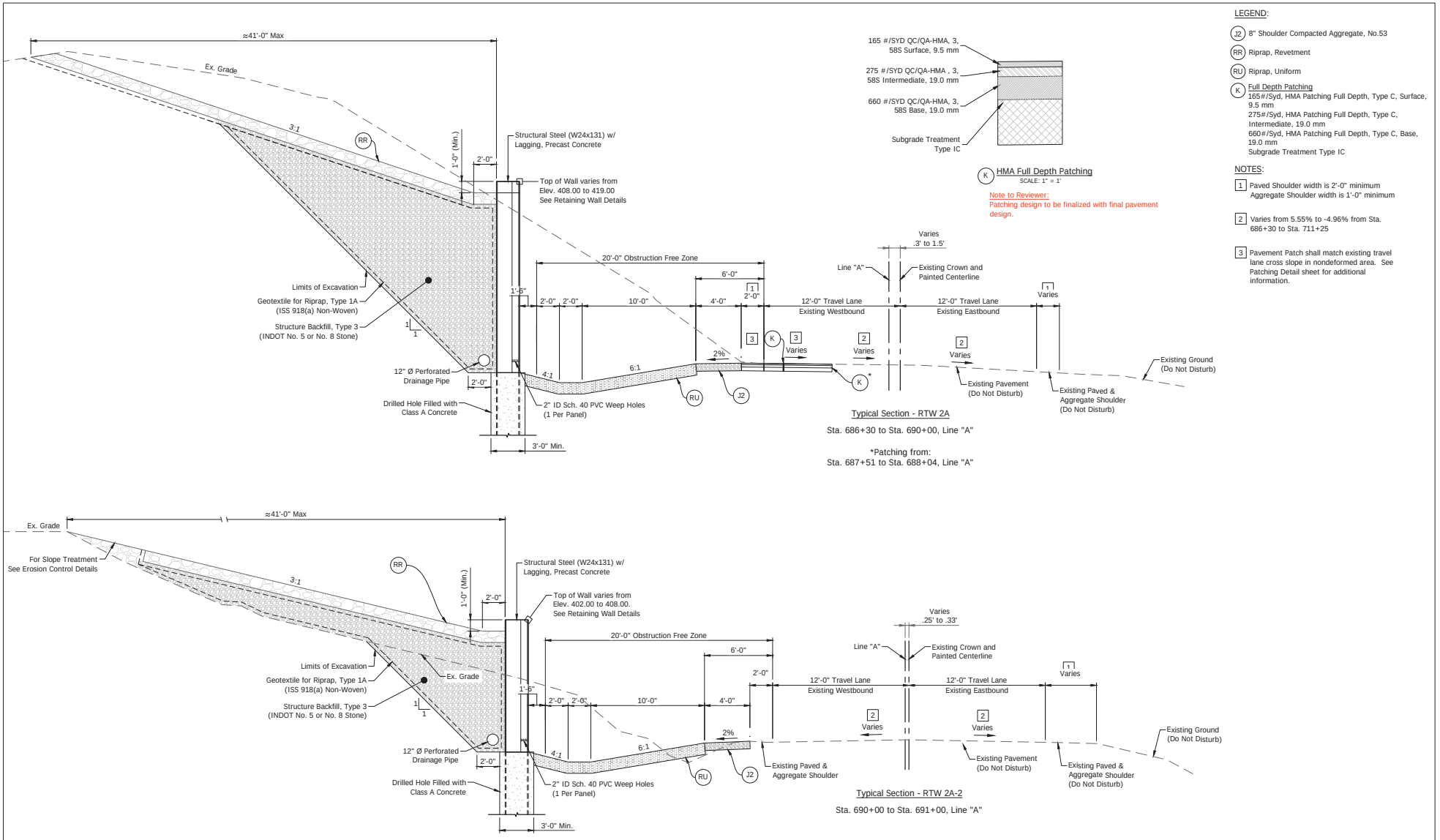
DESIGNED: AJB DRAWN: AJB
CHECKED: NRJ CHECKED: NRJ

INDIANA
DEPARTMENT OF TRANSPORTATION

Index and General Notes

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000131
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 48
CONTRACT	PROJECT
R-43515	2000131

Preliminary



LEGEND:

- J2 8" Shoulder Compacted Aggregate, No.53
- RR Riprap, Revetment
- RU Riprap, Uniform
- K Full Depth Patching
  165#/Syd, HMA Patching Full Depth, Type C, Surface, 9.5 mm
  275#/Syd, HMA Patching Full Depth, Type C, Intermediate, 19.0 mm
  660#/Syd, HMA Patching Full Depth, Type C, Base, 19.0 mm
  Subgrade Treatment Type IC

NOTES:

1. Paved Shoulder width is 2'-0" minimum Aggregate Shoulder width is 1'-0" minimum
2. Varies from 5.55% to -4.96% from Sta. 686+30 to Sta. 711+25
3. Pavement Patch shall match existing travel lane cross slope in nondeformed area. See Patching Detail sheet for additional information.

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vsei@vsengineering.com
www.vsengineering.com

STAGE 2 PLANS NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ DATE ____ ####

DESIGNED: AJB | DRAWN: AJB | CHECKED: NRJ | CHECKED: NRJ

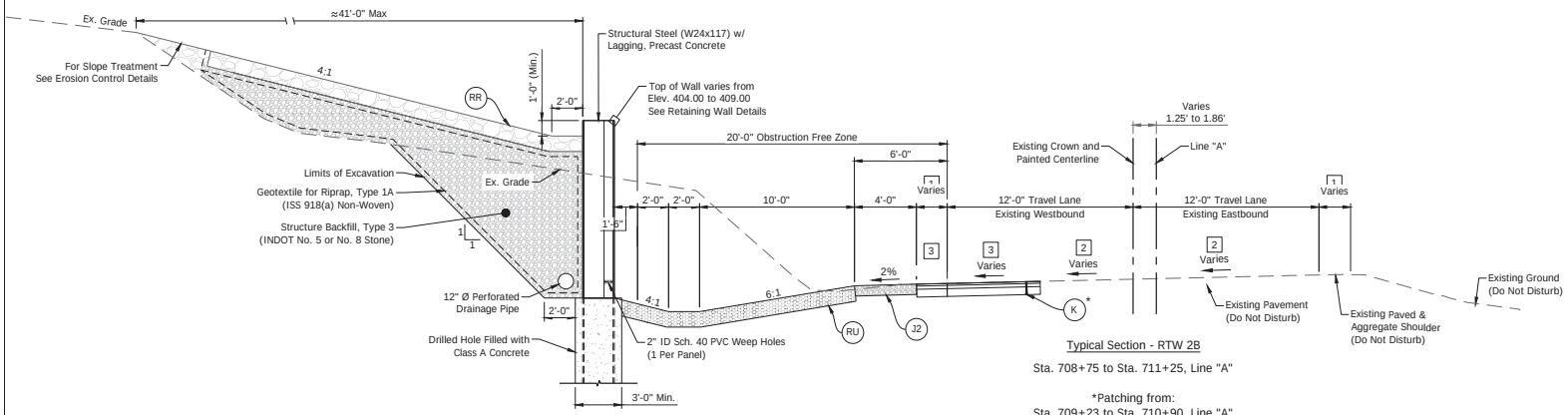
INDIANA DEPARTMENT OF TRANSPORTATION

Typical Sections

HORIZONTAL SCALE	BRIDGE FILE
1/4" = 1'-0"	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000131
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 48
CONTRACT	PROJECT
R-43515	2000131

DIRECTORY...Z:\Shared\Documents\Projects\2023\2305273 SR 66 Side Correction - 2000131\30 Sheet Drawings\02 Typical Sections\
FILE.....5273-TYP-01.dwg
PLOTTED BY...AJB
DATE.....Aug 16,2024 - 9:51am

Preliminary



Typical Section - RTW 2B

Sta. 708+75 to Sta. 711+25, Line "A"

*Patching from:
Sta. 709+23 to Sta. 710+90, Line "A"

LEGEND:

(J2) 8" Shoulder Compacted Aggregate, No.53

(RR) Riprap, Revetment

(RU) Riprap, Uniform

(K) Full Depth Patching
165#/Syd, HMA Patching Full Depth, Type C, Surface, 9.5 mm
275#/Syd, HMA Patching Full Depth, Type C, Intermediate, 19.0 mm
660#/Syd, HMA Patching Full Depth, Type C, Base, 19.0 mm
Subgrade Treatment Type IC

NOTES:

1. Paved Shoulder width is 2'-0" minimum
Aggregate Shoulder width is 1'-0" minimum

2. Cross Slope Shall Match Existing Cross Clope

3. Pavement Patch shall match existing travel lane cross slope in nondeformed area. See Patching Detail sheet for additional information.

Note to Reviewer:
The patching pavement design listed above is a temporary stand in for estimating purposes, and will be updated once a final pavement design has been approved.

VS ENGINEERING
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Evansville, IN 47708
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vsei@vsengineering.com
www.vsengineering.com

STAGE 2 PLANS NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ ####
DESIGN ENGINEER DATE

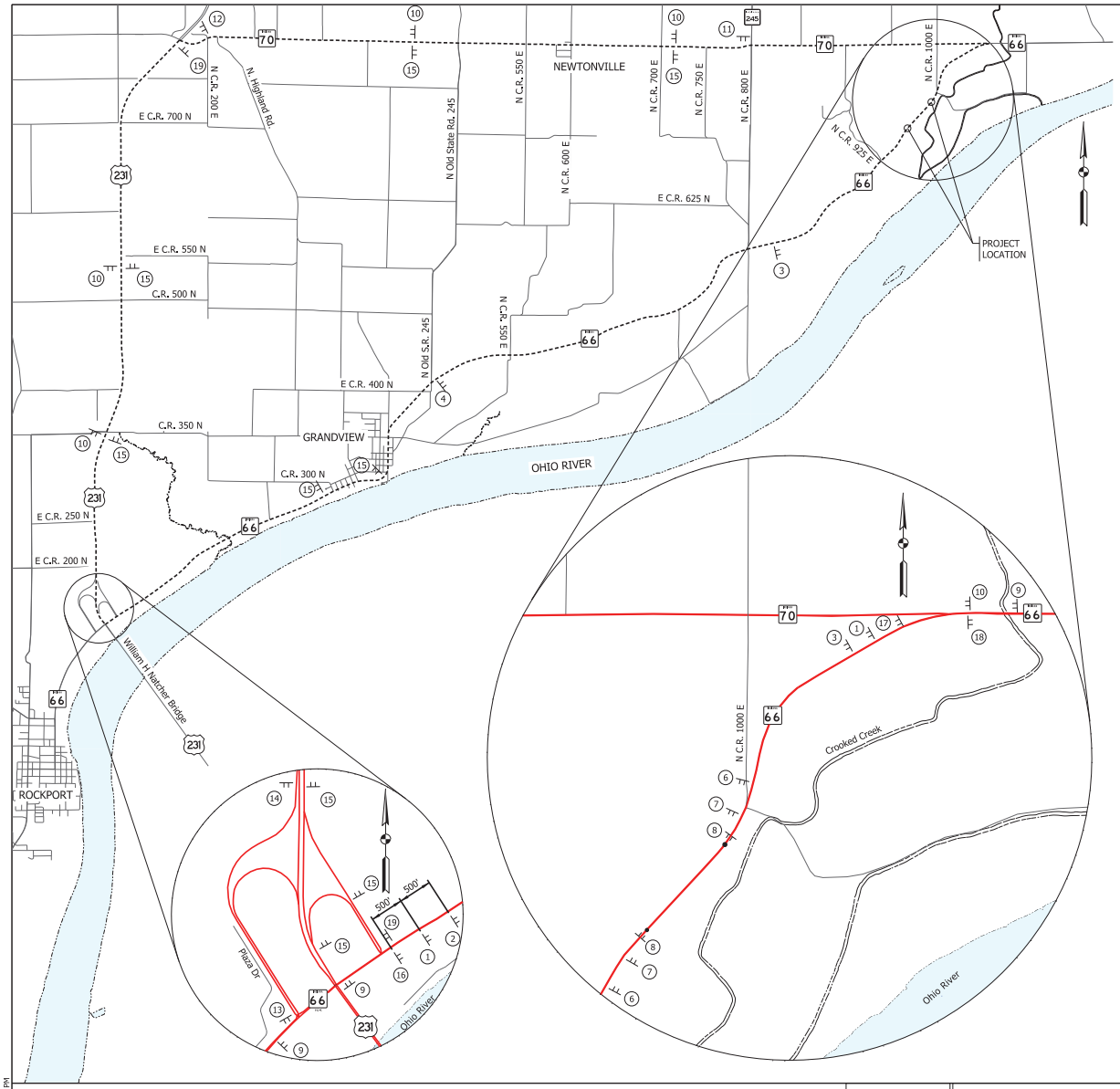
DESIGNED: AJB DRAWN: AJB
CHECKED: NRJ CHECKED: NRJ

INDIANA
DEPARTMENT OF TRANSPORTATION

Typical Sections

HORIZONTAL SCALE	BRIDGE FILE
1/4" = 1'-0"	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000131
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 48
CONTRACT	PROJECT
R-43515	2000131

Preliminary



1. Portable Changeable Message Sign
2. Type III-B Barricade and Road Closure Sign Assembly (with R11-3)

R11-3

3. Type III-B Barricade and Road Closure Sign Assembly (with R11-3)

R11-3

4. Type III-B Barricade and Road Closure Sign Assembly (with R11-3)

R11-3

5. Type III-B Barricade and Road Closure Sign Assembly (with R11-3)

R11-3

6. XW20-3 (Road Closed Ahead, 1000')

XW20-3

7. XW20-3 (Road Closed Ahead, 500')

XW20-3

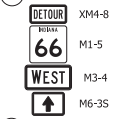
8. Type III-A Barricade and Road Closure Sign Assembly (with R11-2)

R11-2

9. XW20-2 (Detour Ahead)

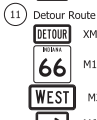
XW20-2

10. Detour Route Marker Assembly



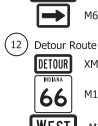
XM4-8
M1-5
M3-4
M6-3S

11. Detour Route Marker Assembly



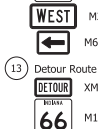
XM4-8
M1-5
M3-4
M6-1S

12. Detour Route Marker Assembly



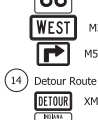
XM4-8
M1-5
M3-4
M6-1S

13. Detour Route Marker Assembly



XM4-8
M1-5
M3-4
M5-1(R)S

14. Detour Route Marker Assembly

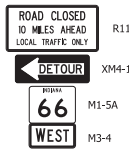


XM4-8
M1-5
M3-4
M6-2(R)S

15. Detour Route Marker Assembly

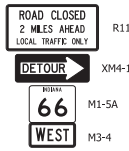
XM4-8
M1-5
M3-2
M6-3S

16. Type III-B Barricade and Road Closure Sign Assembly (with R11-3, XM-4-10-L, M1-5A, & M3-4)



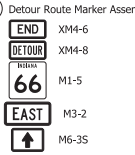
R11-3
XM4-10L
M1-5A
M3-4

17. Type III-B Barricade and Road Closure Sign Assembly (with R11-3, XM-4-10-R, M1-5A & M3-4)



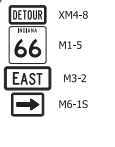
R11-3
XM4-10R
M1-5A
M3-4

18. Detour Route Marker Assembly



XM4-6
XM4-8
M1-5
M3-2
M6-3S

19. Detour Route Marker Assembly



XM4-8
M1-5
M3-2
M6-1S

TWO ROAD CLOSURE NOTICE SIGNS XG20-5 REQUIRED (ONE AT EACH END) PLACED AT SITE A MINIMUM OF 14 DAYS PRIOR TO ROAD CLOSURE

NOTES

1. Detour Route Marker Assemblies shall be in accordance with Standard Drawing 801-TCDT-04. Sign spacing shall be in accordance with Standard Drawing 801-TCDT-01.
2. Type B Construction Warning Lights shall be used with all signs located on barricades. Type A Construction Warning Lights shall be used on all other construction signs.
3. Access to all drives and field entrances shall be maintained during construction.

SIGN QUANTITIES TABLE

ITEM	DESCRIPTION	SIZE	QTY.	UNIT
Construction Sign, A			9	EA
Construction Sign, B			0	EA
Barricade, III-A			48	LFT
Barricade, III-3			120	LFT
Road Closure Sign Assembly			7	EA
Detour Route Marker Assembly			20	EA
Portable Changeable Message Sign			2	EA

STAGE 2 SUBMITTAL NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: DSR DRAWN: DSR

CHECKED: SRM CHECKED: SRM

INDIANA DEPARTMENT OF TRANSPORTATION

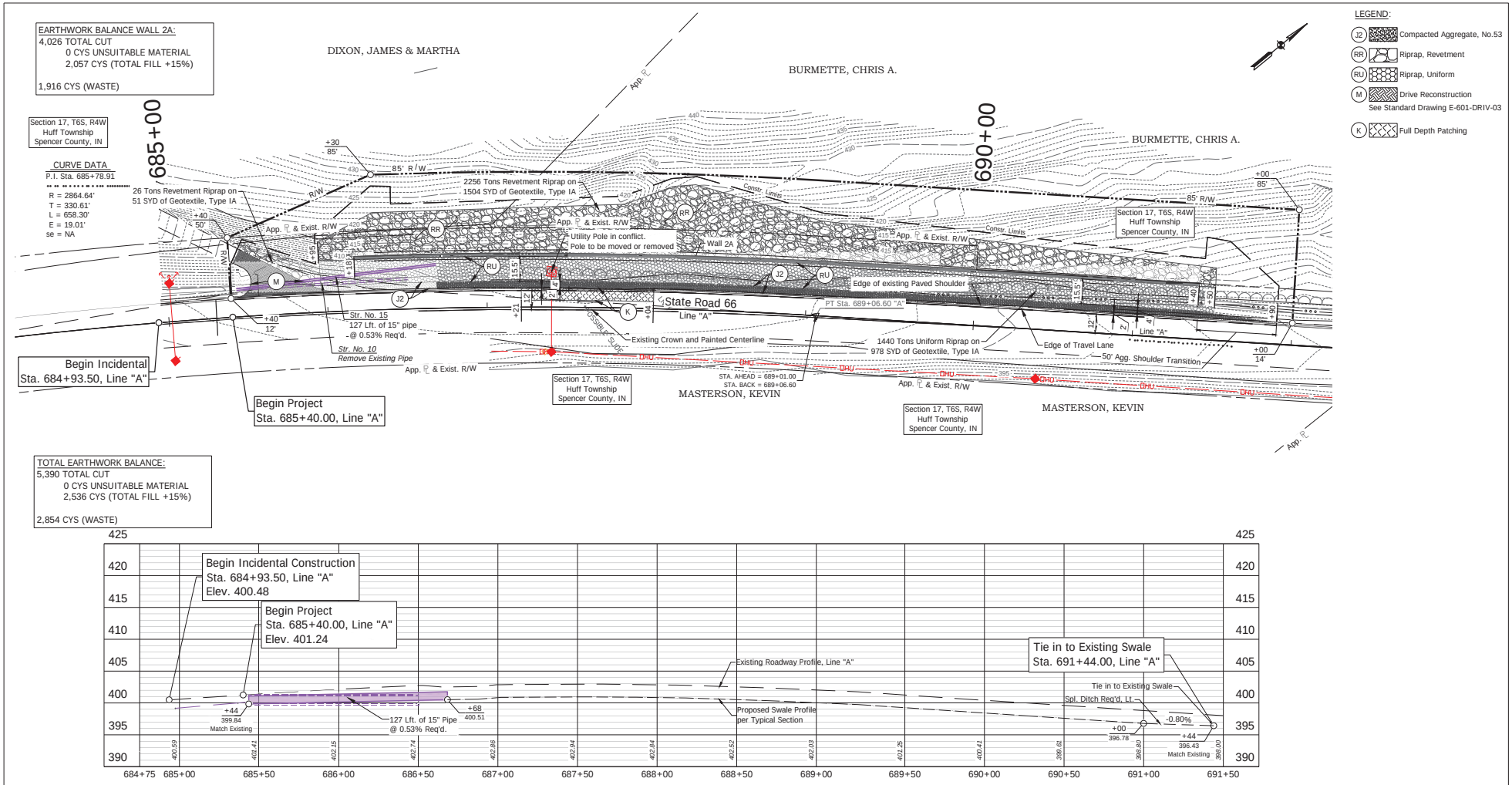
MAINTENANCE OF TRAFFIC DETOUR ROUTE

HORIZONTAL SCALE	BRIDGE FILE
NTS	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000131
SURVEY BOOK	SHEETS
-	7 of 48
CONTRACT	PROJECT
R-43515	2000131

Plot:8/15/2024 1:12:56 PM

File:H:\Projects\2023\Engineering\23EN011_SR_66_SLIDE_CORRECTION_DES_2000131_VS\CAD\Sheets\23EN011_Detour Route.dgn
Model:Detour Route

Preliminary



TOTAL EARTHWORK BALANCE:
5,390 TOTAL CUT
0 CYS UNSUITABLE MATERIAL
2,536 CYS (TOTAL FILL +15%)
2,854 CYS (WASTE)

Note To Reviewer:
Apparent Existing Right of Way was untimely recorded and it is anticipated that reacquisition will be required.

VS ENGINEERING
223 NW 2nd St. Suite 201
Evansville, IN 47708
P: (812) 401-0303
vsei@vsengineering.com
www.vsengineering.com

STAGE 2 PLANS NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	#### DATE	
DESIGNED: AJB	DRAWN: AJB		
CHECKED: NRJ	CHECKED: NRJ		

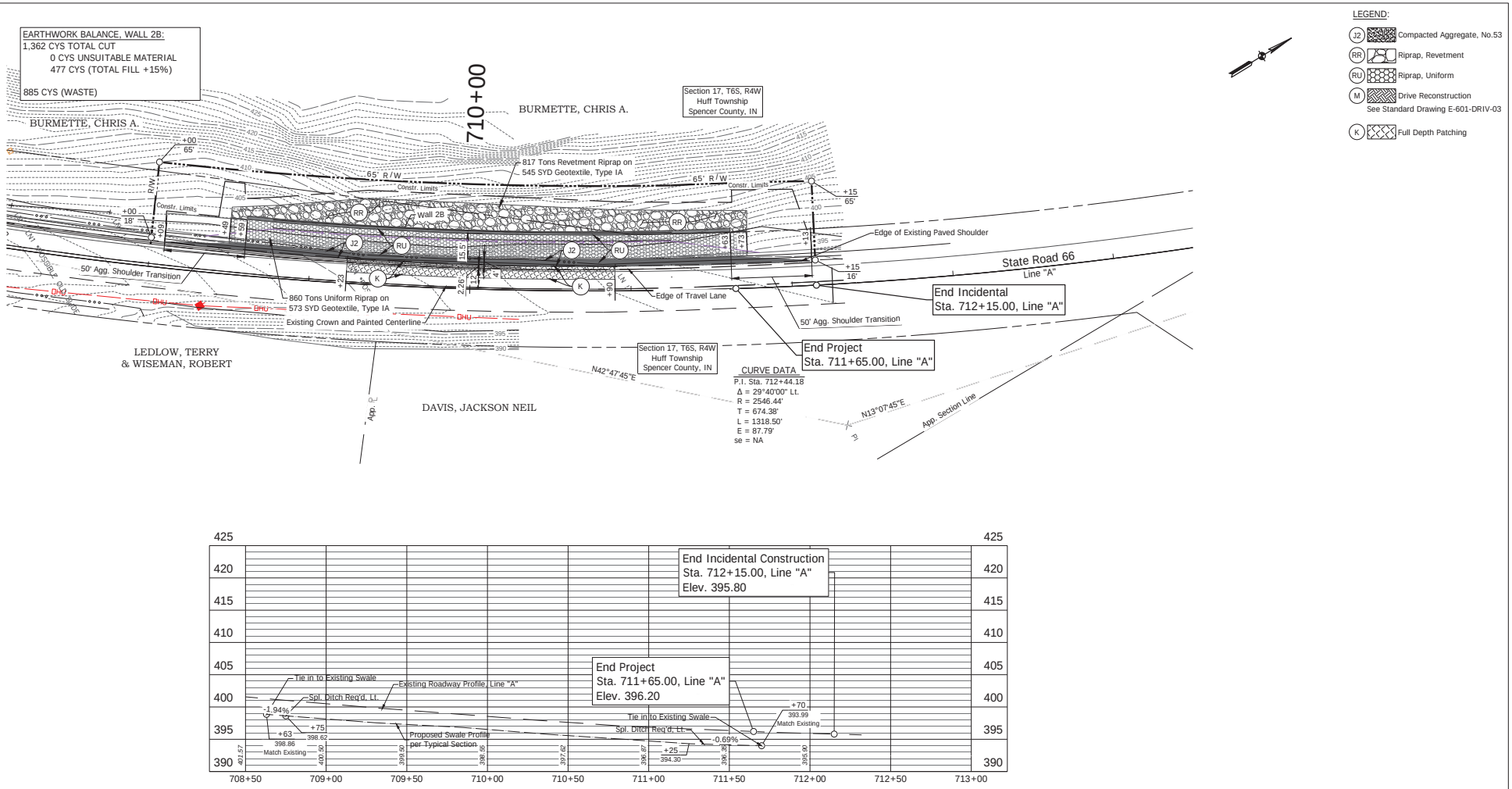
INDIANA DEPARTMENT OF TRANSPORTATION

Plan And Profile - Line "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION
1" = 30'	2000131
SURVEY BOOK	SHEETS
Electronic	8 of 48
CONTRACT	PROJECT
R-43515	2000131

DIRECTORY: J:\Shared\Documents\Projects\2023\2305273 SR 66 Bridge Correction - 2000131\00 Sheet\Drawings\06 Plan and Profile\
FILE: 6273-PP-01.dwg
DWGSCALE:1 LTSCALE:1
PLOTTED: Aug 16,2024 - 2:11pm
DATE: Aug 16,2024 - 2:11pm

Preliminary



Note To Reviewer:
Apparent Existing Right of Way was untimely recorded and it is anticipated that reacquisition will be required.

VS ENGINEERING
223 NW 2nd St. Suite 201
Evansville, IN 47708
P: (812) 401-0303
vsei@vsengineering.com
www.vsengineering.com

STAGE 2 PLANS NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ #### DESIGN ENGINEER DATE

DESIGNED: AJB DRAWN: AJB
CHECKED: NRJ CHECKED: NRJ

INDIANA
DEPARTMENT OF TRANSPORTATION

Plan And Profile - Line "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION
1" = 30'	2000131
SURVEY BOOK	SHEETS
Electronic	9 of 48
CONTRACT	PROJECT
R-43515	2000131

DIRECTORY: J:\Shared\Documents\Projects\2023\2305273 SR 66 Bridge Correction - 2000131\00 Sheet\Drawings\06 Plan and Profile\
FILE: 6273-PP-01.dwg
DWGSCALE:1 LTSCALE:1
PLOTTED: Aug 16, 2024 - 9:52am
DATE: Aug 16,2024 - 9:52am

Preliminary

Categorical Exclusion

Appendix C

Early Coordination

INDIANA DEPARTMENT OF TRANSPORTATION

September 25, 2024

Sample Early Coordination Letter

«Name»
«Title»
«Address1»
«Address2»
«City», «State» «Zip»

Re: Des. No. 2000131
State Road (SR) 66 Slide Correction Project
State Project
SR 66, 1.35 Miles West of SR 70 Junction (Jct)
Spencer County, Indiana

Dear «Salu»,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a slide correction project on SR 66, 1.35 miles west of the SR 70 Jct in Spencer County, Indiana (Des. No. 2000131).

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

Project Location and Existing Conditions
The proposed project is located on SR 66, 1.35 miles west of the SR 70 Jct. in Spencer County, Indiana. Specifically, the project located in Section 17, Township 6 South, Range 4 West in Huff Township as depicted on the Tell City U.S. Geological Survey 1:24,000 scale quadrangle. Adjacent land use consists of forested, agricultural, and rural residential properties.

Within the project area, SR 66 is functionally classified as a rural, minor arterial road. The typical cross section consists of two 12-foot travel lanes (one in each direction) with a mix of both 1-foot aggregate and 2-foot paved shoulders. Please see attachments for maps and photographs of the proposed project area.

Draft Purpose and Need
The need for this project stems from two overhead slides occurring off the west bound shoulder of SR 66. Both slides are causing pavement distresses, primarily in the shoulder with potential to extend into the west bound travel lane.

The purpose of the project is to prevent further damage to the roadway and to reduce maintenance needs in the area.

Proposed Project
The proposed work involves repairing two overhead slides occurring off the west bound shoulder of SR 66. The proposed project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. A driveway culvert will be removed and replaced.

A total of 0.97 acre of tree removal is anticipated.

The maintenance of traffic (MOT) will consist of planned road closure with a detour. The detour will utilize US 231 and SR 70.

Construction is anticipated to begin February of 2026 and is anticipated to be completed by November 2026.

Right-of-Way (ROW)
This project will require up to 1.94 acres of new permanent ROW and 0.36 acre of re-acquired ROW.

Environmental Resources
A Red Flag Investigation (RFI) was performed for a 0.5-mile radius around the project area. A few "Red Flags" were identified within the 0.5-mile search radius; however, not all will impact the proposed project. One NWI wetland is located within the project area. Additionally, the project is located within a floodplain polygon. This project is also located within the Indiana Karst Region.

Section 106
It is anticipated that this project will fall under the Minor Projects Programmatic Agreement (MPPA) within the guidelines of Category B-10 with archaeology.

Range-Wide Informal Programmatic Consultation
Spencer County is within the range of the federally endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*). The U.S. Fish and Wildlife Service (USFWS) Range-wide Programmatic Informal Consultation for the Indiana Bat and Northern Long-eared Bat (NLEB) will be completed for this project. If a determination of "Not Likely to Adversely Affect" or "Likely to Adversely Affect" is reached, then additional consultation with the USFWS will occur through INDOT.

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

If you have any questions regarding this project, please feel free to contact me at (812) 759-4107, 6200 Vogel Road, Evansville, Indiana 47715, or at Kelsey.Boss@lochgroup.com. Additionally, should you want to contact the sponsor for this project, INDOT Vincennes District, please contact the Project Manager, Dakota Risse, at (812) 404-8620 or DaRisse@indot.in.gov.

Thank you in advance for your input.

Sincerely,

Kelsey Boss
Environmental Specialist I
Lochmueller Group, Inc.

Attachments:

- General Location Map
- USGS Topographic Map
- Red Flag Investigation Maps
- Photographs
- Preliminary Design Plans

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

Distribution List:

- FHWA – Indiana Division (electronic submission)
- IDEM Groundwater (online submission)
- Indiana Geological and Water Survey (online submission)
- IDNR, Division of Fish and Wildlife (electronic submission)
- U.S. Housing and Urban Development (electronic submission)
- INDOT, Vincennes District Environmental (electronic submission)
- INDOT, Project Manager (electronic submission)
- Natural Resources Conservation Service (electronic submission)
- U.S. Army Corps of Engineers, Louisville District (electronic submission)
- Spencer County Plan Commission, Floodplain Administrator
- Spencer County Board of Commissioners
- Spencer County Surveyor's Office
- Spencer County Highway Department
- Spencer County Common Council
- Spencer County Sheriff's Department
- Spencer County Emergency Management Agency
- Spencer County Emergency Ambulance Service, Inc.
- South Spencer County School Corporation
- Grandview Volunteer Fire Department

Organization and Project Information

Organization Name: Lochmueller Group Inc.

Last Name: Boss

Email: Kelsey.Boss@lochgroup.com

City: Evansville

Zip: 47715

Destination Id: 2000131

Project Description: The proposed work for this project is to repair two overhead slides. The proposed project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. A driveway culvert will be removed and replaced.

First Name: Kelsey

Phone: (812) 479-6200

Address Line 1: 6200 Vogel Road

State: IN

Customer Id: INDOT

Project Title: SR 66 Slide Correction Project

Environmental Assessment Report

Geological Hazards:

1. Floodway
2. High liquefaction potential

Mineral Resources:

1. Bedrock Resource: High Potential
2. Sand and Gravel Resource: Low Potential

Active or abandoned mineral resources extraction sites:

1. Petroleum Exploration Wells

Disclaimer:

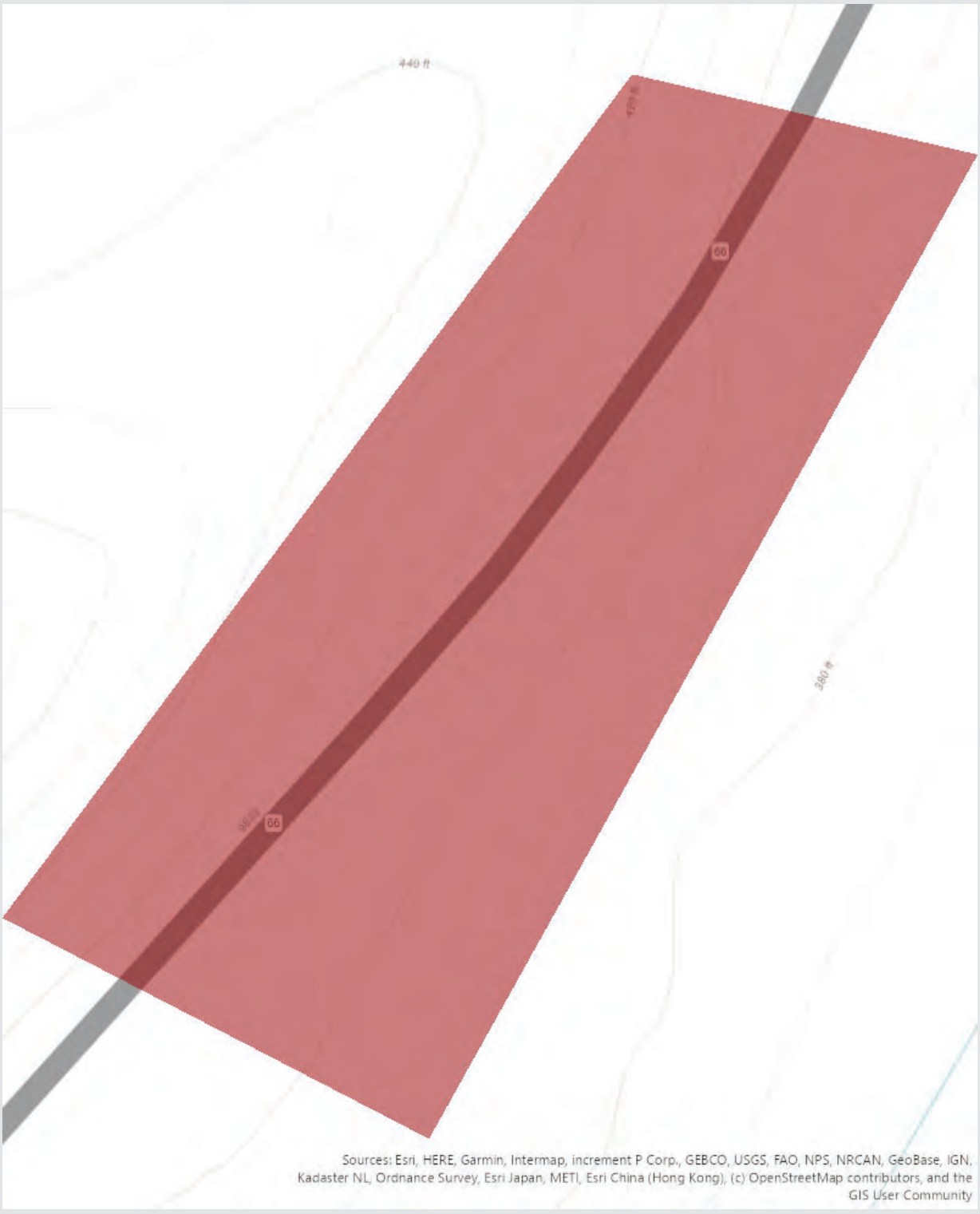
This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties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

This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: (812) 855-7428



Metadata:

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https://portal.igs.indiana.edu/arcgis/rest/services/Seismic_Earthquake_Liquefaction_Potential/MapServer/info/metadata/

https://portal.igs.indiana.edu/arcgis/rest/services/Bedrock_Geology/MapServer/info/metadata/

https://portal.igs.indiana.edu/arcgis/rest/services/Industrial_Minerals_SandAndGravel_Resources/MapServer/info/metadata/

https://igws.indiana.edu/pdms/

Organization and Project Information

Organization Name: Lochmueller Group Inc.

Last Name: Boss

Email: Kelsey.Boss@lochgroup.com

City: Evansville

Zip: 47715

Destination Id: 2000131

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Disclaimer:

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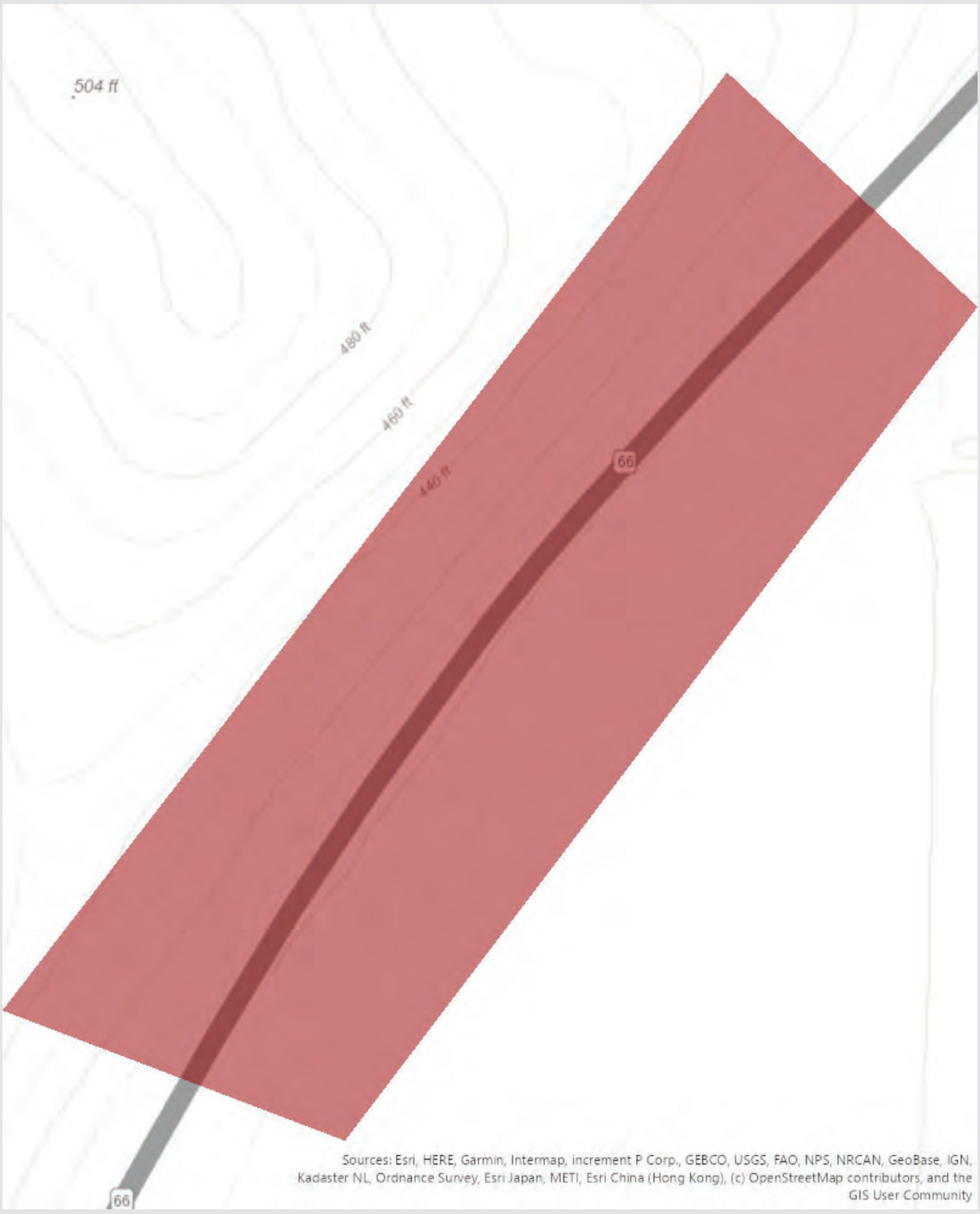

Metadata:

https://gisdata.in.gov/server/rest/services/Hosted/FIRM_Flood_Hazard_Zones_2023/FeatureServer/info/metadata

https://portal.igs.indiana.edu/arcgis/rest/services/Seismic_Earthquake_Liquefaction_Potential/MapServer/info/metadata/

https://portal.igs.indiana.edu/arcgis/rest/services/Bedrock_Geology/MapServer/info/metadata/

https://portal.igs.indiana.edu/arcgis/rest/services/Industrial_Minerals_SandAndGravel_Resources/MapServer/info/metadata/

https://igws.indiana.edu/pdms/

Kelsey Boss

From: Falls, Ryan G <RFalls@indot.IN.gov>
Sent: Monday, September 30, 2024 7:48 AM
To: Kelsey Boss
Cc: Daniel Townsend; Brooke Vorbeck; Sean Langley
Subject: RE: Early Coordination - DES 2000131 SR 66 Slide Correction Project

EXTERNAL

Kelsey Boss,

At this time, our office has no comment on this project. Thank you for the opportunity to respond to early coordination.

Ryan Falls
Senior Environmental Manager Supervisor
Indiana Department of Transportation
Vincennes District
Cell: 812-582-1387
Email: rfalls@indot.in.gov
Find us on social media!

From: Kelsey Boss <Kelsey.Boss@lochgroup.com>
Sent: Wednesday, September 25, 2024 11:26 AM
To: Falls, Ryan G <RFalls@indot.IN.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>; Brooke Vorbeck <Brooke.Vorbeck@lochgroup.com>; Sean Langley <SLangley@lochgroup.com>
Subject: Early Coordination - DES 2000131 SR 66 Slide Correction Project

> **EXTERNAL EMAIL:** This email was sent from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Hello Mr. Falls,

We are working on the environmental document for a slide correction project located in Spencer County on SR 66 in Indiana (Des. No. 2000131). The early coordination package is attached for your review and comment.

Thank you,

Kelsey Boss

LOCHMUELLER GROUP

Kelsey Boss, BS
Environmental Specialist I
Lochmueller Group
6200 Vogel Road, Evansville, IN 47715

THIS IS NOT A PERMIT

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

DNR#: ER-26862

Request Received: September 25, 2024

Requestor:
Kelsey Boss
Lochmueller Group, Inc.
6200 Vogel Road
Evansville, IN 47715

Project:
SR 66 slide correction along the west bound shoulder via installation of non-gravity, cantilever soldier-pile and lagging retaining walls, 1.35 miles west of the SR 70 Junction; Des #2000131

County/Site Info: Spencer County

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

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

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

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

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

A) 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: https://www.in.gov/nrc/files/IB-17.pdf.

Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in a rural area typically do not require mitigation or additional plantings beyond seeding and stabilizing disturbed areas, though there are exceptions for high quality habitat sites.

Impacts under 0.10 acre in an urban area should be mitigated by replacing each mature tree removed (trees that are 10” diameter-at-breast height (dbh)) with two trees of 3-gallon stock or larger. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location.

The mitigation site should be located in the floodway, downstream of the one (1) square mile drainage area of that stream (or another stream within the 8-digit HUC, preferably as close to the impact site as possible) and adjacent to existing forested riparian habitat.

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

1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Southern Indiana as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits all tree and brush clearing.
3. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
4. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
5. If erosion control blankets are used, they shall be heavy-duty, biodegradable, and net free or use loose-woven/Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer’s recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

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

Rachel Van Voorhis

Date: October 25, 2024

Rachel Van Voorhis
Environmental Coordinator
Division of Fish and Wildlife

United States Department of Agriculture

Farm Production and Conservation

Natural Resources Conservation Service

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

December 15, 2024

Kelsey Boss
6200 Vogel Road
Evansville, Indiana 47715
Kelsey.Boss@lochgroup.com

Dear Kelsey Boss:

The proposed State Road (SR) 66 Slide Correction Project, located on SR 1.35 Miles West of SR 70 Junction, in Spencer County, Indiana. (Des No 2000131) as referred to in your letter received on September 25, 2024, will cause a conversion of prime farmland.

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

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

Sincerely,

JOHN ALLEN

Digitally signed by JOHN ALLEN
Date: 2024.12.16 08:24:00 -05'00'

JOHN ALLEN
State Soil Scientist

Enclosers

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **9/25/24**	4. Sheet 1 of **1**
1. Name of Project **Des 2000131, SR 66**	5. Federal Agency Involved **FHWA**	
2. Type of Project **Slide Correction Project**	6. County and State **Spencer County, Indiana**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **12/20/24**	2. Person Completing Form **JRA**
3. Does the corridor 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 ☐		4. Acres Irrigated / Average Farm Size: 290 ac
5. Major Crop(s): **Corn**	6. Farmable Land in Government Jurisdiction: Acres: **210590** % **82**	7. Amount of Farmland As Defined in FPPA: Acres: 151782 % **59**
8. Name Of Land Evaluation System Used: **LESA**	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Maximum Points	Alternative Corridor For Segment ____ Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		**1.46**			
B. Total Acres To Be Converted Indirectly, Or To Receive Services		**0**			
C. Total Acres In Corridor		**4.8**			
PART IV *(To be completed by NRCS) Land Evaluation Information*					
A. Total Acres Prime And Unique Farmland		**0.88**			
B. Total Acres Statewide And 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		**95**			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*		56			
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	**Maximum Points**				
1. Area in Nonurban Use	**15**	**15**			
2. Perimeter in Nonurban Use	**10**	**10**			
3. Percent Of Corridor Being Farmed	**20**	**10**			
4. Protection Provided By State And Local Government	**20**	**0**			
5. Size of Present Farm Unit Compared To Average	**10**	**7**			
6. Creation Of Nonfarmable Farmland	**25**	**0**			
7. Availablility Of Farm Support Services	**5**	**3**			
8. On-Farm Investments	**20**	**1**			
9. Effects Of Conversion On Farm Support Services	**25**	**0**			
10. Compatibility With Existing Agricultural Use	**10**	**0**			
TOTAL CORRIDOR ASSESSMENT POINTS	**160**	46			
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	**100**	56			
Total Corridor Assessment (From Part VI above or a local site assessment)	**160**	46			
TOTAL POINTS *(Total of above 2 lines)*	**260**	102			

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
Corridor A	**1.46**	**12/20/24**	YES ☐ NO ☑

5. Reason For Selection:

This alternative has an impact rating score of less than 160 and will have minimal impacts to prime farmland.

Signature of Person Completing this Part: *Kelsey Boss* DATE **12/20/24**

NOTE: Complete a form for each segment with more than one Alternate Corridor

Note: Amount of tree clearing decreased from 2.3 ac to 1.15 ac. See Appendix C, page 43 for coordination with Vincennes District Environmental regarding this.

United States Department of the Interior

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

In Reply Refer To: 10/16/2024 21:45:29 UTC
Project Code: 2025-0006787
Project Name: Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

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

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

Attachment(s):

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

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2025-0006787

Project Name: Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

Project Type: Slide Repair - Roadways

Project Description: The proposed slide correction project (DES 2000131) is located on SR 66, 1.35 miles west of the SR 70 junction with SR 66. The proposed work involves repairing two overhead slides occurring off the west bound shoulder of SR 66. The proposed project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. No work to bridges is anticipate. A 15-inch driveway culvert will be removed and replaced. The project is located in a rural area surrounded by wooded areas, farm fields, rural residential, and rural commercial areas that would be considered suitable summer habitat for the Indiana bat and the northern long-eared bat. A total of 2.3 acres of tree clearing is anticipated within 100 feet of the existing roadway. Dominant species within the tree clearing area are red maple (Acer rubrum) and chestnut oak (Quercus montana). Tree clearing will not occur during the active season (April 1 – September 30). A review of the USFWS database by INDOT Vincennes District Environmental staff on March 4, 2024 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. Construction is anticipated to begin in March 2025 and be completed by November 2025. No permanent or temporary lighting is anticipated. Mitigation is not anticipated.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.987790399999994,-86.87394531395086,14z

Counties: Spencer County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 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
Gray Bat *Myotis grisescens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
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
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

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

INSECTS

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

CRITICAL HABITATS

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

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

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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

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

NAME	BREEDING SEASON
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
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

NAME	BREEDING SEASON
Field Sparrow *Spizella 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/9446	Breeds Mar 1 to Aug 15
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
Prairie Warbler *Setophaga discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
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

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

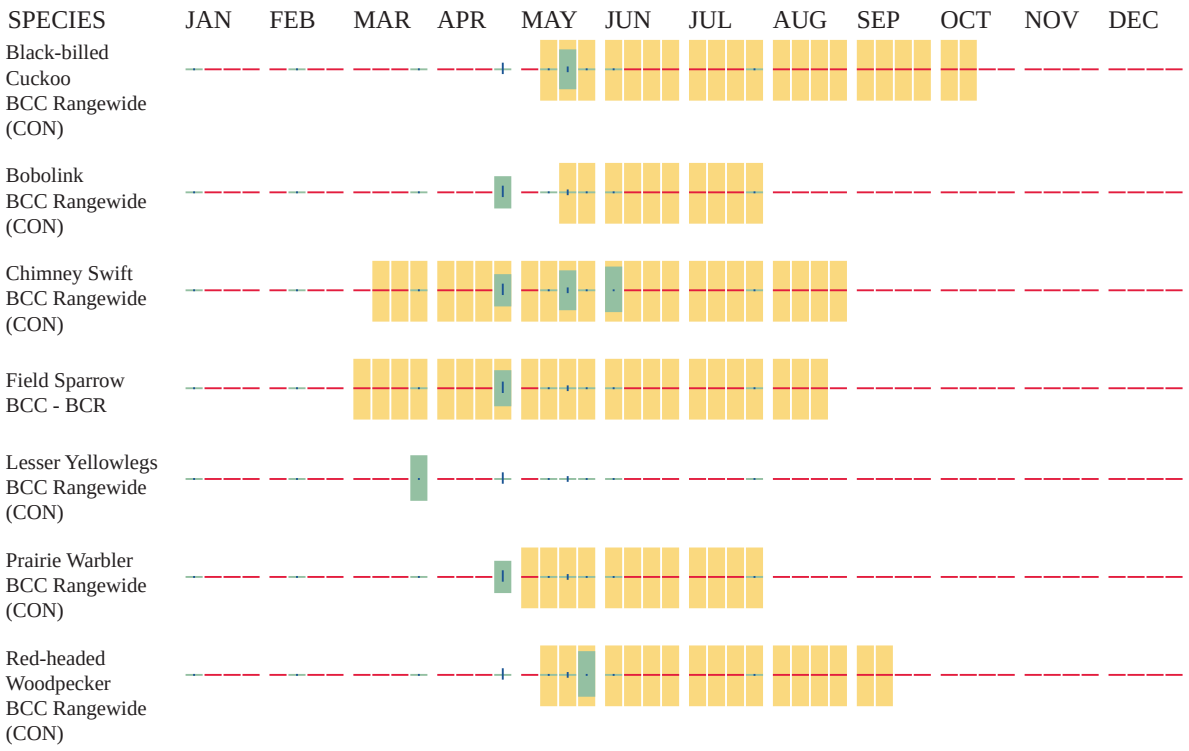
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

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

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

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

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



Additional information can be found using the following links:

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

WETLANDS

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

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

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation
Name: Kelsey Boss
Address: 6200 Vogel Road
City: Evansville
State: IN
Zip: 47715
Email kelsey.boss@lochgroup.com
Phone: 8127594107

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Note: Amount of tree clearing decreased from 2.3 ac to 1.15 ac. See Appendix C, page 43 for coordination with Vincennes District Environmental regarding this.

United States Department of the Interior

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

In Reply Refer To: 10/21/2024 16:51:54 UTC
Project code: 2025-0006787
Project Name: Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

Subject: Concurrence verification letter for the 'Des 2000131; SR 66 Slide Correction Project; Spencer County, IN' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated October 21, 2024 to verify that the **Des 2000131; SR 66 Slide Correction Project; Spencer County, IN** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

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

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

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

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

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

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

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

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

- Gray Bat *Myotis grisescens* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

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

NAME

Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

DESCRIPTION

The proposed slide correction project (DES 2000131) is located on SR 66, 1.35 miles west of the SR 70 junction with SR 66. The proposed work involves repairing two overhead slides occurring off the west bound shoulder of SR 66. The proposed project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. No work to bridges is anticipate. A 15-inch driveway culvert will be removed and replaced. The project is located in a rural area surrounded by wooded areas, farm fields, rural residential, and rural commercial areas that would be considered suitable summer habitat for the Indiana bat and the northern long-eared bat. A total of 2.3 acres of tree clearing is anticipated within 100 feet of the existing roadway. Dominant species within the tree clearing area are red maple (Acer rubrum) and chestnut oak (Quercus montana). Tree clearing will not occur during the active season (April 1 – September 30). A review of the USFWS database by INDOT Vincennes District Environmental staff on March 4, 2024 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. Construction is anticipated to begin in March 2025 and be completed by November 2025. No permanent or temporary lighting is anticipated. Mitigation is not anticipated.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.987790399999994,-86.87394531395086,14z

DETERMINATION KEY RESULT

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

QUALIFICATION INTERVIEW

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

   [1] See Indiana bat species profile

   Automatically answered
   Yes

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

   [1] See northern long-eared bat species profile

   Automatically answered
   No

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

   A) Federal Highway Administration (FHWA)

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

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

   No

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

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

   No

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

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

   No

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

   No

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

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

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

   Yes

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

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

   Yes

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

    No

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

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

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

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

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

    No

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

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

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

    No

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

    Yes

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

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

    B) During the inactive season

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

    Yes

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

    No

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

    Yes

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

    No

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

    No

20. Does the project include slash pile burning?

    No

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

    No

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

    No

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

    No

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

    No

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

    Yes

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

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

    Yes

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

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

    Yes

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

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

    Yes

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

    No

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

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

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

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

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

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

33. **General AMM 1**
    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

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

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

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

    Yes

35. **Tree Removal AMM 3**
    Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

    Yes

36. **Tree Removal AMM 4**
Can the project avoid cutting down/removal of *all* (1) **documented**[1] Indiana bat or NLEB roosts[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

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

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

Yes

PROJECT QUESTIONNAIRE

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

   No

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

   Yes

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

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

   2.3

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

TREE REMOVAL AMM 1

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

TREE REMOVAL AMM 2

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

TREE REMOVAL AMM 3

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

TREE REMOVAL AMM 4
Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

GENERAL AMM 1
Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

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

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

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

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

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation
Name: Ryan Falls
Address: 3650 South U.S. Highway 41
City: Vincennes
State: IN
Zip: 47591
Email rfalls@indot.in.gov
Phone: 8125821387

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Kelsey Boss

From: Falls, Ryan G <RFalls@indot.IN.gov>
Sent: Monday, October 21, 2024 11:53 AM
To: Kelsey Boss; Wright, Kristy
Cc: Daniel Townsend; Brooke Vorbeck; Sean Langley
Subject: NLAA: Requesting for IPaC Finding Review - Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

EXTERNAL

Kelsey, thank you for the additional information on the project in the text of the email. That helps with review. And that is how we have been answering #21.

The document's finding of May Effect, NLAA-With AMMs for DES 2000131 has been deemed sufficient. It has been verified and submitted to USFWS. The Service has 14 days after the "Not Likely to Adversely Affect" determination letter is generated. They will review that information once it is received; if you do not receive a response within 14 days, they have no additional comments for the two bats covered under the programmatic. The NEPA document approval may not occur until this review period has ended. The Official Species List and Concurrence Verification Letter are now immediately available for your use. It is suggested that these documents be downloaded at this time. This concludes the IPaC phase of coordination with the Vincennes environmental office.

Ryan Falls
Senior Environmental Manager Supervisor
Indiana Department of Transportation
Vincennes District
Cell: 812-582-1387
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From: Kelsey Boss <Kelsey.Boss@lochgroup.com>
Sent: Friday, October 18, 2024 10:35 AM
To: Falls, Ryan G <RFalls@indot.IN.gov>; Wright, Kristy <KWright@indot.IN.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>; Brooke Vorbeck <Brooke.Vorbeck@lochgroup.com>; Sean Langley <SLangley@lochgroup.com>
Subject: Requesting for IPaC Finding Review - Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

Mr. Falls and Ms. Wright,

This email is to request your review of the completed IPaC determination of "May Affect – Not Likely to Adversely Affect" for SR 66 Slide Correction Project in Spencer County (Des. No. 2000131). You have been added as members to the project titled "Des 2000131; SR 66 Slide Correction Project; Spencer County, IN" (IPaC Record Locator: 505-151201451).

Kelsey Boss

From: McWilliams, Robin <robin_mcwilliams@fws.gov>
Sent: Wednesday, December 11, 2024 10:01 AM
To: Ryan Falls
Cc: Kelsey Boss; Daniel Townsend; Brooke Vorbeck; Sean Langley
Subject: Re: [EXTERNAL] FW: Des 2000131 SR 66 Slide Correction Project, Spencer County - Other Species Determination

EXTERNAL

Dear Ryan,

This email responds to your request for the U.S. Fish and Wildlife Service's (Service) concurrence on a "not likely to adversely affect" determination for the gray bat made by the Federal Highway Administration and Indiana Department of Transportation for the SR 66 Slide Correction Project in Spencer County, Indiana. Consultation for the Indiana bat and northern long-eared bat was concluded using the Federal Highway Administration, Federal Rail Administration, and Federal Transit Administration's Rangewide Programmatic Consultation and associated determination key at the Service's Information for Planning and Conservation (IPaC) website.

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

The proposed work involves repairing two overhead slides occurring off the west bound shoulder of SR 66. Project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. No work to bridges or within waterways is anticipated. The project is located in a rural area surrounded by forest, farm fields, rural residential, and rural commercial areas. A total of 2.3 acres of tree clearing is anticipated within 100 feet of the existing roadway. Tree clearing will occur between October 1 and March 30.

The project is within the range of the gray bat (*Myotis grisescens*). Gray bats are year-round cave obligates, roosting in caves both during hibernation and summer maternity season; they may also occasionally use structures for roosting. Foraging habitat of gray bats is generally correlated with rivers, streams, lakes or reservoirs and associated shorelines and riparian areas. They use forested corridors and tree cover to travel between caves and foraging areas.

Based on the lack of gray bat maternity or winter habitat near the site, no in-stream work, and a commitment to seasonal tree-clearing restrictions, the Service concurs that this project is not likely to adversely affect the gray bat.

We appreciate the opportunity to review and comment at this early stage of project planning. If you have any additional questions or concerns, please feel free to contact me.

Sincerely,
Robin

Robin McWilliams Munson
Fish and Wildlife Biologist/Transportation Liaison
U.S. Fish and Wildlife Service
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403
Robin_McWilliams@fws.gov
***NEW* 812-902-1752**

Mon-Tues 8:30-4:30p
Wed-Thurs 8:30-4:30p Telework

From: Falls, Ryan G <RFalls@indot.IN.gov>
Sent: Wednesday, December 11, 2024 8:51 AM
To: McWilliams, Robin <robin_mcwilliams@fws.gov>
Cc: Kelsey Boss <Kelsey.Boss@lochgroup.com>; Townsend, Daniel <DTownsend@lochgroup.com>; Brooke Vorbeck <Brooke.Vorbeck@lochgroup.com>; Langley, Sean <SLangley@lochgroup.com>
Subject: [EXTERNAL] FW: Des 2000131 SR 66 Slide Correction Project, Spencer County - Other Species Determination

Robin,

Lochmueller Group, on behalf of INDOT, on behalf of FHWA, has determined that this project may affect, but is not likely to adversely affect (MA, NLAA) the gray bat (*Myotis grisescens*). INDOT is requesting USFWS's concurrence with this finding. If you have any questions, please reach out to me or Kelsey Boss.

Thank you,

Ryan Falls
Senior Environmental Manager Supervisor
Indiana Department of Transportation
Vincennes District
Cell: 812-582-1387
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From: Kelsey Boss <Kelsey.Boss@lochgroup.com>
Sent: Tuesday, December 10, 2024 2:29 PM
To: Falls, Ryan G <RFalls@indot.IN.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>; Brooke Vorbeck <Brooke.Vorbeck@lochgroup.com>; Sean Langley

<SLangley@lochgroup.com>
Subject: Des 2000131 SR 66 Slide Correction Project, Spencer County - Other Species Determination

The Des 2000131 Slide Correction Project does not qualify for the USFWS Interim Policy. The species list indicates that the Gray Bat is present within the project area. Please see below information.

We are working on the environmental document for a slide correction project located on SR 66, approximately 1.35 miles west of SR 70 Junction in Spencer County, Indiana (Des 2000131). The project was evaluated using the IPaC system on October 21, 2024. The project received a finding of May Affect – Not Likely to Adversely Affect. I have attached the coordinating email. INDOT early coordination guidance states that additional coordination is needed if the project does not fall under the USFWS Interim Policy (2013) for listed species other than the Indiana bat and/or the northern long-eared bat. The gray bat (*Myotis grisescens*) was identified on the official species list generated from IPaC. The project does not qualify for the Interim Policy due to impacts to forested right-of-way greater than 0.5 acre. The preferred alternative will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. No work to bridges is anticipated. A 15-inch driveway culvert will be removed and replaced. I have attached the coordinating email.

Approximately 1.15 acre of tree clearing is anticipated. All tree clearing will be within 100 feet of the existing roadway and will occur during the inactive season (October 1 - March 31). The project is located in a rural area surrounded by wooded areas, farm fields, rural residential, and rural commercial areas that would be considered suitable summer habitat for the gray bat (*Myotis grisescens*). Dominant species within the tree clearing area are red maple (*Acer rubrum*) and chestnut oak (*Quercus montana*). A review of the USFWS database by INDOT Vincennes District environmental staff on March 4, 2024 did not indicate the presence of endangered bat species in or within 0.5-mile of the project area. The anticipated timing of construction is March 2025 - November 2025. No temporary or permanent lighting is anticipated.

The following avoidance and minimization measures (AMMs) will be implemented.

- Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.
- Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.
- Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).
- Tree Removal AMM 4: Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts or **documented** foraging habitat any time of year.
- General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

Lochmueller Group, on behalf of INDOT, on behalf of FHWA, has determined that this project may affect, but is not likely to adversely affect (MA, NLAA) the gray bat (*Myotis grisescens*). This determination is based on the presence of suitable habitat within and surrounding the project area and the AMMs that will be implemented to reduce the likelihood of impact.

A project map has been attached for your reference.

Kelsey Boss

From: Falls, Ryan G <RFalls@indot.IN.gov>
Sent: Tuesday, December 10, 2024 1:15 PM
To: Kelsey Boss; Wright, Kristy
Cc: Daniel Townsend; Brooke Vorbeck; Sean Langley
Subject: RE: NLAA: Requesting for IPaC Finding Review - Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

EXTERNAL

Changes in tree clearing amount, especially decreasing, shouldn't change IPaC's outcome. Please leave IPaC, as is, and reflect the change in the CE text. Thank you.

Ryan Falls
Senior Environmental Manager Supervisor
Indiana Department of Transportation
Vincennes District
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From: Kelsey Boss <Kelsey.Boss@lochgroup.com>
Sent: Tuesday, December 10, 2024 12:42 PM
To: Falls, Ryan G <RFalls@indot.IN.gov>; Wright, Kristy <KWright@indot.IN.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>; Brooke Vorbeck <Brooke.Vorbeck@lochgroup.com>; Sean Langley <SLangley@lochgroup.com>
Subject: RE: NLAA: Requesting for IPaC Finding Review - Des 2000131; SR 66 Slide Correction Project; Spencer County, IN

Mr. Falls,

I was drafting an email for the Other Species Determination (gray bat) when it came to my attention that the amount of tree clearing has decreased from 2.3 acres to 1.15 acres. Will this impact the IPaC and if so, how should we proceed?

Any guidance you can provide will be appreciated.

Thank you,

Kelsey Boss

LOCHMUELLER GROUP
Kelsey Boss, BS
Environmental Specialist I

Categorical Exclusion

Appendix D

Section 106 of the National Historic Preservation Act (NHPA)

Category A consists of projects that, by their nature, have no effect on properties listed in or eligible for inclusion in the National Register of Historic Places (hereinafter referred to as the "National Register") and do not require review by INDOT Cultural Resources Office. All of the work under this Category must occur in previously disturbed soils, which are defined as soils that have been completely altered or displaced by earthmoving or other modern manipulation.

1. Any work on bridges limited to substructure or superstructure elements without replacing, widening, or elevating the superstructure under the conditions listed below ***(BOTH Conditions A and B must be met)*****.** This category **does not** include bridge replacement projects (when both superstructure and substructure are removed):

   A. The project takes place in previously disturbed soils; *AND*
   B. With regard to the bridges, at least one of the conditions (i, ii or iii) listed below must be satisfied:
      i. The latest Historic Bridge Inventory identified the bridge as non-historic (see http://www.in.gov/indot/2531.htm);
      ii. The bridge was built after 1945, and is a common type as defined in Section V. of the *Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect AND the considerations listed in Section IV of the Program Comment do not apply;
      iii. The bridge is part of the Interstate system and was determined not eligible for the National Register under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.

2. All work within interchanges and within medians of divided highways in previously disturbed soils.

3. Replacement, repair, lining, or extension of culverts and other drainage structures that do not exhibit wood, stone or brick structures or parts therein and are in previously disturbed soils.

4. Roadway work associated with surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within previously disturbed soils where replacement, repair, or installation of curbs, curb ramps or sidewalks will not be required.

5. Repair, in-kind replacement or upgrade of existing lighting, signals, signage, and other traffic control devices in previously disturbed soils.

6. Repair, replacement, or upgrade of existing safety appurtenances such as guardrails, barriers, glare screens, and crash attenuators in previously disturbed soils.

7. Repair or in-kind replacement of fencing and hardscape landscaping elements and/or replacement of existing plant materials in previously disturbed soils and installation of new fencing and hardscape landscaping elements and plant materials limited to locations within interstate right-of way within previously disturbed soils.

8. Installation of new or modification of existing traffic control devices and systems, including signs, signals, markings, illumination, other warning devices and their supports, to improve safety at railway crossings in previously disturbed soils.

9. Installation, repair, or replacement of erosion control measures along roadways, waterways and bridge piers within previously disturbed soils.

10. Routine roadside maintenance activities necessary to preserve existing infrastructure or maintain roadway safety in previously disturbed soils.

11. Rehabilitation of existing rest areas and truck weigh stations within previously disturbed soils.

12. Removal and disposal of hazardous waste.

13. Work on concrete and asphalt decks of bridges identified in the Historic Bridge Inventory as National Register-listed or National Register-eligible (see http://www.in.gov/indot/2531.htm), which is limited to pavement resurfacing, overlay, pavement repair, pavement grinding, pavement marking, seal coating, joint repair, and in-kind replacement or repair of existing concrete curbs, curb ramps or sidewalks in previously disturbed soils, provided none of these actions impact structural members of the bridge.

14. Repair and/or replace existing MSE walls, retaining walls and noise walls in previously disturbed soils, using similar design, dimensions and materials.

SECTION 1

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

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

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

Original Submission Date: May 22, 2024 **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): Hannah Blad, Lochmueller Group

Project Designation Number: 2000131

Route Number: State Route (SR) 66

Feature crossed (if applicable): N/A

City/Township: Huff Township **County:** Spencer County

Project Description: The proposed slide correction project (DES 2000131) is located on SR 66, 1.35 miles west of the SR 70 junction with SR 66. The proposed work involves repairing two overhead slides occurring off the west bound shoulder of SR 66. The proposed project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls.

The maintenance of traffic for this project will be a road closure through the duration of construction, which will last for one construction season. An official detour utilizing Hwy 231, SR 70 and SR 66 is proposed. No permanent or temporary lighting will be used for this project. Construction is expected to begin in the spring of 2025.

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: N/A

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:
0.35 acres of reacquisition ROW

- Northwest side of SR 66
- Proposed activities within ROW include: access to the embankment slide site for machinery and work vehicles.

1.54 acres of permanent ROW

- Northwest side of SR 66
- Proposed activities within ROW include: cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever solider-pile and lagging retaining walls.

Is there *any* potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?
☐ Yes ☒ No

Archaeology (check one):

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

☒ **Project takes place in undisturbed soils and the archaeology report is included with the submission.***
**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) (INDOT will highlight applicable conditions in yellow**):**

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

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

Condition B (Above-Ground Resources)
Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

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

Information reviewed (please check all that apply):

General project location map ☒ USGS map ☒ Aerial photographs ☒ Soil survey data ☒

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

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

Bridge inspection information/iTAMS ☐ Historic Bridge Inventory Database ☐
SHAARD ☒ SHAARD GIS ☒ Streetview Imagery ☒ County GIS Data/Property Cards ☒

Other (please specify):
Kizior, Liz, Alexandra Powell, and Kathleen D. Settle
2024 *A Phase Ia Archaeological Reconnaissance for the Proposed SR 66 Slide Correction Project located 1.35 miles west of SR 70 Junction in Spencer County, Indiana, INDOT Des. No. 2000131*. Prepared by Stantec Consulting Services, Indianapolis, for VS Engineering, Evansville. Document on file at INDOT-CRO.

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

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

Additional Comments: N/A

Above-ground Resources

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 first performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Spencer County. No listed resources are present immediately adjacent to the project area, a distance that serves as an adequate area of potential effects given the project scope and terrain.

The National Register & Indiana Historic Sites and Structures Inventory (IHSSI) information for Spencer County is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). All sites were reviewed through the IHBCCM, which contains the most recently updated SHAARD information. No IHSSI documented properties are located immediately adjacent to the project area.

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.

The INDOT-CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, and the Spencer County GIS website. This project includes two (2) separate project areas located along SR 66. The project setting is arboraceous with thick lines of trees on the east and west sides of the roadway. There is one (1) early twentieth century residential property with two (2) late twentieth century outbuildings located immediately adjacent to the northern project area. A parcel with an early twentieth century outbuilding is located adjacent to the southern project area. None of these structures appear to possess either the age or integrity and/or significance necessary to be considered National Register-eligible.

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

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 Stantec (Lizior et al. 2024). No archaeological sites were previously recorded within or adjacent to the project area.

Stantec investigated two survey areas, measuring a total of 0.85 hectare (2.10 acres) via a combination of shovel probing (*n*=8), visual inspection of steep natural slopes (gradient > 20 percent) and obviously disturbed areas. No archaeological resources were documented as a result of the survey and no additional investigation is recommended (Lizior et al. 2024).

On September 4, 2024, Stantec notified CRO of a change in scope that increased the project length at the beginning and end points and reduced the width of the project footprint as measured from the centerline of SR 66.

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 completed a desktop review of the added scope. The new incidental construction beginning point would be 9.72 feet (2.9 m) southwest of the surveyed area, to encompass a privately-owned gravel road, which is cut into the terrain to connect with SR 66 and flanked by drainage improvements. Work will take place in entirely disturbed soils. The additional 12.49 ft. (3.8 m) for the new incidental construction end point is within the standard interval for shovel probe survey employed by Stantec (Lizior et al. 2024); no additional fieldwork is required. The reduced width of the project area does not affect the width of the archaeology survey.

To summarize, the archaeological survey area encompasses the original project area and covers the added scope at the northeastern terminus (new construction end point). No archaeological resources were documented as a result of the survey and no additional investigation is recommended (Lizior et al. 2024). The added scope at the southwestern terminus (new construction beginning point) is limited to soils that are entirely previously disturbed.

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

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

INDOT-CRO staff reviewer(s): Taylor Payne and Dawn Alexander

INDOT Approval Date: November 6, 2024

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

INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R3 / 3-22)

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

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

Name(s) of author(s)	Date *(month, day, year)*
Liz Kizior and Alexandra Powell	November 8, 2024

Title of project
A Phase Ia Archaeological Reconnaissance for the proposed SR 66 Slide Correction Project located 1.35 miles west of SR 70 Junction in Spencer County, Indiana, INDOT Des. No. 2000131

This document is being used to report on the results of:
☐ Records check only ☒ Records check and Phase 1a archaeological reconnaissance
☐ An addendum to a previous archaeological report. *For an addendum, provide the following information.*

Name(s) of author(s) of previous report	
Title of previous report	
Date of previous report *(month, day, year)*	DHPA number

PROJECT OVERVIEW

Description of project

The proposed slide correction project is located on S.R. 66, 1.35 miles west of S.R. 70 Junction (RP 66+71) in Spencer County (Figure 1). The project lies within the Indiana Department of Transportation's Vincennes District, Tell City Subdistrict. There are two overhead slides occurring off the West Bound (WB) shoulder on the cut slope side of the roadway. The first slide is located at RP 69+56 and the second is approximately 2300 feet northeast of the first slide, approximately at RP 69+70. The slide lengths are 470 ft and 250 ft long respectively. Both slides are causing pavement distresses, primarily in the shoulder. This has the potential to extend into the WB travel lane.

The proposed project measures a total of approximately 2,645 feet (ft; including Incidental Construction). The proposed project improvements would include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever solider-pile and lagging retaining walls. There are two localized wall areas planned within the overall project length. The walls are designated 2A, 2A-2 and 2B. Walls 2A and 2A-2 are adjacent/connected with a length of 470 ft (Sta. 686+18 to 691+40 "A"). Wall 2B has a length of 250 ft (Sta. 708+59 to 711+63 "A"). The project would require acquiring 1.64 acres of right-of-way and re-acquiring 0.34 acres of right-of-way (centerline to edge of travel way). Work would occur as much as 118 ft from the west-bound lane edge of pavement. Approximately 2.32 acres of tree removal will be required as a part of this project.

The proposed maintenance of traffic for this project is a road closure through the duration of construction, which would last for one construction season. An official detour utilizing Hwy 231, SR 70 and SR 66 is proposed. No permanent or temporary lighting is planned for this project. Construction is expected to begin spring of 2025.

INDOT designation number(s)	Project number	DHPA number	DHPA plan number
2000131	239000233		

Prepared for: *(Company / Institution / Agency)*
VS Engineering, Inc.

Name of contact
Jarvis Hand

Address *(number and street, city, state, and ZIP code)*
223 NW 2nd Street, Suite 201, Evansville, IN 47708

Telephone number	E-mail address
(812) 617-0382	JHand@vsengineering.com

Name of principal investigator
Kathleen D. Settle

Name of company / institution
Stantec Consulting Services Inc.

Address *(number and street, city, state, and ZIP code)*
3901 Industrial Boulevard, Indianapolis, IN 46254

Telephone number	E-mail address
(463) 269-3812	katie.settle@stantec.com

Signature of principal investigator *(Required)*	Date *(month, day, year)*
Kathleen Settle	November 8, 2024

Describe landforms.

Number of shovel probes excavated	Number of cores / auger probes
8	0

Describe disturbances. Attach photographs documenting disturbances.

Disturbances included gravel and mottled soils noted on the ground surface directly adjacent to the road's edge and drainage ditch following the northwest side of SR 66.

Actual area surveyed *(hectares)*	Actual area surveyed *(acres)*
0.85	2.10

Explain results of fieldwork.

The survey area consisted of 0.85 ha (2.10 ac), which was surveyed through visual inspection and systematic shovel test survey (Figure 4; Photos 1-5). The survey area consisted of disturbed cut slope on the northwestern side of SR 66, and terrace margin atop the cut slope with natural undulating topography. Due to the drainage ditches with standing water, disturbance, and cut slope ranging from 20-80 percent noted at the road's edge, shovel tests were attempted at the furthest extent from the roadway in an attempt to excavate intact soils. Intervals of 15 meters were adhered to as closely as possible, though some shovel tests were offset due to natural slope, which was greater than 20 percent (Photo 3). Eight shovel tests were excavated within the survey area, all of which were negative for cultural material. Intact shovel test probes exhibited 7-25 centimeters of very dark grayish brown (10YR 3/2) to brown (10YR 4/3) silty loam over a layer of yellowish brown (10YR 5/4) silty loam to silty clay loam B-Horizon (Photo 6). One shovel test was dug to 50 centimeters below ground surface, and was found to contain an A horizon of 22 cm of brown (10YR 4/3) silt loam over yellowish brown (10YR 5/4) silty clay loam subsoil. Soils directly adjacent to the roadway were found to be disturbed. Areas of disturbed cut slope (20-80 percent), natural slope (20-45 percent), and six no dig points are depicted on Figure 4 (Photos 1-5). During the course of the survey, no archaeological sites were encountered. Eight shovel tests were excavated within the survey area, which was also subjected to visual inspection in areas with clear disturbance or slope. All shovel tests contained intact soil stratigraphy and were negative for cultural material.

RECOMMENDATIONS

Records check *(Check all that apply)*

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

Phase 1a archaeological reconnaissance *(Check all that apply)*

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

Other recommendations / commitments

Based on the findings, Stantec recommends that no further testing of the survey area be required for the project to proceed as planned. Should the survey area footprint change, additional investigation may be required.

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

REQUIRED ATTACHMENTS

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

Other attachments

Survey Area Photographs

Categorical Exclusion

Appendix E

Red Flag Investigation & Hazardous Materials

INDIANA DEPARTMENT OF TRANSPORTATION

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

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

Eric Holcomb, Governor
Michael Smith, Commissioner

Date: June 21, 2024

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: Sean Langley
Lochmueller Group, Inc.
6200 Vogel Road
Evansville, IN 47715
slangley@lochgroup.com

Re: RED FLAG INVESTIGATION
DES # 2000131, State Project
Slide Correction Project
State Road (SR) 66, 1.35 Miles West of SR 70 Junction (Jct)
Spencer County, Indiana

PROJECT DETAILS

The proposed project (Des. No. 2000131) involves repairing two overhead slides occurring off the west bound shoulder of SR 66. Both slides are causing pavement distresses, primarily in the shoulder. The method of slide repair is still in development but will likely involve cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. Excavation up to a depth of 40 feet will occur. Tree clearing may be required.

Bridge Work Included in Project: Yes ☐ No ☒ Structure #(s) _____
If this is a bridge project, is the bridge Historical? Yes ☐ No ☐ , Select ☐ Non-Select ☐
(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).

Culvert Work Included in Project: Yes ☐ No ☒ Structure #(s) _____

Proposed right of way: Temporary ☐ # Acres _____ Permanent ☒ # Acres Up to 2.86 new and up to 0.36 re-acquired, Not Applicable ☐

Type and proposed depth of excavation: Excavation up to a depth of 40 feet for soldier pile installation will occur.

Maintenance of traffic (MOT): The MOT is still in development but will consist of planned road closure with detour or a temporary signal.

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

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

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

Airports*: Although not located within the 0.5 mile search radius, one (1) public-use airport, Hancock County/Ron Lewis FLD, is located within 3.8 miles (20,000 feet) of the project area. Hancock County/Ron Lewis Field (FLD) is located approximately 2.4 miles south of the southern terminus of the southern project area in Kentucky. No impact 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:			
Karst Springs	**N/A**	NWI - Wetlands	**19**
Canal Structures – Historic	**N/A**	Lakes	**5**
NPS NRI Listed	**N/A**	Floodplain - DFIRM	**2**
IDEM 303d Listed Streams and Lakes (Impaired)	**3**	Cave Entrance Density	**N/A**
Rivers and Streams	**19**	Sinkhole Areas	**N/A**
Canal Routes - Historic	**N/A**	Sinking-Stream Basins	**N/A**

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

Explanation:

IDEM 303d Listed Streams and Lakes (Impaired): Three (3) IDEM 303d listed streams are located within the 0.5 mile search radius. The nearest impaired stream, Crooked Creek, is located approximately 0.05 mile east of the northern project area. No impact is expected.

Rivers and Streams: Nineteen (19) stream segments are located within the 0.5 mile search radius. The nearest stream segment, which is associated with Crooked Creek, is located approximately 0.05 mile east of the northern project area. No impact is expected.

NWI – Wetlands: Nineteen (19) NWI wetland polygons are located within the 0.5 mile search radius. One (1) NWI wetland polygon is located adjacent to the southern project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Lakes: Five (5) lakes are located within the 0.5 mile search radius. The nearest lake is located approximately 0.07 mile southeast of the southern terminus of the southern project area. No impact is expected.

Floodplain – DFIRM: Two (2) floodplain polygons are located within the 0.5 mile search radius. The northern project area is located within one of the floodplain polygons. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	**24**	Mineral Resources	**N/A**
Mines – Surface	**N/A**	Mines – Underground	**N/A**

Explanation:

Petroleum Wells: Twenty-four (24) petroleum wells are located within the 0.5 mile search radius. The nearest petroleum well is located approximately 0.14 mile northeast of the northern terminus of the northern project area. No impact is expected.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	**N/A**	Open Dump Waste Sites	**N/A**
RCRA Generator/ TSD	**N/A**	Restricted Waste Sites	**N/A**
RCRA Corrective Action Sites	**N/A**	Waste Transfer Stations	**N/A**
State Cleanup Sites	**N/A**	Tire Waste Sites	**N/A**
Septage Waste Sites	**N/A**	Landfill Boundaries	**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**	Notice of Contamination Sites	**N/A**
Solid Waste Landfill	**N/A**	Institutional Controls	**N/A**
Infectious/Medical Waste Sites	**N/A**	NPDES Facilities	**1**
Leaking Underground Storage (LUST) Sites	**N/A**	NPDES Pipe Locations	**N/A**
Manufactured Gas Plant Sites	**N/A**		

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

Explanation:

NPDES Facilities: One (1) NPDES facility is located within the 0.5 mile search radius. The Foertsch Fill Site, 8986 SR 66, Grandview, Permit # INRA01263, is located approximately 0.42 mile southwest of the southwestern terminus of the southern project area. The permit was terminated on May 31, 2019. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Spencer County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/nature-preserves/files/np_spencer.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.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Evidence of Birds in Bridge Report: Yes ☐ No ☐ N/A ☒
*If yes, further coordination with INDOT Ecology and Waterway Permitting may be necessary.

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE:

N/A

WATER RESOURCES:

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

- One (1) NWI wetland polygon is located adjacent to the southern project area.
- The northern project area is located within a floodplain polygon (coordination only).

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION:

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

Prepared by: _____(Signature)
Sean Langley
Environmental Specialist II
Lochmueller Group, Inc.

QA/QC Completed by: _____ (Signature)
Kelsey Boss
Environmental Specialist I
Lochmueller Group, Inc.

INDOT ESD concurrence: Peter Washburn Digitally signed by Peter Washburn Date: 2024.06.21 12:49:24 -04'00' (Signature)

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: N/A

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
SR 66, 1.35 Miles West of SR 70 Jct
Des. No. 2000131, Slide Correction Project
Spencer County, Indiana

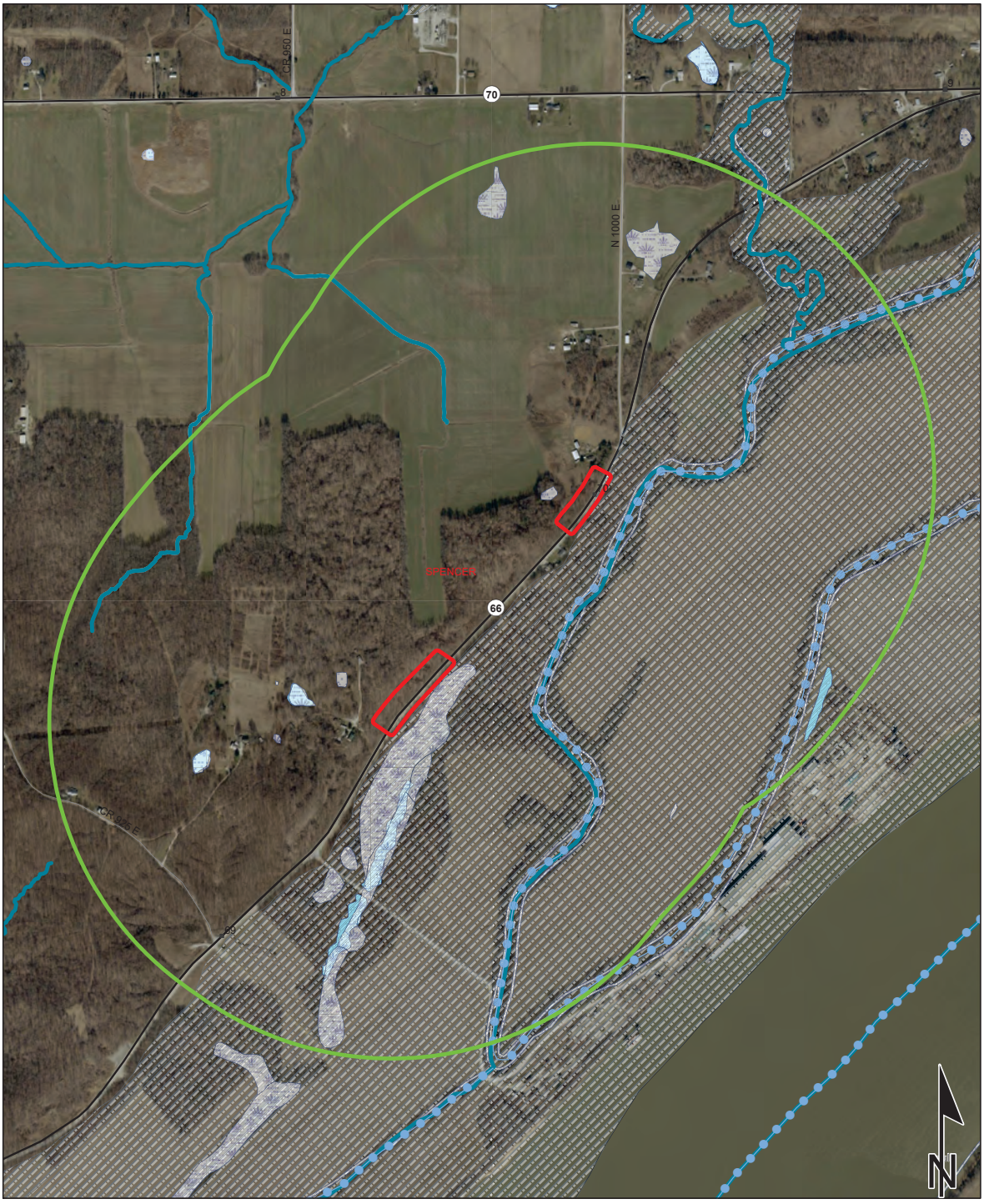
Sources:
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

0.45 0.23 0 0.45 Miles

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

TELL CITY QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Water Resources
SR 66, 1.35 Miles West of SR 70 Jct
Des. No. 2000131, Slide Correction Project
Spencer County, Indiana



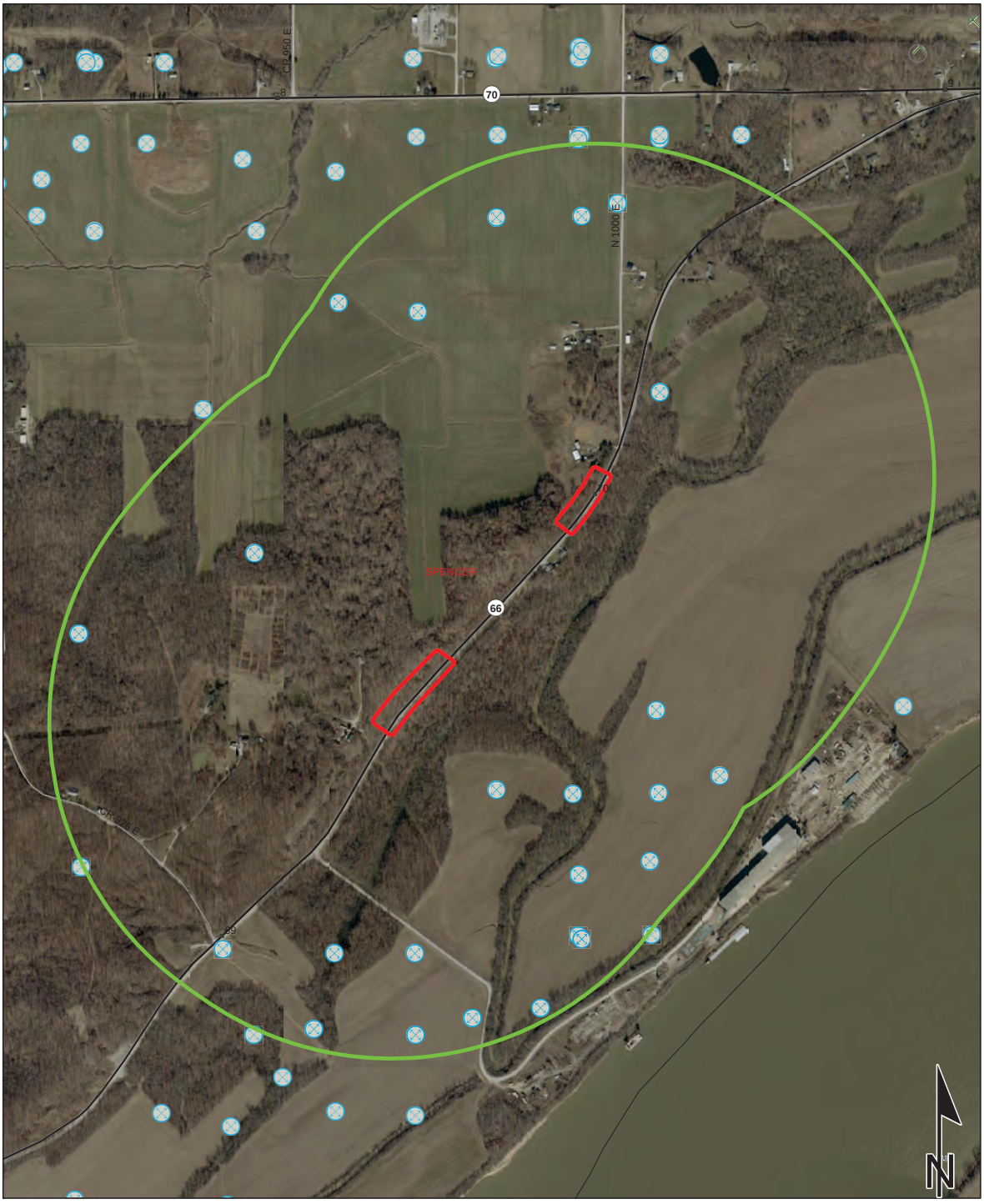
0.15 0.07 0 0.15 Miles

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.

- Karst Spring
- 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

Red Flag Investigation - Mining and Mineral Exploration
SR 66, 1.35 Miles West of SR 70 Jct
Des. No. 2000131, Slide Correction Project
Spencer County, Indiana



0.15 0.07 0 0.15 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.

- Oil and Gas Wells
- Mineral Resources
- Mine - Surface
- Mine - Underground
- County Boundary
- Project Area
- Half Mile Radius
- Toll
- Interstate
- State Route
- US Route
- Local Road

Red Flag Investigation - Hazardous Material Concerns
SR 66, 1.35 Miles West of SR 70 Jct
Des. No. 2000131, Slide Correction Project
Spencer County, Indiana

- Brownfield
- RCRA Corrective Action Sites
- Confined Feeding Operation
- Notice_Of_Contamination
- Construction/Demolition Site
- Infectious/Medical Waste Site
- Leaking Underground Storage Tank
- Manufactured Gas Plant
- NPDES Facilities
- NPDES Pipe Locations
- Open Dump Waste Site
- RCRA Generator/TSD
- Restricted Waste Site
- Septage Waste Site
- Solid Waste Landfill
- State Cleanup Site
- Superfund
- Tire Waste Site
- Underground Storage Tank
- Voluntary Remediation Program
- Waste Transfer Station
- Institutional Controls
- County Boundary
- Project Area
- Half Mile Radius
- Toll
- Interstate
- State Route
- US Route
- Local Road

0.15 0.07 0 0.15 Miles

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

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

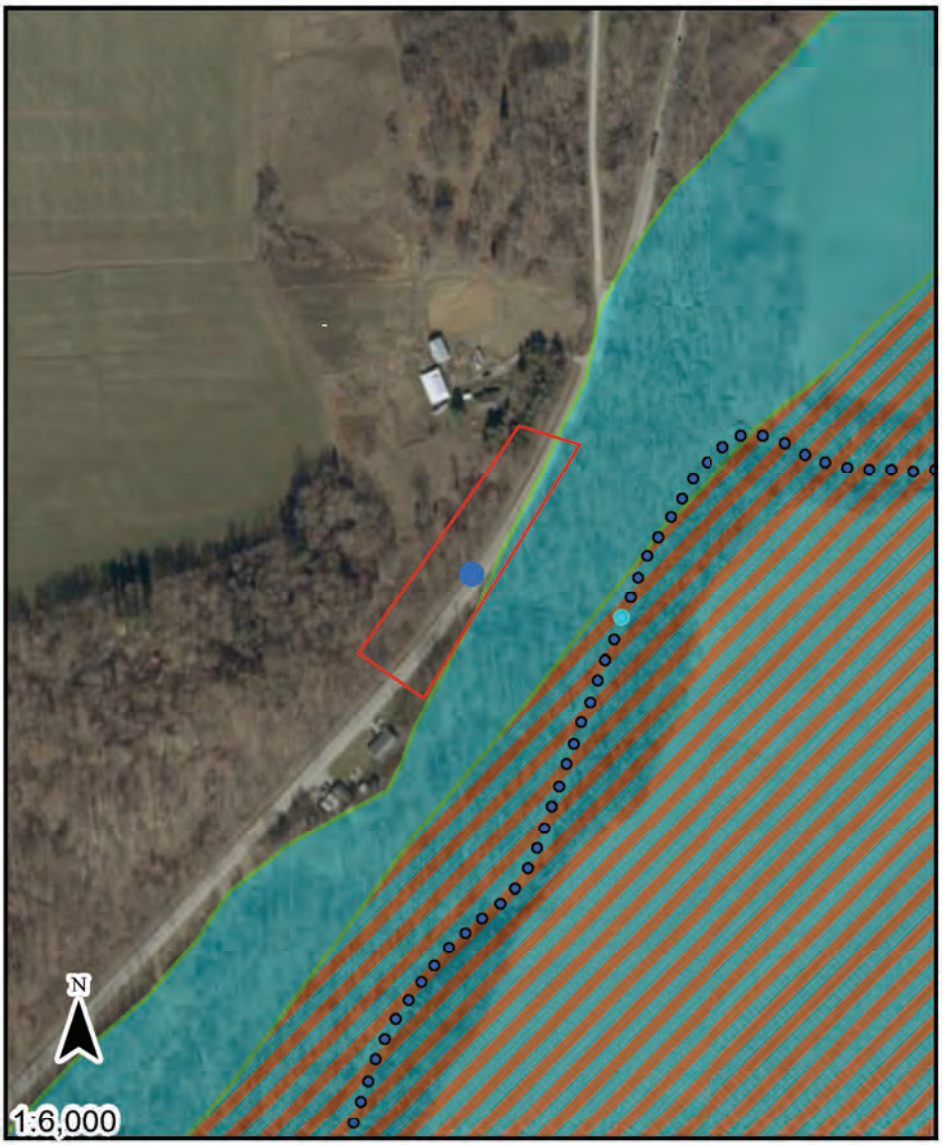
Categorical Exclusion

Appendix F

Water Resources

DNR Indiana Department of Natural Resources

Floodplain Analysis & Regulatory Assessment (FARA)



Point of Interest
Base Flood Elevation Point
POI
1.0
FEMA Zone AE Floodway; FEMA Administrative Floodway
FEMA Zone AE
Not Mapped

Long: **-86.8689217260906**
Lat: **37.992037452429145**

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

County: **Spencer**
Stream Name: **Crooked Creek**
Approximate Ground Elevation: **399.1 feet (NAVD88)**
Base Flood Elevation: **395.4 Feet (NAVD88)**
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: **Kay Irwin, Floodplain Administrator**
Community Jurisdiction: **Spencer County, County proper**
Phone: **(812) 649-6010**
Email: **spencerplan@psci.net**
US Army Corps of Engineers District: **Louisville**
Date Generated: 11/15/2024

DNR Indiana Department of Natural Resources

Floodplain Analysis & Regulatory Assessment (FARA)

Point of Interest
Base Flood Elevation Point
POI
1.0
FEMA Zone AE Floodway; FEMA Administrative Floodway
FEMA Zone AE
Not Mapped

Long: **-86.8736853293012**
Lat: **37.987995680889725**

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

County: **Spencer**
Stream Name: **Crooked Creek**
Approximate Ground Elevation: **413.1 feet (NAVD88)**
Base Flood Elevation: **395.4 Feet (NAVD88)**
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: **Kay Irwin, Floodplain Administrator**
Community Jurisdiction: **Spencer County, County proper**
Phone: **(812) 649-6010**
Email: **spencerplan@psci.net**
US Army Corps of Engineers District: **Louisville**

Date Generated: 11/15/2024

Approved 7-18-2024
J.Leever

Waters of the U.S. Determination
SR 66 Slide Correction Project
Spencer County, Indiana
Des. No. 2000131

Waters of the U.S. Report Completion Date:
July 17, 2024

Date(s) of Field Reconnaissance:
August 17, 2023

Location
The project is located along State Route (SR) 66, approximately 1.35 miles west of the SR 70 junction in Spencer County, Indiana.

- Huff Township, Spencer County, Indiana
- Section 17; Township 6 South, Range 4 West
- Tell City 1:24,000 United States Geological Survey (USGS) Quadrangle
- Southwest Investigated Area - Latitude: 37.987780, Longitude: -86.873817
- Northeast Investigated Area - Latitude: 37.992290, Longitude: -86.868660

Project Description
There are two overhead slides occurring off the westbound shoulder on the cut slope side of the roadway (Photos 7 and 35). The proposed project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. Approximately 2.3 acres of tree removal will be required as a part of this project.

The Waters of the U.S. (WOTUS) investigated area limits were defined as two separate areas. The southwest investigated area was approximately 795 feet in length southwest to northeast along SR 66 with approximately 155 feet northwest of the centerline of the road and approximately 50 feet southeast of the centerline of the road. The northeast investigated area was approximately 575 feet in length southwest to northeast along SR 66 with approximately 130 feet northwest of the centerline of the road and approximately 40 feet southeast of the centerline of the road. The SR 66 Slide Correction Project identified three wetlands (Wetland A, Wetland B, and Wetland C) within the investigated area. The landscape surrounding the investigated area is predominantly forested with some rural residential properties.

USGS Feature(s)
According to the USGS Tell City 1:24,000 topographic quadrangle, no blue-line features are located within the investigated area (Pages A2 and A3).

NHD Feature(s)
The NHD GIS dataset did not identify any flowline segments within the investigated area (Page A4).

Soils

According to the 2023 Soil Survey Geographic (SSURGO) Database for Spencer County, Indiana, the investigated area contains soil areas with nonhydric and predominantly nonhydric soils (Page A5). Table 1 below summarizes the soil units within the investigated area.

Table 1. Soil Summary Table

Soil Unit Name	Symbol	NRCS Flooding Frequency	NRCS Drainage Class	NRCS Hydric Soil Category	SSURGO Hydric Rating
Apalona-Zanesville silt loams	ZaB2	None	Moderately well drained	Nonhydric (0%)	0%
Gilpin-Wellston silt loams, 25 to 35 percent slopes	GmF	None	Well drained	Nonhydric (0%)	0%
Hosmer silt loam, 5 to 10 percent slopes, severely eroded	HoC3	None	Moderately well drained	Nonhydric (0%)	0%
Sciotoville silt loam, 2 to 6 percent slopes, eroded	ScB2	None	Moderately well drained	Nonhydric (0%)	0%
Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Sn	Frequent	Somewhat poorly drained	Predominantly Nonhydric (1-32%)	2%
Wellston silt loam, 18 to 25 percent slopes, eroded	WeE2	None	Well drained	Nonhydric (0%)	0%

National Wetlands Inventory (NWI) Information

No U.S. Fish and Wildlife (USFWS) NWI features were identified within the investigated area (Page A6). The nearest mapped feature to the southwest investigated area is a PFO1A located adjacent to the investigated area. The nearest mapped feature to the northeast investigated area is a PUBGx located approximately 126 feet to the northwest of the investigated area. These wetlands are listed in Table 2 below. Wetland type is based on *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).

Table 2. USFWS NWI Table

Wetland Type	Description	Location
PFO1A	Palustrine, forested, broad-leaved deciduous, temporarily flooded	Adjacent to southeast investigated area
PUBGx	Palustrine, unconsolidated bottom, intermittently exposed, excavated	126 feet northwest of investigated area

12-digit HUC

The SR 66 Slide Correction Project is within the 051402010503 12-digit HUC (Town of Liberal-Crooked Creek) watershed (Pages A2 and A3). No blueline streams were identified during the field investigation or within StreamStats; therefore, no mapped watersheds were identified within the investigated area (Page A7).

Indiana Department of Natural Resources (IDNR) Floodway/Floodplain
The IDNR Indiana Floodplain Information Portal (https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e) Best Available Flood Zones data indicates that a portion of the northeast investigated area is within a mapped flood Zone AE (Page A8).

Attached Documents

- ~~Location Map~~
- ~~USGS Quad Map (1:24,000)~~
- ~~USGS Quad Map (1:12,000)~~
- National Hydrography Dataset (NHD) Line Map
- USDA SSURGO Soils Map
- USFWS NWI Map
- StreamStats Watershed Map
- IDNR Best Available Flood Hazard Map
- Indiana Karst Region Map
- Water Resources Maps
- ~~Photo Location Maps and Project Photos~~
- US Army Corps of Engineers (USACE) Wetland Determination Data Forms
- USACE Pre-Jurisdictional Determination Form

Select pages removed to reduce file size and avoid duplication.

Field Reconnaissance
The August 17, 2023 field investigation was conducted within the growing season. Wetland resource boundaries were determined using aerial photography, Digital Elevation Model generated contours, and field mapping.

Karst Reconnaissance
The investigated area is located within the Karst Region of Indiana in the southern portion of the Spencer Upland, an area of ridges and valleys with up to 300 feet of topographic relief that have developed in Mississippian age shale, sandstone, and limestone (Page A9). Sinkholes and caves occur where limestone is present in the Spencer Upland. However, no karst features were identified during the field investigation.

Wildlife Resources
There are no drainage structures within the investigated area; therefore, no drainage structures were examined for the presence of bats and birds.

Stream Feature(s)
No streams were identified during the field reconnaissance that contained a bed, bank, or Ordinary High Water Mark (OHWM) within the investigated area (Pages A10-A12). Drainage from the roadway appears to flow into roadside ditches (RSD) or down slopes through sheet flow.

Wetlands

The field investigation identified three wetland features (Wetland A, Wetland B, and Wetland C) within the investigated area. Wetland A and Wetland C occur within the ditch line, while Wetland B is located in an excavated swale within a sloped, forested area. The total area of all wetlands with the investigated area is 0.064 acre.

The Wetland Summary Table (Table 3) depicts characteristic data that can be found on the wetland determination forms.

Wetland A

Wetland A is a 0.04-acre emergent wetland situated along SR 66 southbound in the southwest investigated area (Pages A10-A11). Wetland A formed in the ditch line and receives drainage from the roadway and adjacent slope. Wetland A would be considered an exempt isolated wetland based on its classification as a Class I wetland located within a roadside ditch with no connection to a jurisdictional feature. INDOT acknowledges that Wetland A would not likely meet the definition of a Waters of the U.S. under the Clean Water Act. However, INDOT may request that the USACE take jurisdiction of Wetland A. Wetland A has therefore been included on the attached Preliminary Jurisdictional Determination form. As defined by Cowardin *et al.* (1979), this wetland would be classified as palustrine, emergent, persistent (PEM1). Based on a qualitative assessment of Wetland A, this wetland is of poor quality due to its size, function within the roadside ditch, and quality of vegetation. Two data points defining Wetland A were analyzed in the field, AW1 (Pages A28-A30) represents the wetland data point and AU1 (Pages A31-A33) represents the upland data point. The soil pit for AU1 had shovel refusal at 17 inches of depth due to compacted roadside soils.

Wetland B

Wetland B is a 0.004-acre emergent, excavated wetland located within the wooded area north of SR 66 in the southwest investigated area (Pages A10-A11). Wetland B receives drainage from the slope and has been previously excavated. Due to being saturated at the surface within a shaded area, no vegetation was observed; however, hydric soils and wetland hydrology are present. Wetland B would be considered an exempt isolated wetland based on its classification as Class I wetland with no connection to a jurisdictional feature. INDOT acknowledges that Wetland B would not likely meet the definition of a Waters of the U.S. under the Clean Water Act. However, INDOT may request that the USACE take jurisdiction of Wetland B. Wetland B has therefore been included on the attached Preliminary Jurisdictional Determination form. As defined by Cowardin *et al.* (1979), this wetland would be classified as palustrine, emergent, persistent (PEM1). Based on a qualitative assessment of Wetland B, this wetland is of poor quality due to its size, function, and excavated nature. Two data points defining Wetland B were analyzed in the field, BW1 (Pages A34-A36) represents the wetland data point and BU1 (Pages A37-A39) represents the upland data point. The soil pit for BW1 and BU1 had shovel refusal at 17 inches of depth due to roots in the area.

Wetland C

Wetland C is a 0.02-acre emergent wetland located along SR 66 southbound in the northeast investigated area (Pages A10 and A11). Wetland C formed in the ditch line and receives drainage from the roadway and adjacent slope. Wetland C would be considered an exempt isolated wetland based on its classification as a Class I wetland located within a roadside ditch with no connection to a jurisdictional

feature. INDOT acknowledges that Wetland C would not likely meet the definition of a Waters of the U.S. under the Clean Water Act. However, INDOT may request that the USACE take jurisdiction of Wetland C. Wetland C has therefore been included on the attached Preliminary Jurisdictional Determination form. As defined by Cowardin *et al.* (1979), this wetland would be classified as palustrine, emergent, persistent (PEM1). Based on a qualitative assessment of Wetland C, this wetland is of poor quality due to its size, function within the roadside, and quality of vegetation. Two data points defining Wetland C were analyzed in the field, CW1 (Pages A40-A42) represents the wetland data point and CU1 (Pages A43-A45) represents the upland data point. The soil pit for CW1 had shovel refusal at 19 inches of depth due to compacted roadside soils. The soil pit for CU1 had shovel refusal at 19 inches of depth due to roots in the area.

Table 3. Wetland Summary Table

Wetland ID#	Wetland Type	Acres in Study Area	Quality	Photo ID(s)	Associated Structure ID	Likely Waters of the U.S.	Data Point ID#	Dominant Vegetation (Stratum: Species)	Lat/Long	Hydric Soil Indicator (s)	Hydrology Indicator(s)	Within Wetland?	Notes
Wetland A	PEM1	0.04	Poor	13-20	NA	Yes*	AW1	*Herb: Echinochloa crus-galli*	37.988559/ -86.87295	F3	A3, B8, C8, D5	Yes	Wetland A extends to the northeast beyond the investigated area and is part of roadside drainage.
							AU1	*Tree: Acer rubrum, Quercus montana* *Sapling/Shrub: Acer rubrum* *Herb: Lonicera japonica, Bidens tripartite, Erechtites hieraciifolius*	37.988574/ -86.872988	NA	NA	NA	
Wetland B	PEM1	0.004	Poor	21-28	NA	Yes*	BW1	*No vegetation was observed within the excavated wetland area due to saturation at the surface*	37.98866/ -86.872975	F3	A3, B8, D2	Yes	Wetland B has been previously excavated within the wooded sloping area. No vegetation was observed due to saturation at the surface and shaded conditions. Wetland B is fully contained in the investigated area.
							BU1	*Tree: Acer rubrum* *Sapling/Shrub: Acer rubrum, Fagus grandifolia* *Herb: Parthenocissus quinquefolia*	37.988635/ -86.872997	F3	NA	NA	
Wetland C	PEM1	0.02	Poor	43-51	NA	Yes*	CW1	*Herb: Echinochloa crus-galli, Cynodon dactylon*	37.992606/ -86.868535	F3, F8	A2, A3	Yes	Wetland C extends to the northeast beyond the investigated area and is part of roadside drainage.
							CU1	*Tree: Acer rubrum, Quercus palustris* *Sapling/Shrub: Acer rubrum* *Herb: Sorghum halepense*	37.992615/ -86.868569	NA	NA	NA	

* INDOT acknowledges these wetlands would not likely meet the definition of a Waters of the U.S. under the Clean Water Act. However, INDOT may request that the USACE take jurisdiction of these wetlands.

Roadside Ditch (RSD) Features

The field review identified six RSD features. RSDs were located within roadside depressions excavated for drainage. RSDs lacked a defined bed and bank and sufficient wetland indicators, therefore the RSD features identified would not be considered Waters of the U.S. All RSD features are summarized in Table 4.

Table 4. RSD Summary Table

RSD ID#	Lat/Long	Type	Jurisdictional Features connected to RSD	Photo ID(s)	Linear (ft) within Investigated Area	USGS Blueline/ NHD Line	Likely Waters of the U.S.
RSD1	37.98706 -86.874575	Vegetation	NA	3-4	62	No	No
RSD2	37.987293 -86.874378	Bare ground	NA	5-6	135	No	No
RSD3	37.98808 -86.873495	Bare ground	Wetland A	10	120	No	No
RSD4	37.991721 -86.869281	Vegetation	NA	31, 34	217	No	No
RSD5	37.992319 -86.86874	Vegetation	Wetland C	39	114	No	No
RSD6	37.991532 -86.869273	Vegetation	NA	33	108	No	No

Open Water

There are no open water areas for consideration as WOTUS or non-WOTUS features within the investigated area.

Conclusions

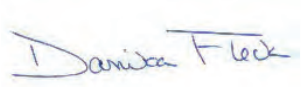
The August 17, 2023 field review for the SR 66 Slide Correction Project identified three wetlands (Wetland A, Wetland B, and Wetland C) within the investigated area. Wetland A, Wetland B, and Wetland C are exempt isolated wetlands based on the classification as Class I wetlands with no connection to a jurisdictional feature. INDOT acknowledges that these wetlands would not likely meet the definition of a Waters of the U.S. under the Clean Water Act. However, INDOT may request that the USACE take jurisdiction of Wetland A, Wetland B, and Wetland C.

Every effort should be taken to avoid and minimize impacts to the wetland features. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts 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.

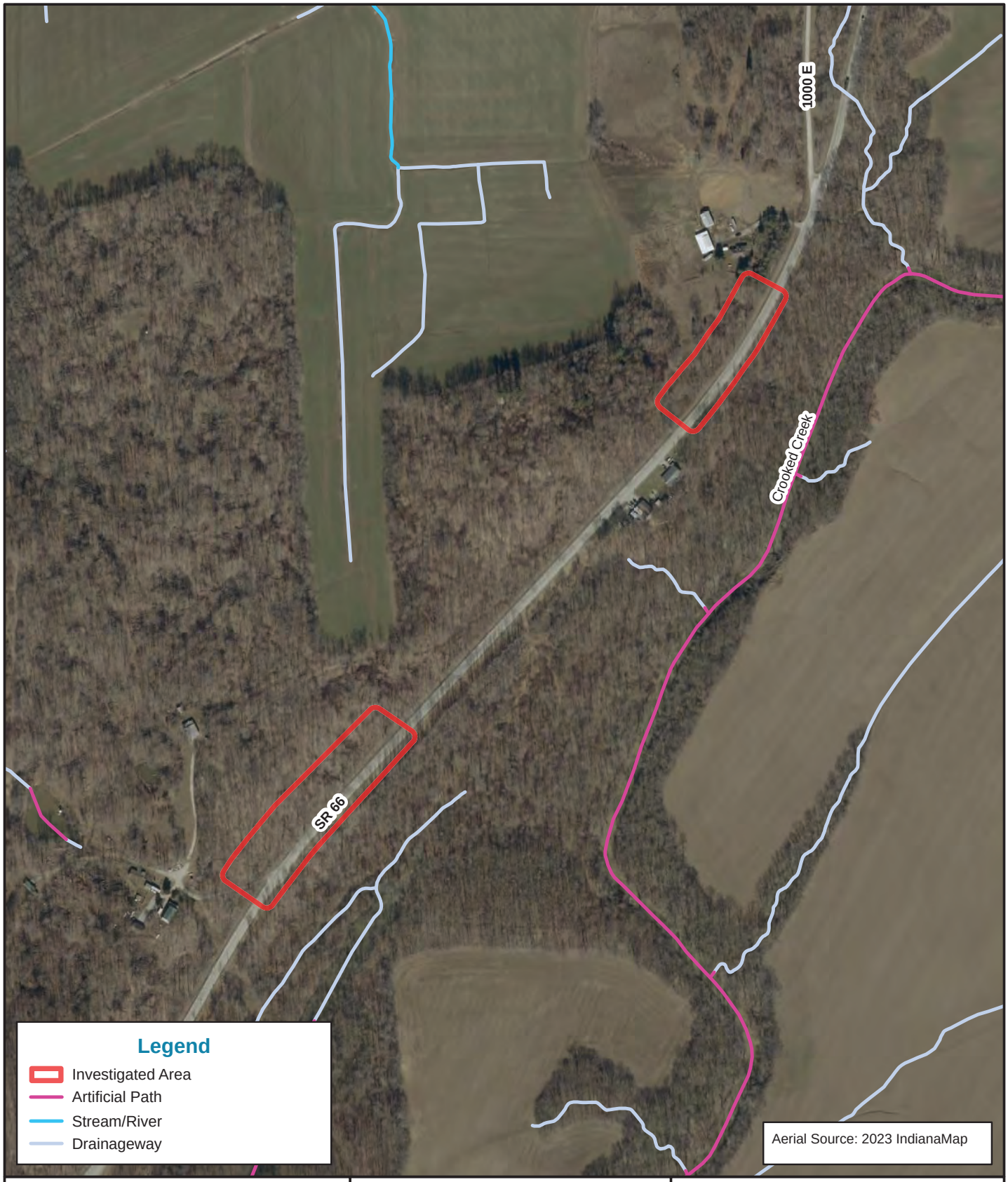
Acknowledgement

This waters determination has been prepared based on the best available information, interpreted in the light of the investigators' training, experience, and professional judgement in conformance with the 1987 *Corps of Engineers Wetlands Delineation Manual*, the appropriate regional supplement, the *USACE Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines.

Danika Fleck



Environmental Specialist
Lochmueller Group, Inc.



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Toll Free: (800) 423-7411

National Hydrography Dataset Line Map

Des. No. 2000131
Waters of the U.S. Report

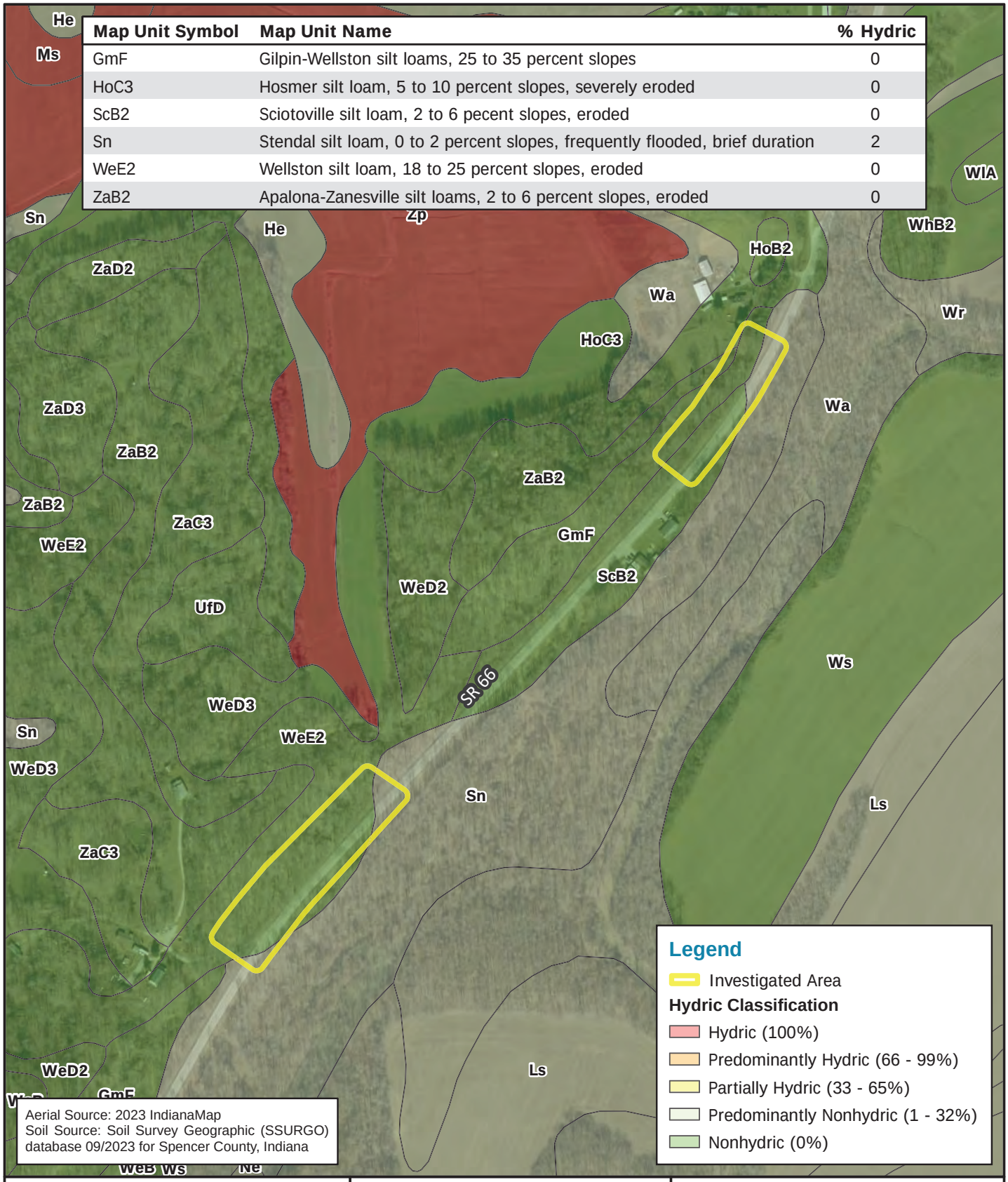
0 250 500 Feet

N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck

Map Unit Symbol	Map Unit Name	% Hydric
GmF	Gilpin-Wellston silt loams, 25 to 35 percent slopes	0
HoC3	Hosmer silt loam, 5 to 10 percent slopes, severely eroded	0
ScB2	Sciotoville silt loam, 2 to 6 pecent slopes, eroded	0
Sn	Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	2
WeE2	Wellston silt loam, 18 to 25 percent slopes, eroded	0
ZaB2	Apalona-Zanesville silt loams, 2 to 6 percent slopes, eroded	0



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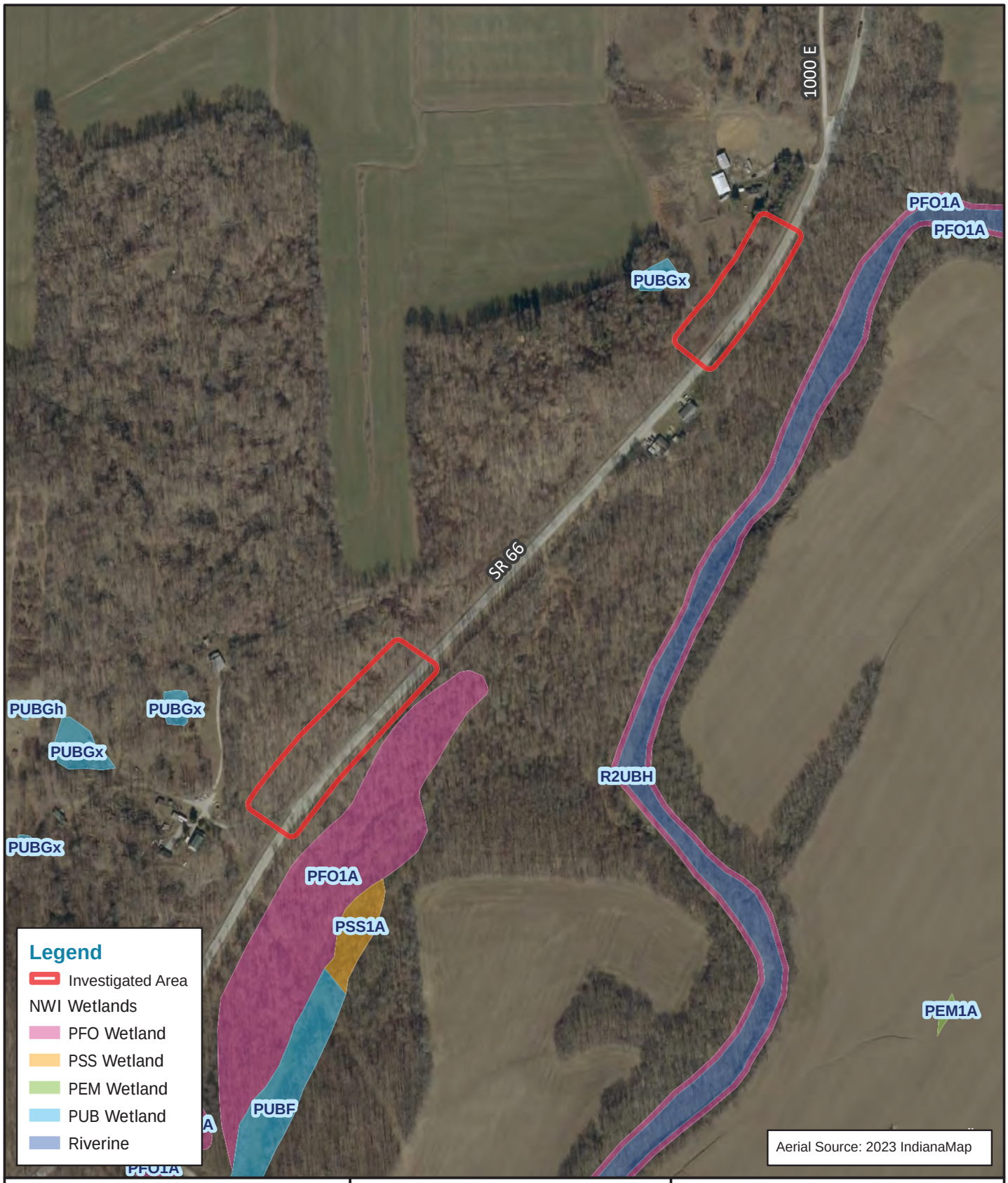
USDA SSURGO Soils Map
Des. No. 2000131
Waters of the U.S. Report

0 250 500 Feet
N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck



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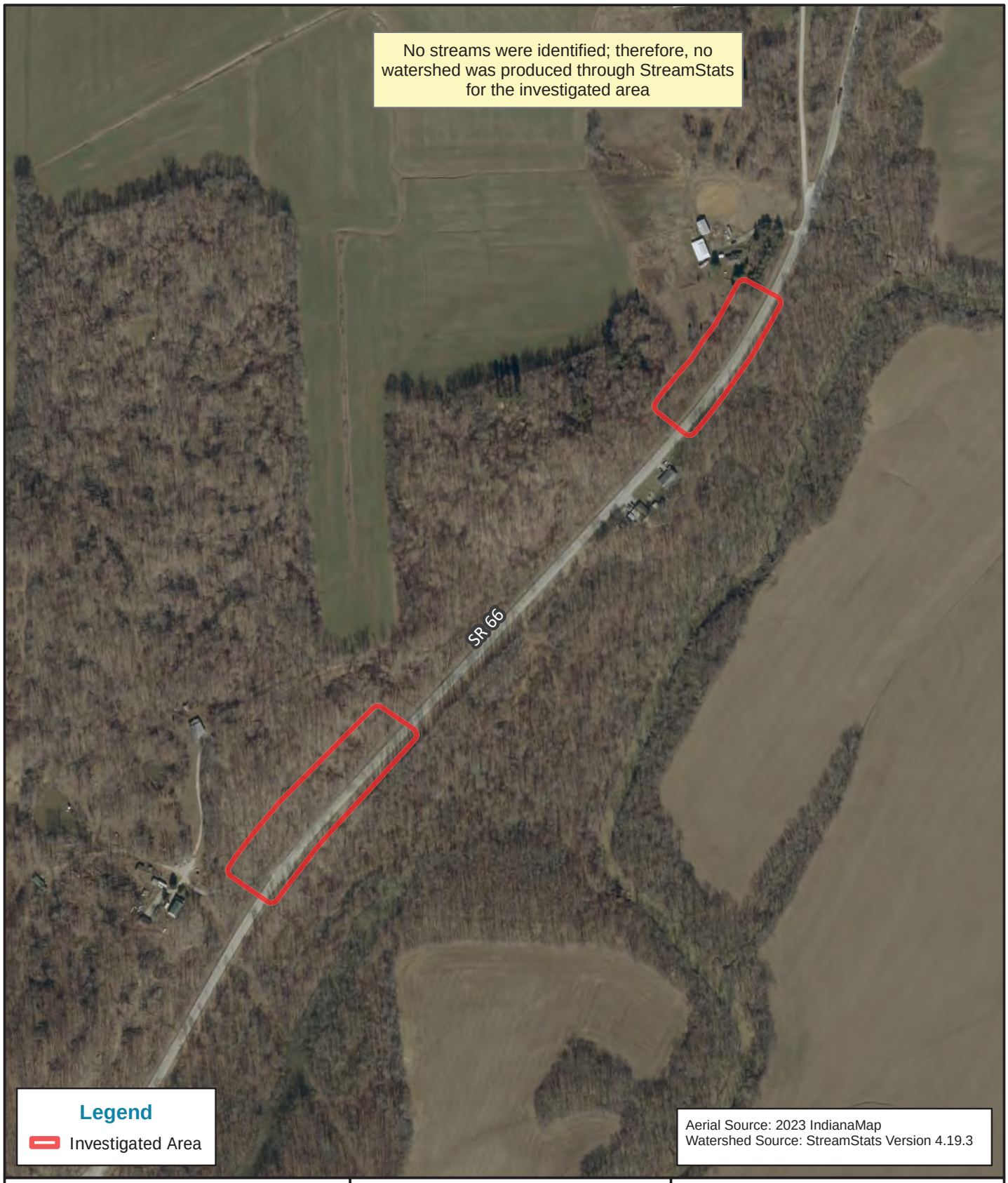
USFWS NWI Map
Des. No. 2000131
Waters of the U.S. Report

0 250 500 Feet

N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck



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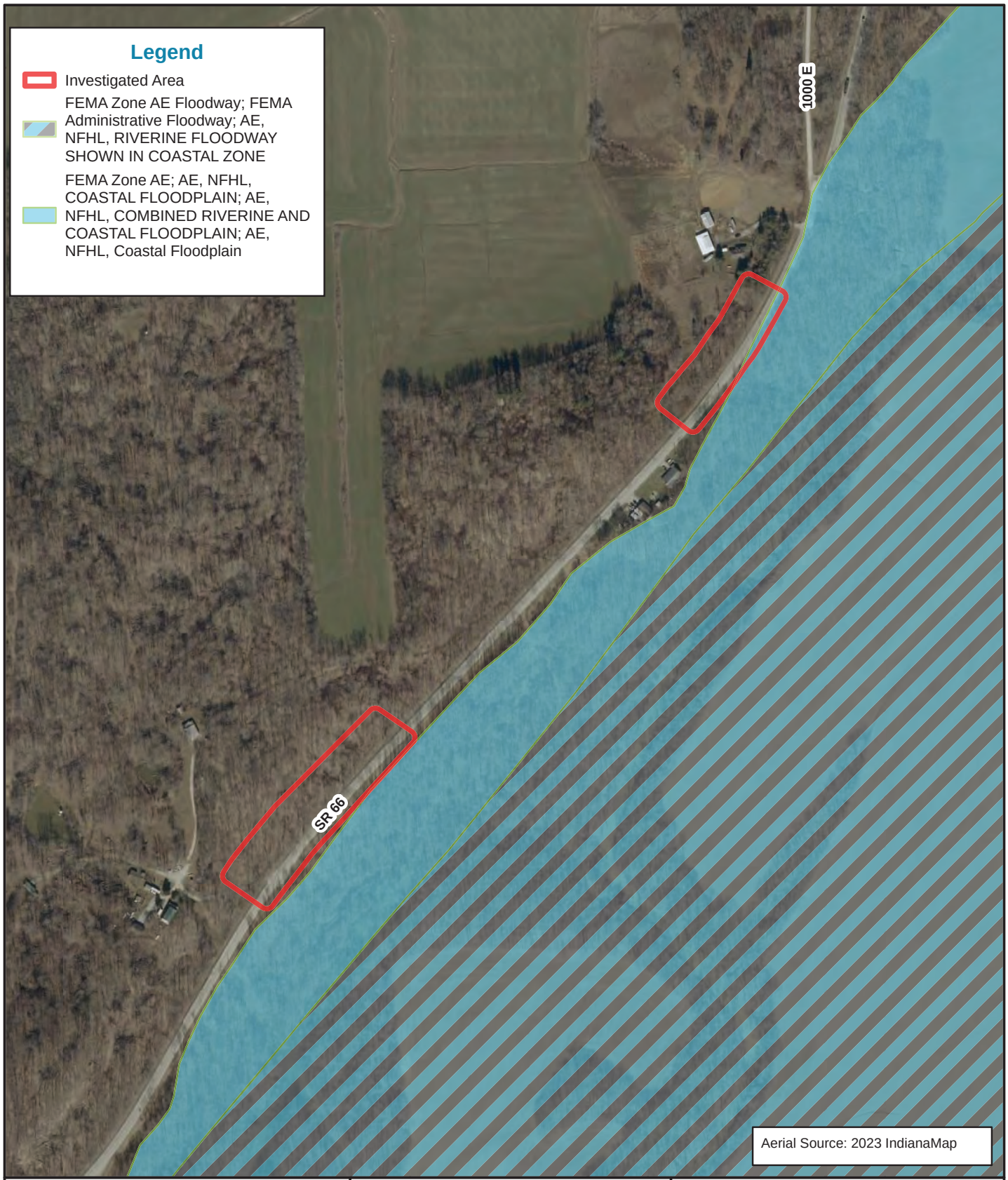
StreamStats Watershed Map
Des. No. 2000131
Waters of the U.S. Report

0 250 500 Feet

N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck



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IDNR Best Available Flood Hazard Map

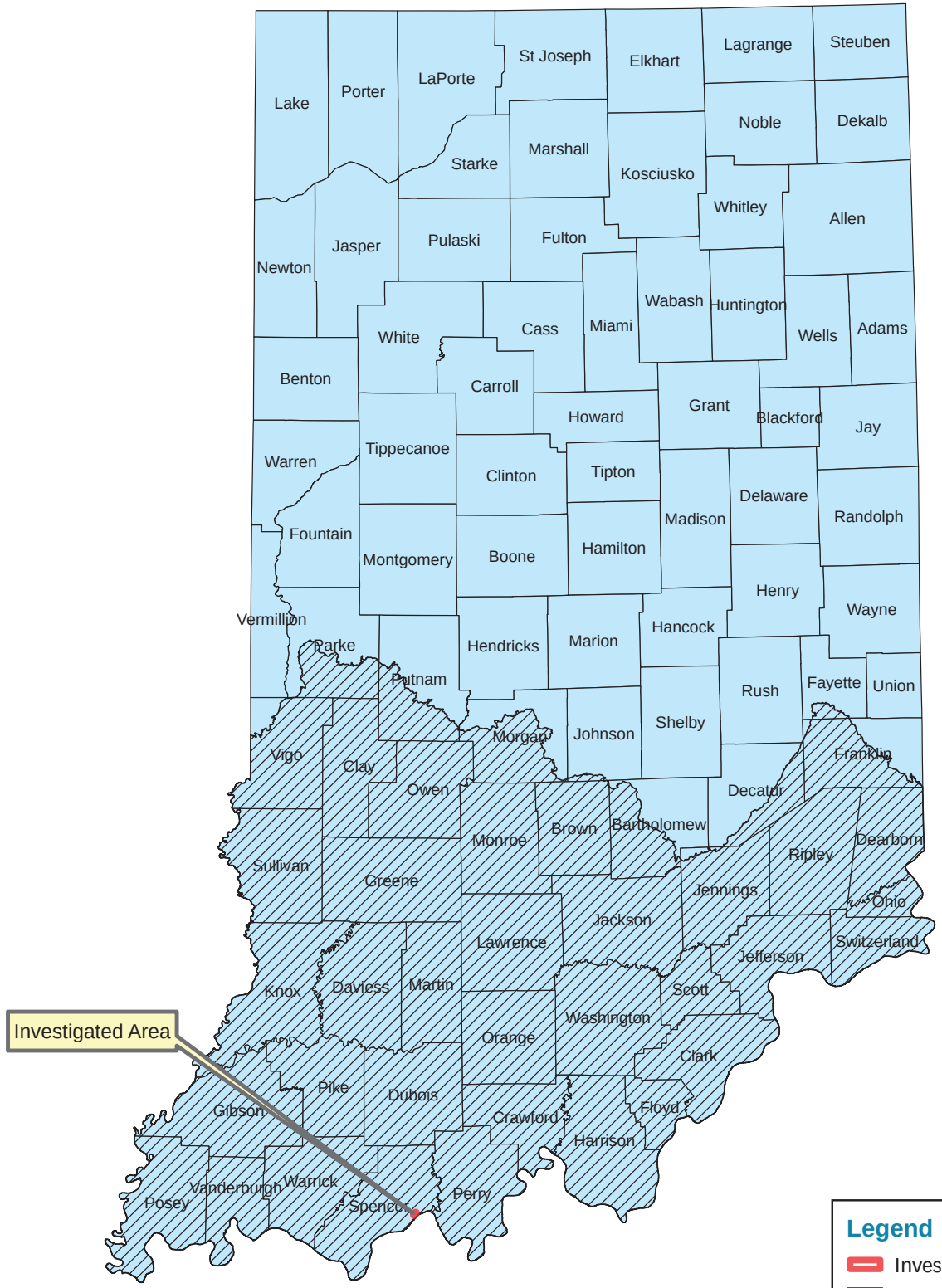
Des. No. 2000131
Waters of the U.S. Report

0 250 500 Feet

N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck



Source: Protection of Karst Features during Project Development and Construction (July 15, 2021)

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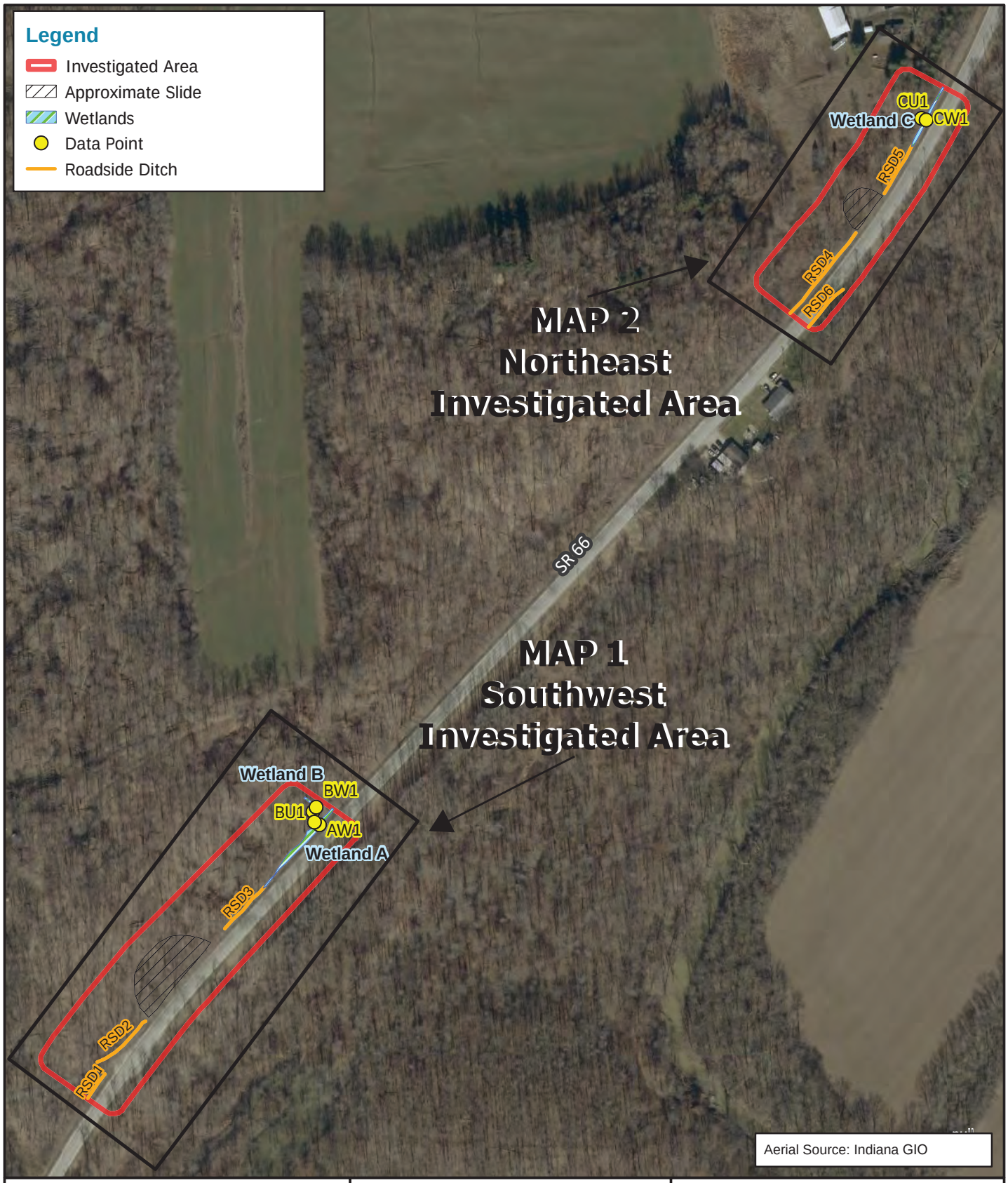
Indiana Karst Region Map

Des. No. 2000131
Waters of the U.S. Report

0 25 50 Miles N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck



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Index Map
Des. No. 2000131
Waters of the U.S. Report

0 150 300 Feet

N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/13/2024, dfleck

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Water Resources Map (1 of 2)
Des. No. 2000131
Waters of the U.S. Report

0 50 100 Feet

N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck

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Water Resources Map (2 of 2)
Des. No. 2000131
Waters of the U.S. Report

0 50 100 Feet

N

County: Spencer
Township: Huff
State: Indiana

1.35 Miles West of SR 70 Junction
SR 66 Slide Correction
Created: 2/12/2024, dfleck

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Midwest Region** See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp:11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: SR 66 Slide Correction Project City/County: Spencer Sampling Date: 08/17/23

Applicant/Owner: INDOT State: IN Sampling Point: AW1

Investigator(s): DLF & PMP Section, Township, Range: Sec 17, T6S, R4W

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

Slope (%): 0 Lat: 37.988559 Long: -86.87295 Datum: WGS 1984

Soil Map Unit Name: Stendal silt loam 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 ____
Hydric Soil Present?	Yes X	No ____
Wetland Hydrology Present?	Yes X	No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
This wetland is within a roadside ditch with sparce vegetation

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: 5)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Echinochloa crus-galli*	10	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	10 =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	0	x 1 =	0
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:	10 (A)		20 (B)

Prevalence Index = B/A = 2.00

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.)

SOIL

Sampling Point: AW1

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
0-6	10YR 4/1	60	10YR 5/8	40	C	M	Loamy/Clayey	Prominent redox concentrations
6-14	10YR 5/6	60	10YR 7/8	20	C	M	Loamy/Clayey	Distinct redox concentrations
			5YR 4/6	20	C	M		Distinct redox concentrations
14-20	10YR 4/1	65	10YR 5/6	35	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)
- ___ 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:

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)
- X 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)
- X 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): 14
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 10

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

AW1 Soil Pit

AW1 Soil Profile

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Midwest Region** See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp:11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: SR 66 Slide Correction Project City/County: Spencer Sampling Date: 08/17/23

Applicant/Owner: INDOT State: IN Sampling Point: AU1

Investigator(s): DLF & PMP Section, Township, Range: Sec 17, T6S, R4W

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

Slope (%): 2 Lat: 37.988574 Long: -86.872988 Datum: WGS 1984

Soil Map Unit Name: Stendal silt loam 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:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	30	Yes	FAC
2. *Quercus montana*	25	Yes	FACU
3.			
4.			
5.			
	55	=Total Cover	
Sapling/Shrub Stratum (Plot size: 5)			
1. *Acer rubrum*	15	Yes	FAC
2.			
3.			
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Lonicera japonica*	15	Yes	FACU
2. *Bidens tripartita*	15	Yes	OBL
3. *Erechtites hieraciifolius*	10	Yes	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	40	=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: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	0	x 2 =	0
FAC species	45	x 3 =	135
FACU species	40	x 4 =	160
UPL species	10	x 5 =	50
Column Totals:	110 (A)		360 (B)

Prevalence Index = B/A = 3.27

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.)

SOIL

Sampling Point: AU1

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 4/3	95	10YR 5/8	5	C	M	Loamy/Clayey	Prominent redox concentrations
12-17	2.5Y 5/3	40	7.5YR 5/8	40	C	M	Loamy/Clayey	Prominent redox concentrations
			2.5Y 5/1	20	C	M		Distinct 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)
- ___ 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:

The soil pit was only dug to 17" due to compacted roadside soils.

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:

AU1 Soil Pit

AU1 Soil Profile

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Midwest Region** See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp:11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: SR 66 Slide Correction Project City/County: Spencer Co Sampling Date: 08/17/23

Applicant/Owner: INDOT State: IN Sampling Point: BW1

Investigator(s): DLF & PMP Section, Township, Range: Sec 17, T6S, R4W

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

Slope (%): 5 Lat: 37.98866 Long: -86.872975 Datum: WGS 1984

Soil Map Unit Name: Stendal silt loam 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 ____ No X

Are Vegetation X, 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** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
This was an excavated area within the wooded area north of SR 66. No vegetation was observed within the wetland area due to saturation.

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: 5)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	=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: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

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)

X 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.)
No vegetation was observed within the saturated, excavated area.

SOIL

Sampling Point: BW1

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
0-7	10YR 2/1	100					Loamy/Clayey	
7-17	10YR 5/1	60	10YR 6/8	30	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 3/6	10	C	M		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)
- ___ 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:

The soil pit was only dug to 17" due to roots in the area

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)
- X 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)
- X 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): 14
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:

BW1 Soil Pit

BW1 Soil Profile

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Midwest Region** See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp:11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: SR 66 Slide Correction Project City/County: Spencer Co Sampling Date: 08/17/23

Applicant/Owner: INDOT State: IN Sampling Point: BU1

Investigator(s): DLF & PMP Section, Township, Range: Sec 17, T6S, R4W

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

Slope (%): 5 Lat: 37.988635 Long: -86.872997 Datum: WGS 1984

Soil Map Unit Name: Stendal silt loam 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 X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
This was an excavated area within the wooded area north of SR 66.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	100	Yes	FAC
2.			
3.			
4.			
5.			
	100	=Total Cover	
Sapling/Shrub Stratum (Plot size: 5)			
1. *Acer rubrum*	15	Yes	FAC
2. *Fagus grandifolia*	15	Yes	FACU
3. *Fraxinus pennsylvanica*	5	No	FACW
4.			
5.			
	35	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Parthenocissus quinquefolia*	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	10	=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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	115	x 3 =	345
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	145 (A)		455 (B)

Prevalence Index = B/A = 3.14

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.)

SOIL

Sampling Point: BU1

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
0-8	10YR 3/2	100					Loamy/Clayey	
8-15	10YR 4/1	80	10YR 6/8	20	C	M	Loamy/Clayey	Prominent redox concentrations
15-17	2.5Y 5/3	70	2.5Y 6/8	30	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)
- ___ 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:

The soil pit was only taken to 17" due to numerous roots in the area

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:

BU1 Soil Pit

BU1 Soil Profile

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Midwest Region** See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp:11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: SR 66 Slide Correction Project City/County: Spencer Co Sampling Date: 08/17/23

Applicant/Owner: INDOT State: IN Sampling Point: CW1

Investigator(s): DLF & PMP Section, Township, Range: Sec 17, T6S, R4W

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

Slope (%): 0 Lat: 37.992606 Long: -86.868535 Datum: WGS 1984

Soil Map Unit Name: Stendal silt loam 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:

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: 5)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Echinochloa crus-galli*	55	Yes	FACW
2. *Cynodon dactylon*	45	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	0	x 3 =	0
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	100 (A)		290 (B)

Prevalence Index = B/A = 2.90

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 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.)

SOIL

Sampling Point: CW1

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
0-13	2.5Y 4/1	80	7.5YR 4/6	20	C	M	Loamy/Clayey	Prominent redox concentrations
13-19	10YR 6/1	60	10YR 5/6	40	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)
- ___ 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)
- X 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:

The soil pit was only dug to 19" due to compacted roadside soils

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)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 9
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:

CW1 Soil Pit

CW1 Soil Profile

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Midwest Region** See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp:11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: SR 66 Slide Correction Project City/County: Spencer Co Sampling Date: 8/17/23

Applicant/Owner: INDOT State: IN Sampling Point: CU1

Investigator(s): DLF & PMP Section, Township, Range: Sec 17, T6S, R4W

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

Slope (%): 3 Lat: 37.992615 Long: -86.868569 Datum: WGS 1984

Soil Map Unit Name: Gilpin-Wellston silt loams 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** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	60	Yes	FAC
2. *Quercus palustris*	40	Yes	FACW
3.			
4.			
5.			
	100	=Total Cover	
Sapling/Shrub Stratum (Plot size: 5)			
1. *Acer rubrum*	40	Yes	FAC
2.			
3.			
4.			
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Sorghum halepense*	65	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	65	=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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	100	x 3 =	300
FACU species	65	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	205 (A)		640 (B)

Prevalence Index = B/A = 3.12

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 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** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: CU1

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
0-7	10YR 3/3	100					Loamy/Clayey	
7-16	10YR 3/6	100					Loamy/Clayey	
16-19	10YR 4/6	100					Loamy/Clayey	

[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:

The soil profile was only dug to 19" due to roots in the area

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:

CU1 Soil Pit

CU1 Soil Profile

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: July 17, 2024

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Danika Fleck, Lochmueller Group, 6200 Vogel Road, Evansville, IN 47715

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

There are two overhead slides occurring off the westbound shoulder on the cut slope side of the roadway. The proposed project improvements will include cutting back areas of failed materials and mitigating the embankment slide by installing non-gravity, cantilever soldier-pile and lagging retaining walls. Approximately 2.3 acres of tree removal will be required as a part of this project. The SR 66 Slide Correction Project identified three wetlands (Wetland A, Wetland B, and Wetland C) within the investigated area.

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: Indiana County/parish/borough: Spencer Co City: near Troy, IN

Center coordinates of site (lat/long in degree decimal format):

Lat.: 37.987780 Long.: -86.873817

Universal Transverse Mercator: 16S, 511080E, 4204467N

Name of nearest waterbody: Crooked Creek

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)
Wetland A	37.988559	-86.87295	0.04 acre	wetland	Section 404
Wetland B	37.98866	-86.872975	0.004 acre	wetland	Section 404
Wetland C	37.992606	-86.868535	0.02 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: Location map, topographic, soils, NWI, floodplain, aerial.
- [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: _____.
  - [x] USGS NHD data.
  - [x] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: Tell City 1:24,000.
- [x] Natural Resources Conservation Service Soil Survey. Citation: SSURGO Database, 09/2023, Spencer Co, IN.
- [x] National wetlands inventory map(s). Cite name: Indiana Geodatabase Wetlands.
- [ ] State/local wetland inventory map(s): _____.
- [x] FEMA/FIRM maps: https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e.
- [ ] 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): Indiana GIO.
  or [x] Other (Name & Date): Ground Photos 08/17/2023.
- [ ] 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.

_____	Danika Fleck Digitally signed by Danika Fleck Date: 2024.07.17 13:56:16 -05'00'
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.

Categorical Exclusion

Appendix G

Public Involvement

VS ENGINEERING
4275 North High School Road, Indianapolis, IN 46254
317.293.3542
www.vsengineering.com

Sample Notice of Survey

NOTICE OF SURVEY

April 13, 2023

RE: State Road 66 Slide Correction
Spencer County, Indiana

Dear Property Owner:

Our information indicates that you own or occupy property near this proposed highway project. Our employees will be doing 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 by Indiana Code IC 8-23-7-26. 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.

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

The survey work will include mapping the location of features such as trees, buildings, fences and drives, and obtaining ground elevations. The survey work may also include the identification and mapping of wetlands, archaeological investigations (which may include excavation of small shovel test probes), and various other environmental studies. The survey is needed for the proper planning and design of this highway 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 contact me at the phone number or address shown herein.

Sincerely,

VS Engineering, Inc.
Alex J Daugherty, PS
Project Surveyor
812-401-0303

Des. No. 2000131

Categorical Exclusion

Appendix H

Air Quality

SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Performance Measure Impacted: Safety																	
Location: 2.05 miles West of SR-70 Jct																	
Comments:Include DES 1900287, 1900291, 1900294, 1900295, 1900300, 2000129, 2001057																	
Indiana Department of Transportation	43515 / 2000131	Init.	SR 66	Slide Correction	Vincennes	0	STBG	$11,442,007.00	Road Construction	CN	$8,043,200.00	$2,010,800.00		$10,054,000.00			
									Road ROW	RW	$30,400.00	$7,600.00	$38,000.00				
Performance Measure Impacted: Safety																	
Location: 1.35 miles West of SR 70 Jct																	
Comments:Include DES 1900288, 2000125, 2000131, 2000133																	
Indiana Department of Transportation	43515 / 2000131	A 05	SR 66	Slide Correction	Vincennes	0	STBG	$11,613,499.00	Road Consulting	PE	$115,280.00	$28,820.00	$144,100.00				
Performance Measure Impacted: Safety																	
Location: 1.35 miles West of SR 70 Jct																	
Comments:add PE in FY 2024 include DES 2000131, 1900288, 2000125, 2000133																	
Indiana Department of Transportation	43972 / 2100642	Init.	SR 66	Bridge Deck Overlay	Vincennes	0	NHPP	$3,995,720.00	Bridge Construction	CN	$2,544,800.00	$636,200.00			$3,181,000.00		
									Bridge Consulting	PE	$196,000.00	$49,000.00	$245,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: EBL over RICHARDS DRAIN, 04.02 W SR 161																	
Comments:Include DES 2100633, 2100634, 2100642, 2100643																	
Indiana Department of Transportation	43979 / 2100169	Init.	SR 66	HMA Overlay, Preventive Maintenance	Vincennes	1.332	NHPP	$2,376,000.00	Road Construction	CN	$1,398,400.00	$349,600.00			$1,748,000.00		
									Bridge Construction	CN	$1,552,000.00	$388,000.00			$1,940,000.00		
									Bridge ROW	RW	$32,000.00	$8,000.00	$40,000.00				
									Road ROW	RW	$16,000.00	$4,000.00	$20,000.00				
Performance Measure Impacted: Pavement Condition																	
Location: From 2.52 mi W. US 231 (W. City Limits Rockport) to 1.19 W. of US 231																	
Comments:Include DES 2100169, 2100830, 2100831																	
Indiana Department of Transportation	43979 / 2100169	A 04	SR 66	HMA Overlay, Preventive Maintenance	Vincennes	1.332	NHPP	$5,292,085.00	Road Consulting	PE	$326,080.00	$81,520.00	$407,600.00				
Performance Measure Impacted: Pavement Condition																	
Location: From 2.52 mi W. US 231 (W. City Limits Rockport) to 1.19 W. of US 231																	
Comments:ADD PE in FY 2024																	

*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.

Categorical Exclusion

Appendix I

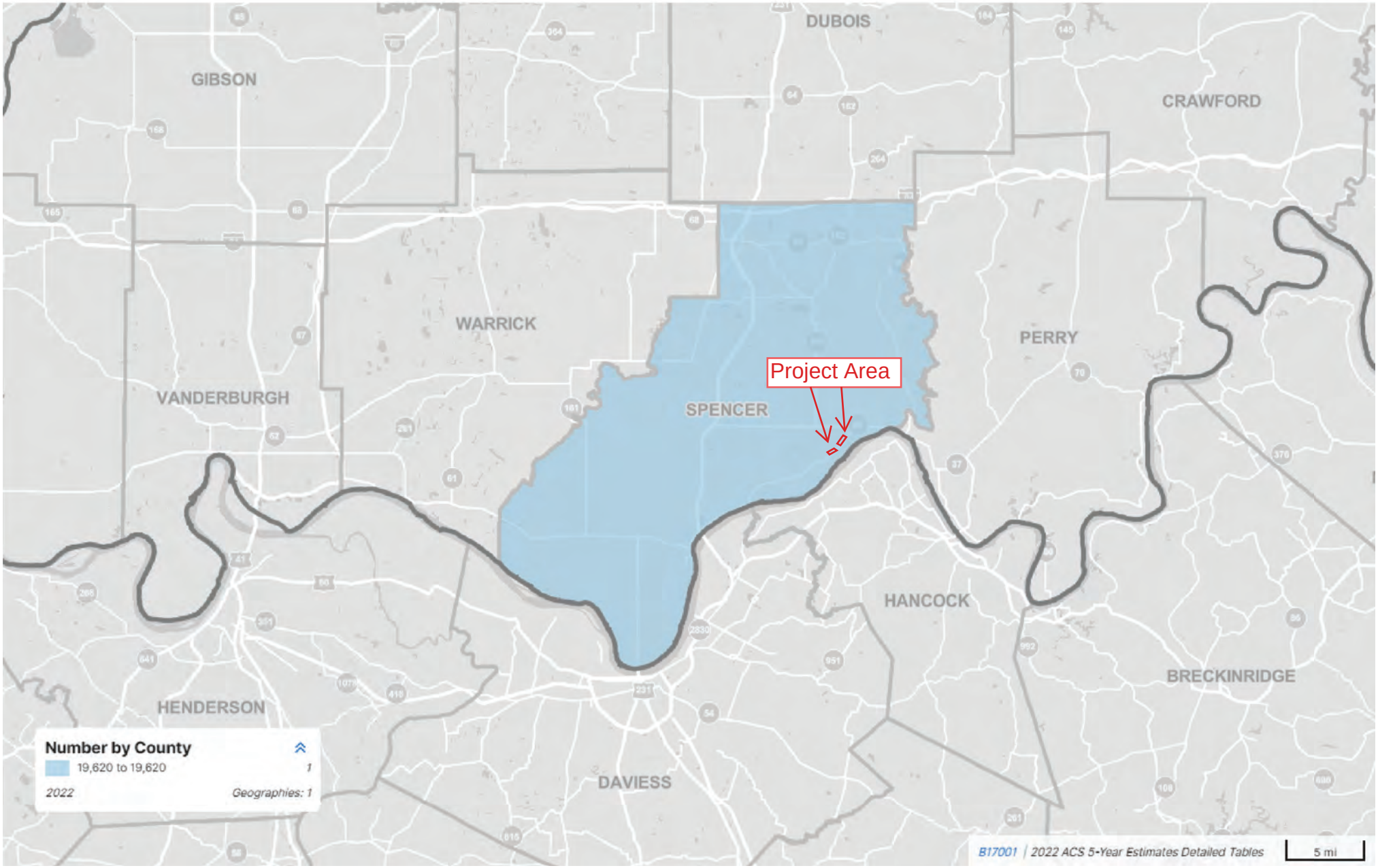
Other Information

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

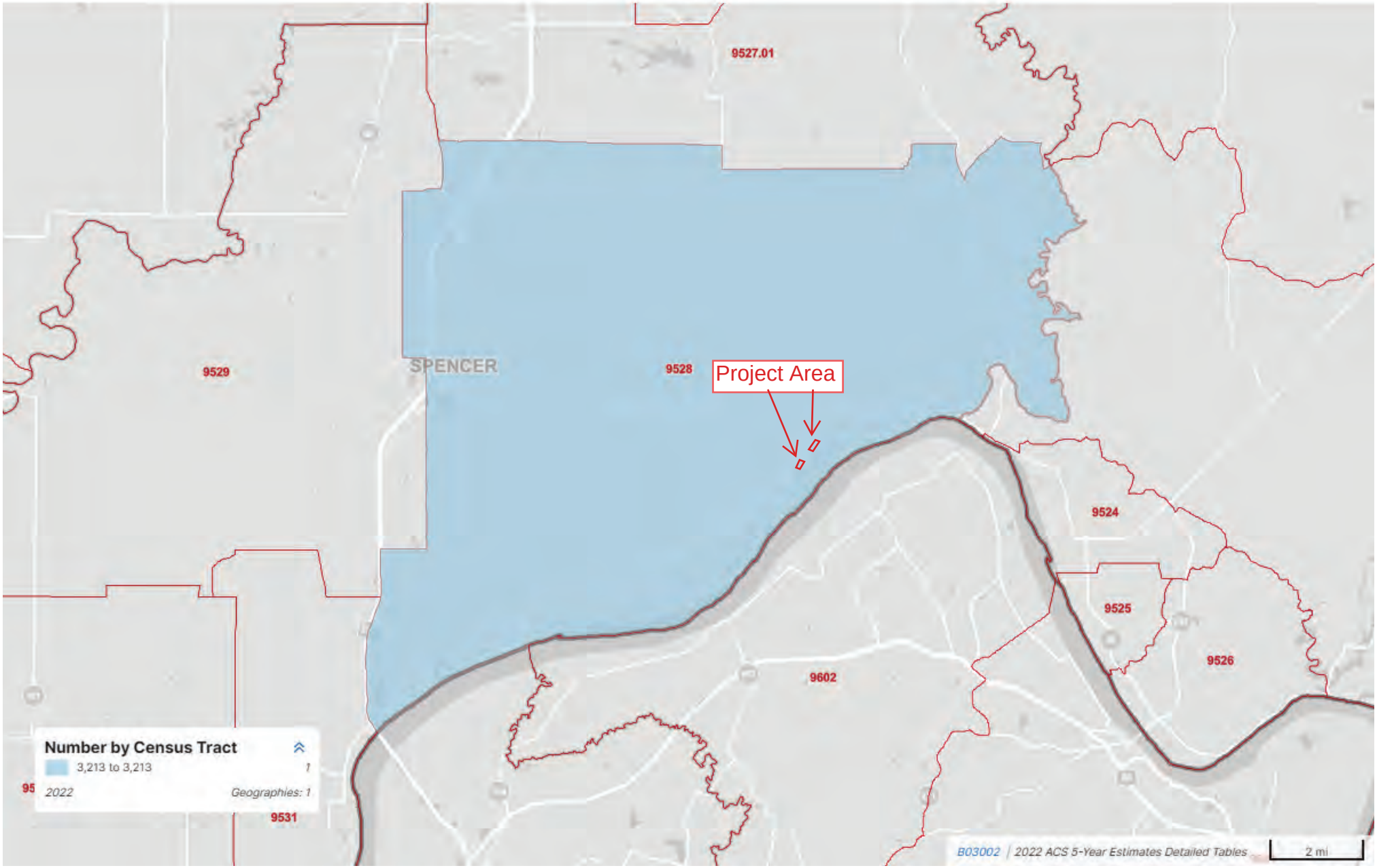
ProjectNumber	SubProjectCode	County	Property
1800003	1800003	Spencer	Lincoln State Park & Lincoln Woods Nature Preserve
1800161	1800161A	Spencer	Lincoln State Park
1800171	1800171F	Spencer	Lincoln State Park
1800174	1800174	Spencer	Lincoln State Park & Lincoln Woods Nature Preserve
1800305	1800305E	Spencer	Lincoln State Park
1800312	1800312G	Spencer	Lincoln State Park
1800327	1800327F	Spencer	Lincoln State Park
1800363	1800363P	Spencer	Lincoln State Park
1800413	1800413M	Spencer	Lincoln State Park
1800428.1	1800428.2	Spencer	Lincoln State Park
1800430	1800430	Spencer	Lincoln State Park & Lincoln Woods Nature Preserve
1800553	1800553	Spencer	Jim Yellig Park
1800553.1	1800553.1	Spencer	Jim Yellig Park

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

Total:


DUBOIS
GIBSON
CRAWFORD
WARRICK
PERRY
Project Area
VANDERBURGH
SPENCER
HANCOCK
BRECKINRIDGE
HENDERSON
DAVIESS
Number by County
19,620 to 19,620
1
2022
Geographies: 1
B17001 | 2022 ACS 5-Year Estimates Detailed Tables
5 mi

Total:


9527.01
9529
SPENCER
9528
Project Area
9524
9525
9526
9602
9531
Number by Census Tract
3,213 to 3,213
1
2022
Geographies: 1
B03002 | 2022 ACS 5-Year Estimates Detailed Tables
2 mi

Poverty Status in the Past 12 Months by Sex by Age

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Label	Spencer County, Indiana		Census Tract 9528; Spencer County; Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	19,620	±37	3,213	±317
Income in the past 12 months below poverty level:	1,415	±327	77	±47
Male:	439	±140	22	±12
Under 5 years	24	±19	0	±13
5 years	18	±21	1	±4
6 to 11 years	31	±54	1	±4
12 to 14 years	25	±23	1	±4
15 years	3	±5	0	±13
16 and 17 years	17	±15	2	±3
18 to 24 years	36	±32	0	±13
25 to 34 years	47	±46	0	±13
35 to 44 years	14	±15	5	±7
45 to 54 years	23	±23	0	±13
55 to 64 years	92	±58	7	±12
65 to 74 years	60	±31	0	±13
75 years and over	49	±43	5	±6
Female:	976	±227	55	±40
Under 5 years	32	±24	0	±13
5 years	56	±46	12	±19
6 to 11 years	52	±36	0	±13
12 to 14 years	69	±65	0	±13
15 years	7	±8	0	±13
16 and 17 years	21	±28	0	±13
18 to 24 years	147	±94	4	±5
25 to 34 years	121	±54	15	±19
35 to 44 years	51	±32	1	±3
45 to 54 years	91	±53	3	±3
55 to 64 years	120	±56	4	±6
65 to 74 years	79	±35	3	±5
75 years and over	130	±54	13	±18
Income in the past 12 months at or above poverty level:	18,205	±331	3,136	±332
Male:	9,588	±156	1,725	±200
Under 5 years	472	±28	67	±38
5 years	99	±60	38	±30
6 to 11 years	662	±85	114	±59

Table Notes

Poverty Status in the Past 12 Months by Sex by Age

Survey/Program: American Community Survey
Universe: Population for whom poverty status is determined
Year: 2022
Estimates: 5-Year
Table ID: B17001

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, the decennial census is the official source of population totals for April 1st of each decennial year. In between censuses, the Census Bureau's Population Estimates Program produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Information about the American Community Survey (ACS) can be found on the ACS website. Supporting documentation including code lists, subject definitions, data accuracy, and statistical testing, and a full list of ACS tables and table shells (without estimates) can be found on the Technical Documentation section of the A website.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the
Methodology
section.

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

The 2018-2022 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on 2020 Census data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

-
The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a medi was larger than the median itself.

N
The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

(X)
The estimate or margin of error is not applicable or not available.

median-
The median falls in the lowest interval of an open-ended distribution (for example "2,500-")

median+
The median falls in the highest interval of an open-ended distribution (for example "250,000+").

**
The margin of error could not be computed because there were an insufficient number of sample observations.

***
The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.

*****
A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.

Hispanic or Latino Origin by Race

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Label	Spencer County, Indiana		Census Tract 9528; Spencer County; Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	19,935	*****	3,213	±327
Not Hispanic or Latino:	19,299	*****	3,172	±342
White alone	18,727	±52	3,091	±344
Black or African American alone	130	±41	15	±18
American Indian and Alaska Native alone	0	±20	0	±13
Asian alone	80	±17	1	±2
Native Hawaiian and Other Pacific Islander alone	0	±20	0	±13
Some other race alone	55	±44	34	±36
Two or more races:	307	±50	31	±24
Two races including Some other race	39	±28	6	±11
Two races excluding Some other race, and three or more races	268	±44	25	±23
Hispanic or Latino:	636	*****	41	±59
White alone	314	±111	1	±3
Black or African American alone	0	±20	0	±13
American Indian and Alaska Native alone	4	±5	0	±13
Asian alone	0	±20	0	±13
Native Hawaiian and Other Pacific Islander alone	0	±20	0	±13
Some other race alone	46	±58	0	±13
Two or more races:	272	±119	40	±58
Two races including Some other race	272	±119	40	±58
Two races excluding Some other race, and three or more races	0	±20	0	±13

Table Notes

Hispanic or Latino Origin by Race

Survey/Program: American Community Survey
Universe: Total population
Year: 2022
Estimates: 5-Year
Table ID: B03002

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, the decennial census is the official source of population totals for April 1st of each decennial year. In between censuses, the Census Bureau's Population Estimates Program produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Information about the American Community Survey (ACS) can be found on the ACS website. Supporting documentation including code lists, subject definitions, data accuracy, and statistical testing, and a full list of ACS tables and table shells (without estimates) can be found on the Technical Documentation section of the ACS website.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the tru value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

The Hispanic origin and race codes were updated in 2020. For more information on the Hispanic origin and race code changes, please visit the American Community Survey Technical Documentation website.

The 2018-2022 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on 2020 Census data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoin urbanization.

Explanation of Symbols:

-
The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.

N
The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

(X)
The estimate or margin of error is not applicable or not available.

median-
The median falls in the lowest interval of an open-ended distribution (for example "2,500-")

median+
The median falls in the highest interval of an open-ended distribution (for example "250,000+").

**
The margin of error could not be computed because there were an insufficient number of sample observations.

***
The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.

*****
A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.

	COC	AC 1
	Spencer County	Census Tract 9528, Spencer County, Indiana
LOW-INCOME POPULATION		
Total Population for Whom Poverty Status is Determined	19,620	3,213
Total Population Below Poverty Level	1,415	77
Percent Low-Income	7.21%	2.40%
125 Percent of COC	9.02%	
AC Percent Low-Income Greater Than 125 Percent of COC?		NO
AC Percent Low-Income Greater Than 50 Percent?		NO
Population of EJ Concern?		NO
MINORITY POPULATION		
Total Population	19,935	3,213
Minority Population	1,208	122
Percent Minority	6.06%	3.80%
125 Percent of COC	7.57%	
AC Percent Minority Greater Than 125 Percent of COC?		NO
AC Percent Minority Greater Than 50 Percent?		NO
Population of EJ Concern?		NO