SR 250 over Slate Creek – Superstructure Replacement Jennings County, Indiana Des. No. 1701502

Appendix C: Early Coordination

HNTB Corporation

The HNTB Companies

Engineers Architects Planners

111 Monument Circle Suite 1200 Indianapolis, IN 46204 Telephone (317)636-4682 Facsimile (317) 917-5211 www.hntb.com

Sample Early Coordination Letter



November 1, 2019

David Dye Environmental Manager, Seymour District Indiana Department of Transportation 185 Agrico Ln Seymour, IN 47274

Re: Early Coordination Letter

Des. No. 1701502

SR 250 over Slate Creek Bridge Project

Jennings County, Indiana

Dear Mr. Dye:

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving the bridge (250-40-05952 B) over Slate Creek in Jennings County, Indiana. This letter is part of the early coordination phase of the environmental review process. We request comments from you within your area of expertise regarding any potential environmental or community effects associated with this proposed project. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental effects.

Project Location: This project is located on SR 250, approximately 4.16 miles west of SR 3, in a rural portion of Jennings County. More specifically, the project is located in Section 26, Township 5 North, Range 7 East in Marion Township.

Existing Conditions: The existing bridge carrying SR 250 over Slate Creek is a single span adjacent box beam bridge constructed in 1968. The existing structure has a 24-foot span and a 30-foot out to out deck width. The existing SR 250 approach cross section consists of two 11-foot lanes bordered by 3-foot paved shoulders. This section of SR 250 is a two-lane Rural Major Collector. Roadside V-ditches exist along SR 250 in the vicinity of the structure. The existing bridge wearing surface is in fair condition with longitudinal cracking with some delamination and spalls. The curbs on the north and southwest sides of the structure show deterioration and heavy efflorescence, and staining is visible on the superstructure between the box beams. The existing substructure exhibits vertical cracking every five feet in the abutments. Existing guardrail does not meet current Manual for Assessing Safety Hardware (MASH) standards. The approximate existing right-of-way is 20 feet north and 20 feet south of the centerline throughout the project area. The bridge has no historic significance and is not on or eligible for inclusion on the National Register of Historic Places.

Purpose and Need: The need for this project is due to the deteriorated condition of the bridge, as documented in the INDOT Bridge Inspection Report dated November 11, 2017. The purpose of this project is to maintain a safe vehicular crossing of SR 250 over Slate Creek, while maintaining adequate hydraulic function at this location.

Proposed Project: Proposed activities include replacing the bridge superstructure, widening the existing bridge to achieve a clear roadway width of 30 feet, and substructure rehabilitation. Guardrail

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installation to MASH standards will occur. A temporary pump around will be required to complete work on bridge substructure. Tree clearing will be necessary for this project.

Right-of-Way: The project requires the acquisition of approximately one acre of permanent right-of-way. INDOT will perform utility coordination to verify location of surrounding utilities for potential relocation.

Maintenance of Traffic (MOT): The preferred method of traffic maintenance would be a road closure with an official state detour.

Surrounding Resources: Land use in the vicinity of the project is primarily agricultural and residential. Slate Creek flows through the project area and is mapped as a National Wetland Inventory (NWI) resource. HNTB staff will perform a wetland and waterway determination and a biological assessment to identify any ecological resources that may be present. No Swallows' nests have been observed underneath the structure. The project is located in a floodplain and is not located within a wellhead protection area or an Urban Area Boundary (UAB).

This project qualifies for the application of the United States Fish and Wildlife Service (USFWS) range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat. The USFWS Information, Planning, and Consultation System (IPaC) will be utilized to determine the project's potential to affect the Indiana bat and northern long-eared bat. The INDOT Bridge Inspection Report for Bridge No. 250-40-05952 B dated November 13, 2017, states that no evidence of bats were seen or heard on the bridge.

Comments Request: You are asked to review this information and provide any comments you may have relative to the anticipated effects of the project on areas which you have jurisdiction or special expertise. Please send your comments to Kate Lucier, of HNTB Corporation, at klucier@hntb.com or 317-917-5332. Should we not receive your response within thirty (30) calendar days from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary; a reasonable amount may be granted upon request.

If you have any questions regarding this matter, please feel free to contact Kate Lucier, of HNTB Corporation, at klucier@HNTB.com or 317-917-5332 or Will Fortson INDOT Project Manager, at wfortson@indot.in.gov or 812-524-3745. Thank you in advance for your input.

Sincerely,

HNTB CORPORATION

Kate Lucier, PWS

Science Project Manager

Attachments: Figure 1: Project Location Map

Figure 2: Project Area Aerial

Figure 3: USGS 7.5 Minute Topographic Quad Map

Project Location Photographs

Attachments have been removed to avoid duplication

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Cc: Will Fortson, INDOT Project Manager

Erica Haas, HNTB Corporation

Brian Royer, Indiana Department of Natural Resources Division of Oil and Gas

David Dye, INDOT Seymour District Environmental Manager

Chad Ebinger, Jennings County Surveyor

Matt Sporleder, Jennings County Board of Commissioners

Teresa Brown, Jennings County School Corporation

Marie Shepherd, Jennings County Floodplain Administrator

Kenny Freeman, Jennings County Sheriff

Jennings County Highway Department

Jerry Shepherd, Jennings County Emergency Services

Rickie Clark, INDOT Manager of Public Hearings

Indiana Geological Survey

Christie Stanifer, Indiana Department of Natural Resources

Alisha Turnbow, Indiana Department of Environmental Management Groundwater Section

Rick Neilson, NRCS State Conservationist

Greg McKay, US Army Corps of Engineers, Louisville District

Michelle Allen, Federal Highway Administration

Robin McWilliams-Munson, US Fish and Wildlife Service

Patricia Trap, National Park Services

Michael Wurl, US Department of Housing and Urban Development

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Caroline Tegeler

From: McWilliams, Robin <robin_mcwilliams@fws.gov>

Sent: Wednesday, November 6, 2019 11:00 AM

To: Caroline Tegeler

Subject: Re: [EXTERNAL] Early Coordination Letter - SR 250 over Slate Creek (Des. No. 1701502)

Dear Caroline,

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

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (I6 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of I969, the Endangered Species Act of I973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and should follow the new Indiana bat/northern long-eared bat programmatic consultation process, if applicable (*i.e.* a federal transportation nexus is established). We will review that information once it is received.

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

We appreciate the opportunity to comment at this early stage of project planning. If project plans change such that fish and wildlife habitat may be affected, please recoordinate with our office as soon as possible. If you have any questions about our recommendations, please call (812) 334-4261 x. 207.

Sincerely, Robin McWilliams Munson

Standard Recommendations:

- 1. Do not clear trees or understory vegetation outside the construction zone boundaries. (This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.)
- 2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.

Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottomed culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.

3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.

- 4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If rip rap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
- 5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.
- 6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams.
- 7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing.

Robin McWilliams Munson

U.S. Fish and Wildlife Service 620 South Walker Street Bloomington, Indiana 46403 812-334-4261 x. 207 Fax: 812-334-4273

Monday, Tuesday - 7:30a-3:00p Wednesday, Thursday - telework 8:30a-3:00p

On Fri, Nov 1, 2019 at 8:47 AM Caroline Tegeler < ctegeler@hntb.com> wrote:

Dear Ms. McWilliams-Munson,

Please see the attached early coordination letter and supporting graphics for the SR 250 over Slate Creek Bridge Project (Des. Nos. 1701502). If you have any questions regarding this project, please feel free to contact me by phone or email.

Best regards,

Caroline Tegeler

Scientist

Tel (317)917-5352 Cell (765)212-4983 Email ctegeler@hntb.com



November 20, 2019

Kate Lucier **HNTB** Corporation 111 Monument Circle, Suite 1200 Indianapolis, Indiana 46204

Dear Ms. Lucier:

The proposed project to address the deteriorating condition of the bridge that carries State Road 250 over Slate Creek in Jennings County, Indiana, (Des No 1701502), as referred to in your letter received November 1, 2019, will cause a conversion of primes farmland.

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

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

Sincerely,

JERRY RAYNOR Digitally signed by JERRY RAYNOR Date: 2019.11.22 12:59:48 -05'00'

JERRY RAYNOR State Conservationist

Enclosures

Helping People Help the Land.











Des. No. 1701502 Appendix B, Page 6 of 46

FAF	RMLAND CONVERS	SION II	MPACT RA	ATING			
PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request					
Name of Project DES1701502_Slate Creek		Federal Agency Involved					
Proposed Land Use Maintained Roadside		County and State Jennings County, Indiana					
PART II (To be completed by NRCS)		Date Request Received By NRCS 11/1/2019		Person Completing Form:			
Does the site contain Prime, Unique, Statewide or Local Important Farmland			YES NO	Acres Irrigated Average Farm Size 251			
(If no, the FPPA does not apply - do not complete additional parts of this form)							
Major Crop(s) Corn	Acres: 197,780% 82	Farmable Land In Govt. Jurisdiction Acres: 197,780% 82		Amount of Farmland As Defined in FPPA Acres: 153944% 64			
Name of Land Evaluation System Used	Name of State or Local Site Assessment System			Date Land Evaluation Returned by NRCS			
LESA	,			11/20/2019			
PART III (To be completed by Federal Agency)				Alternative Site Rating			
A. Total Acres To Be Converted Directly				Site A	Site B	Site C	Site D
B. Total Acres To Be Converted Indirectly							
C. Total Acres In Site							
PART IV (To be completed by NRCS) Land Evaluation Information							
A. Total Acres Prime And Unique Farmland				0.50			
B. Total Acres Statewide Important or Local Im	portant Farmland			0.00			
C. Percentage Of Farmland in County Or Loca	Govt. Unit To Be Converted			<0.001			
D. Percentage Of Farmland in Govt. Jurisdiction	n With Same Or Higher Re l ati	ve Value		78			
PART V (To be completed by NRCS) Land Ex- Relative Value of Farmland To Be Conv		s)		65			
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-0			Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use			(15)	15			
2. Perimeter In Non-urban Use			(10)	10			
3. Percent Of Site Being Farmed			(20)	0			
4. Protection Provided By State and Local Gov	vernment		(20)	0			
5. Distance From Urban Built-up Area			(15)	15			
6. Distance To Urban Support Services			(15)	15			
7. Size Of Present Farm Unit Compared To Av	verage		(10)	0			
8. Creation Of Non-farmable Farmland			(10)	0			
Availability Of Farm Support Services			(5)	0			
10. On-Farm Investments			(20)	0			
11. Effects Of Conversion On Farm Support Services			(10)	0			
12. Compatibility With Existing Agricultural Use			(10)	0			
TOTAL SITE ASSESSMENT POINTS			160	55	0	0	0
PART VII (To be completed by Federal Agency)							
Relative Value Of Farmland (From Part V)			100	65	0	0	0
Total Site Assessment (From Part VI above or	local site assessment)		160	55	0	0	0
TOTAL POINTS (Total of above 2 lines)			260	120	0	0	0
Site Selected: Site A	te Of Selection 11/1/2019		YES		NO NO		
Reason For Selection:							
Site A is the only alternative that	meets the purpose	and ne	eed.				
Name of Federal agency representative completing this form:				D:	ate: 2/26/2	2020	

(See Instructions on reverse side)

Des. No. 1701502

Form AD-1006 (03-02)

THIS IS NOT A PERMIT

State of Indiana DEPARTMENT OF NATURAL RESOURCES Division of Fish and Wildlife

Early Coordination/Environmental Assessment

DNR #:

ER-21965

Request Received: November 1, 2019

Requestor:

HNTB Corporation

Kate Lucier

111 Monument Circle, Suite 1200

Indianapolis, IN 46204

Project:

SR 250 bridge (#250-40-05952 B) widening, superstructure replacement and substructure rehabilitation over Slate Creek, about 4.16 miles west of SR 3; Des

#1701502

County/Site info:

Jennings

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

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

have permitting authority, all recommendations are voluntary.

Regulatory Assessment:

This proposal will require the formal approval of our agency for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption (see enclosure). Please include a copy of this letter with the permit

application if the project does not meet the bridge exemption criteria.

Natural Heritage Database:

The Natural Heritage Program's data have been checked.

To date, no plant or animal species listed as state or federally threatened, endangered,

or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments:

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

1) Bank Stabilization & Wildlife Passage:

The existing structure currently facilitates wildlife passage under the road as the photos submitted show a concrete ledge along the base of the structure wall which small wildlife can use. The exposed rock slabs in the creek, some of which are adjacent to the structure's edge, appear to be useable for wildlife passage at low and normal flow. The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to current conditions. A level area of natural ground under the structure is ideal for wildlife passage. If channel clearing will result in a flat bench area above the normal water level under the structure, this area should allow wildlife passage and should remain free of riprap and other similar materials that can impair wildlife passage.

Minimize the use of riprap and use alternative erosion protection materials whenever possible. Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Where riprap must be used, we recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank up to the ordinary high water mark (OHWM). The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to the area and

Attachments:

A - Bridge Exemption Criteria

State of Indiana DEPARTMENT OF NATURAL RESOURCES Division of Fish and Wildlife

Early Coordination/Environmental Assessment

specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

While hard armoring alone (e.g. riprap or glacial stone) may be needed in certain instances, soft armoring and bioengineering techniques should be considered first. In many instances, one or more methods are necessary to increase the likelihood of vegetation establishment. Combining vegetation with most bank stabilization methods can provide additional bank protection and help reduce impacts upon fish and wildlife. If hard armoring is needed, wildlife passage can be facilitated by using a smooth-surfaced armoring material instead of riprap, such as articulated concrete block mats, fabric-formed concrete mats, or other similar smooth-surfaced material.

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

B) 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 Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: http://www.in.gov/legislative/iac/20190130-IR-312190041NRA.xml.pdf.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees).

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 with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs if any woody plants are disturbed during construction as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants, including prohibited invasive species (see 312 IAC 18-3-25).
- 2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
- 3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
- 4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
- 5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.
- 6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
- 7. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
- 8. Plant native hardwood trees along the top of the bank and right-of-way to replace the

Attachments:

A - Bridge Exemption Criteria

State of Indiana DEPARTMENT OF NATURAL RESOURCES Division of Fish and Wildlife

Early Coordination/Environmental Assessment

vegetation destroyed during construction.

- 9. Post "Do Not Mow or Spray" signs along the right-of-way.
- 10. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site: maintain these measures until construction is complete and all disturbed areas are
- 11. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

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

Date: November 27, 2019

Christie L. Stanifer

Environ. Coordinator Division of Fish and Wildlife



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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

Indiana Department of Transportation

5701 Highway 31 E Clarksville , IN 47129 Date HNTB Corporation
Dan Logsdon
111 Monument Circle, Suite 1200
Indianapolis , IN 46204

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving the bridge (250-40-05952 B) over Slate Creek in Jennings County, Indiana. This project is located on SR 250, approximately 4.16 miles west of SR 3, in a rural portion of Jennings County, More specifically, the project is located in Section 26, Township 5 North, Range 7 East in Marion Township. The existing bridge carrying SR 250 over Slate Creek is a single span adjacent box beam bridge constructed in 1968. The existing structure has a 24-foot span and a 30-foot out to out deck width. The existing SR 250 approach cross section consists of two 11-foot lanes bordered by 3-foot paved shoulders. This section of SR 250 is a two-lane Rural Major Collector. Roadside V-ditches exist along SR 250 in the vicinity of the structure. The existing bridge wearing surface is in fair condition with longitudinal cracking with some delamination and spalls. The curbs on the north and southwest sides of the structure show deterioration and heavy efflorescence, and staining is visible on the superstructure between the box beams. The existing substructure exhibits vertical cracking every five feet in the abutments. Existing guardrail does not meet current Manual for Assessing Safety Hardware (MASH) standards. The approximate existing right-of-way is 20 feet north and 20 feet south of the centerline throughout the project area. The bridge has no historic significance and is not on or eligible for inclusion on the National Register of Historic Places. The need for this project is due to the deteriorated condition of the bridge, as documented in the INDOT Bridge Inspection Report dated November 11, 2017. The purpose of this project is to maintain a safe vehicular crossing of SR 250 over Slate Creek, while maintaining adequate hydraulic function at this location. Proposed activities include replacing the bridge superstructure, widening the existing bridge to achieve a clear roadway width of 30 feet, and substructure rehabilitation. Guardrail installation to MASH standards will occur. A temporary pump around will be required to complete work on bridge substructure. Tree clearing will be necessary for this project.

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

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer questions not fully addressed in this letter. Also please be mindful that some environmental requirements

may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: http://www.in.gov/idem/5283.htm (http://www.in.gov/idem/5283.htm).

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

WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

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

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

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

- 2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality Wetlands Program. To learn more about the Wetlands Program, visit: http://www.in.gov/idem/4384.htm (http://www.in.gov/idem/4384.htm).
- 3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into

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isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.

- 4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: http://www.in.gov/idem/4384.htm (http://www.in.gov/idem/4384.htm) for the appropriate staff contact to further discuss your project.
- 5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
 - IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
 - IC 14-28-1 Flood Control Act 310 IAC 6-1
 - IC 14-29-1 Navigable Waterways Act 312 IAC 6
 - IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
 - IC 14-29-4 Construction of Channels Act No related code

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

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

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

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

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

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from

IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: http://www.in.gov/idem/4900.htm (http://www.in.gov/idem/4900.htm).

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

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

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

AIR QUALITY

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

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

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

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

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

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

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit: http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf (http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf).) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure visit: http://www.in.gov/isdh/regsvcs/radhealth/radon.htm (http://www.in.gov/isdh/regsvcs/radhealth/radon.htm), http://www.in.gov/idem/4145.htm (http://www.in.gov/idem/4145.htm), or http://www.epa.gov/radon/index.html (http://www.epa.gov/radon/index.html).

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

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

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

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

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee

of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. All notification remitters will be billed on a quarterly basis.

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

- 4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: http://www.in.gov/isdh/19131.htm (http://www.in.gov/isdh/19131.htm).
- 5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule (http://www.ai.org/legislative/iac/T03260/A00080.PDF (http://www.ai.org/legislative/iac/T03260/A00080.PDF)).
- 6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: www.ai.org/legislative/iac/t03260/a00020.pdf (http://www.ai.org/legislative/iac/t03260/a00020.pdf).) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
- 7. For more information on air permits visit: http://www.in.gov/idem/4223.htm (http://www.in.gov/idem/4223.htm), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or OAMPROD atdem.state.in.us.

LAND QUALITY

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

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

6/8

6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: http://www.in.gov/idem/4999.htm (http://www.in.gov/idem/4999.htm).

FINAL REMARKS

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

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

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

Signature(s) of the Applicant

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

Project Description

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving the bridge (250-40-05952 B) over Slate Creek in Jennings County, Indiana. This project is located on SR 250, approximately 4.16 miles west of SR 3, in a rural portion of Jennings County. More specifically, the project is located in Section 26, Township 5 North, Range 7 East in Marion Township. The existing bridge carrying SR 250 over Slate Creek is a single span adjacent box beam bridge constructed in 1968. The existing structure has a 24-foot span and a 30-foot out to out deck width. The existing SR 250 approach cross section consists of two 11-foot lanes bordered by 3-foot paved shoulders. This section of SR 250 is a two-lane Rural Major Collector. Roadside V-ditches exist along SR 250 in the vicinity of the structure. The existing bridge wearing surface is in fair condition with longitudinal cracking with some delamination and spalls. The curbs on the north and southwest sides of the structure show deterioration and heavy efflorescence, and staining is visible on the superstructure between the box beams. The existing substructure exhibits vertical cracking every five feet in the abutments. Existing guardrail does not meet current Manual for Assessing Safety Hardware (MASH) standards. The approximate existing right-of-way is 20 feet north and 20 feet south of the centerline throughout the project area. The bridge has no historic significance and is not on or eligible for inclusion on the National Register of Historic Places. The need for this project is due to the deteriorated condition of the bridge, as documented in the INDOT Bridge Inspection Report dated November 11, 2017. The purpose of this project is to maintain a safe vehicular crossing of SR 250 over Slate Creek, while maintaining adequate hydraulic function at this location. Proposed activities include replacing the bridge superstructure, widening the existing bridge to achieve a clear

7/8

roadway width of 30 feet, and substructure rehabilitation. Guardrail installation to MASH standards will occur. A temporary pump around will be required to complete work on bridge substructure. Tree clearing will be necessary for this project.

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

Date: 3/13/30	
Signature of the INDOT Project Engineer or Other Responsible	Agent William fortion
Date:2/13/20	
Signature of the For Hire Consultant	DL

Dan Logsdon



Organization and Project Information

Project ID: Des. ID:

SR 250 over Slate Creek **Project Title:**

Name of Organization: HNTB Corporation

Requested by: Dan Logsdon

Environmental Assessment Report

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

DISCLAIMER:

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

This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428 Date: February 03, 2020

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



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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

Eric J. Holcomb

Bruno Pigott Commissioner

October 23, 2019

66-33
HNTB Corporation
Attention: Tenecia Jones
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204

Dear Tenecia Jones,

Des. No. 1701502

RE: Wellhead Protection Area

Proximity Determination

Des No 1701502

SR 250 over Slate Creek Superstructure Replacement Jennings County, Indiana

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

The project area **is located within** a Source Water Assessment Area for a PWSS's surface water intake. The Source Water Assessment Area relates to the surface water drainage area that water could potentially flow and influence water quality for a PWSS's source of drinking water. The PWSS that could be impacted by the project is Stucker Fork Water Utility. A contact person for Stucker Fork Water Utility is Randy Needler, and could be reached via e-mail and/or phone at: sfork1@c3bb.com or (812) 794-0650. The contact information is provided as a courtesy and reference for you if any issues arise that could potentially impact the water quality for the PWSS during the course of the project. It is not a requirement of IDEM that you contact the system regarding the project.

Note: the Drinking Water Branch has a self service feature which allows one to determine wellhead proximity without submitting the application form. Use the following instructions:

- 1. Go to http://idemmaps.idem.in.gov/whpa2/
- 2. Use the search tool located in the upper left hand corner of the application to zoom to your site of interest by way of city, county, or address; or use the mouse to click on the site of interest displayed on the map.
- 3. Once the site of interest has been located and selected, use the print tool to create a .pdf of a wellhead protection area proximity determination response.

In the future please consider using this self service feature if it is suits your needs.



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

Sincerely,

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

Alisha Turnbow

Des. No. 1701502 Appendix C, Page 21 of 46

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JOHN W. WETZEL, P.E. R. DERICK WIGGINS, P.E. MARK M. SULLIVAN, P.E. ALAN F. BURCH, P.E. CLINT W. ROOS, P.E.

NATHAN J. WALKER, P.L.S. BRANDON A. PARKER, P.L.S.

February 5, 2020

HNTB Corporation 111 Monument Circle, Suite 1200 Indianapolis, IN 46204

Attn: Ms. Kate Lucier, PWS

Science Project Manager

Re: Stucker Fork Water Utility

> SR 250 Over Slate Creek Bridge Project INDOT Designation No.: 1701502

MEI #2020009-01

Dear Ms. Lucier:

On behalf of our client, the Stucker Fork Conservancy District (SFCD), and in response to the email and letter dated February 3, 2020, we have verified that SFCD does have existing facilities in the geographical area of the proposed INDOT project along SR 250 Over Slate Creek. SFCD has an existing 6-inch water main along the north side of SR 250 that was installed in the early 1990's. Enclosed please find a copy of their Record Drawing Plans (Overall Map 1 and Plan Sheet 5), which are both highlighted in yellow to show the facilities in the geographical area of the proposed INDOT project.

The designated contact for SFCD is as follows:

Name:

Telephone Number:

Postal Address:

Email Address:

Randy Needler, Superintendent

812-794-0650

2260 North US 31, Austin, IN 47102

sfork1@c3bb.com

Should you have any questions or need additional information, please feel free to contact me at (812)-295-2800, or via email at iwetzel@midewesterneng.com. You may also contact Mr. Randy Needler, Superintendent of SFCD, at (812)-794-0650, or via email at sfork1@c3bb.com. Thank you.

Respectfully,

MIDWESTERN ENGINEERS, INC.

John W. Wetzel, P.E. Senior Project Engineer

Enclosure

cc: Stucker Fork Conservancy District c/o Randy Needler

> 802 W. BROADWAY ST. • P.O. BOX 295 • LOOGOOTEE, IN 47553 • P: 812-295-2800 6809 CORPORATE DRIVE • INDIANAPOLIS, IN 46278 • P: 317-334-0262 meinc@midwesterneng.com • www.midwesterneng.com

AMERICAN COUNCIL OF ENGIN of Indiana NEERING COMPANIES

INDOT Bridge/Small Structure Bat Inspection Data Sheet (Rev 4/29/2016)

	General In	formation			
Date of Inspection: 7/17/2019 Time of Inspection: 3:40 pm County: Jennings Inspected by: K. Lucier, D. Logsdon GPS Northing: 4300232 Easting: 611826 UTM Zone: 16	Initial Inspection Follow-up Inspection Construction Construction Contract Number: B-40437, Des. No. 1701502		Temp: 90 °F Wind: 10 mph Precip: 0 Sunrise: 6:33 Sunset: 9:10 Anticipated Start Date for Construction: Spring/Summer 2022		
Bridge or Culvert	The second secon		Bridge or Culvert		
Stream or Road Crossed: SR 250 over		Station: RP 19			
Bridge/Culvert number: 250-40-0595	2 B	Number of Spans: 1			
Type of Structure:		Material:			
☐ Concrete box beam ☐ Steel b	peam	☑ Concrete ☐ Steel			
☐ Concrete I-beam ☐ Steel g		☐ Other (describe):			
☐ Concrete bulb tee beam ☐ Steel pony truss		Took			
☐ Concrete arch ☐ Welded steel thru girder		Shape:			
	ete box culvert	Box Culvert	☐ Pipe		
☐ Concrete slab ☐ Concrete pipe		☐ Arch ☐ Slab			
☐ Multi-plate arch ☐ Corrugated steel pipe		☐ Other (describe)			
Other (list):		Lagation of bate			
Searched entire structure? If not, why not?		Location of bats or signs of use (w/drawing and			
Bats Present? ☐ Seen? ☐ Heard?		photos):			
No No		N/A			
In Clusters? Number of clusters: N/A					
Number of bats in largest cluster: N/A					
Approximate total number of bats found: N/A					
Signs of previous bat use? ☐ Guano ☐ Staining NO					

If Bats Present	
Date and Time Project Supervisor was notified: N/A	
Name of Project Supervisor notified: N/A	

Des. No. 1701502 Appendix C, Page 23 of 46

For bridges and culverts, provide plan, longitudinal and cross section views as appropriate.				
W E				
N/A				

Gillian Clark

From: Baker, Mindy <MBaker2@indot.IN.gov>
Sent: Wednesday, June 5, 2019 8:34 AM

To: Gillian Clark

Cc: Susan Harrington; Dye, David

Subject: RE: USFWS Bat Layer Check - Des. No. 1701502 - SR 250 Superstructure Replacement

Jennings County

Gillian,

I have conducted a check of the USFWS confidential bat database for Des No. 1701502 and the results are stated below.

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. Additional investigation to confirm the presence or absence of bats in or on any culverts, bridges or structures affected by the project will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Also, although I am the contact for USFWS bat database checks, David Dye will be the contact for your IPAC review.

Mindy Baker

Environmental Manager

185 Agrico Lane Seymour, IN 47274 **Office:** (812) 524-3746

Email: mbaker2@indot.in.gov



From: Gillian Clark [mailto:gnclark@HNTB.com]

Sent: Tuesday, June 4, 2019 5:06 PM **To:** Baker, Mindy <MBaker2@indot.IN.gov> **Cc:** Susan Harrington <sharrington@HNTB.com>

Subject: USFWS Bat Layer Check - Des. No. 1701502 - SR 250 Superstructure Replacement Jennings County

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

Mindy -

HNTB would like to request a check of the USFWS bat data to determine the presence of any protected bat species in the area of this INDOT bridge project in Jennings County. Please see the attached graphic for location information. Let me know if you need additional information.

Thanks! Gillian



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office 620 South Walker Street Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

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



In Reply Refer To: February 27, 2020

Consultation Code: 03E12000-2019-SLI-1525

Event Code: 03E12000-2020-E-04183

Project Name: State Road 250 over Slate Creek - Superstructure Replacement (Des. No.

1701502)

Subject: Updated list of threatened and endangered species that may occur in your proposed

project location, and/or may be affected by your proposed project

To Whom It May Concern:

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

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

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

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

Des. No. 1701502 Appendix C, Page 26 of 46

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects and projects that include installing towers that use guy wires or are over 200 feet in height, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

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

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Des. No. 1701502 Appendix C, Page 27 of 46

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

Des. No. 1701502 Appendix C, Page 28 of 46

Project Summary

Consultation Code: 03E12000-2019-SLI-1525

Event Code: 03E12000-2020-E-04183

Project Name: State Road 250 over Slate Creek - Superstructure Replacement (Des. No.

1701502)

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: The Indiana Department of Transportation (INDOT) is proposing a bridge

superstructure replacement and widening project (Des. No. 1701502 – Contract No. B-40437) for the bridge (Structure No. 250-40-05952 B) that carries State Road (SR) 250 over Slate Creek in Jennings County. More specifically, the project is approximately 4.16 miles west of SR 3 in

Marion Township.

Proposed activities include replacing the bridge superstructure, widening the bridge, and substructure rehabilitation. Approximately 0.25 acre of tree clearing will be required due to construction access.

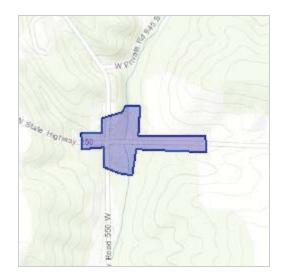
No bats or evidence of bats were noted during the July 17, 2019 site investigation. The INDOT Bridge Inspection Report for Structure No. 250-40-05952 B dated November 11, 2017, indicated no bats were seen or heard under the structure.

Construction activities may increase noise above existing traffic/background levels. The project does not involve lighting alternations; however, temporary lighting may be necessary. A query of the USFWS Bat Database by INDOT Seymour District staff on June 5, 2019 did not identify any documented sites within 0.5 mile of the project area. Work is anticipated to take place in the spring/summer of 2022.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.843815967094514N85.71084848117289W

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Counties: Jennings, IN

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Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME STATUS

Indiana Bat *Myotis sodalis*

Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/5949

Species survey guidelines:

https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf

Northern Long-eared Bat Myotis septentrionalis

Threatened

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

 Incidental take of the NLEB is not prohibited here. Federal agencies may consult using the 4(d) rule streamlined process. Transportation projects may consult using the programmatic process. See www.fws.gov/midwest/endangered/mammals/nleb/index.html

Species profile: https://ecos.fws.gov/ecp/species/9045

Critical habitats

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

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office 620 South Walker Street Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

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



In Reply Refer To: February 27, 2020

Consultation Code: 03E12000-2019-I-1525 Event Code: 03E12000-2020-E-04218

Project Name: State Road 250 over Slate Creek - Superstructure Replacement (Des. No.

1701502)

Subject: Concurrence verification letter for the 'State Road 250 over Slate Creek -

Superstructure Replacement (Des. No. 1701502)' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **State Road 250 over Slate Creek - Superstructure Replacement (Des. No. 1701502)** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is <u>not likely to adversely affect</u> (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*).

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do <u>not</u> 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,

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Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

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

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

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Project Description

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

Name

State Road 250 over Slate Creek - Superstructure Replacement (Des. No. 1701502)

Description

The Indiana Department of Transportation (INDOT) is proposing a bridge superstructure replacement and widening project (Des. No. 1701502 – Contract No. B-40437) for the bridge (Structure No. 250-40-05952 B) that carries State Road (SR) 250 over Slate Creek in Jennings County. More specifically, the project is approximately 4.16 miles west of SR 3 in Marion Township.

Proposed activities include replacing the bridge superstructure, widening the bridge, and substructure rehabilitation. Approximately 0.25 acre of tree clearing will be required due to construction access.

No bats or evidence of bats were noted during the July 17, 2019 site investigation. The INDOT Bridge Inspection Report for Structure No. 250-40-05952 B dated November 11, 2017, indicated no bats were seen or heard under the structure.

Construction activities may increase noise above existing traffic/background levels. The project does not involve lighting alternations; however, temporary lighting may be necessary. A query of the USFWS Bat Database by INDOT Seymour District staff on June 5, 2019 did not identify any documented sites within 0.5 mile of the project area. Work is anticipated to take place in the spring/summer of 2022.

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Determination Key Result

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

Qualification Interview

- 1. Is the project within the range of the Indiana bat^[1]?
 - [1] See Indiana bat species profile

Automatically answered

Yes

- 2. Is the project within the range of the Northern long-eared bat^[1]?
 - [1] See Northern long-eared bat species profile

Automatically answered

Yes

- 3. Which Federal Agency is the lead for the action?
 - A) Federal Highway Administration (FHWA)
- 4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)
 - [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting. No
- 5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?
 - [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

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- 6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?
 - [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

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

No

- 8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)
 - [1] See the Service's summer survey guidance for our current definitions of suitable habitat.
 - [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

Yes

- 9. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?
 - [1] See the Service's <u>summer survey guidance</u> 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*

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- 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 <u>summer survey guidance</u> 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 <u>summer survey guidance</u> 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

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- 14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur^[1]?
 - [1] Coordinate with the local Service Field Office for appropriate dates.
 - B) During the inactive season
- 15. Does the project include activities within documented NLEB habitat^{[1][2]}?
 - [1] Documented roosting or foraging habitat for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)
 - [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

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

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

- B) During the inactive season
- 18. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces? *Yes*
- 19. Will the tree removal alter *any* **documented** Indiana bat or NLEB roosts and/or alter any surrounding summer habitat **within** 0.25 mile of a documented roost?

 No
- 20. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

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

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

No

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

No

24. Does the project include slash pile burning?

No

- 25. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)? *Yes*
- 26. Is there *any* suitable habitat^[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)
 - [1] See the Service's current <u>summer survey guidance</u> for our current definitions of suitable habitat. *Yes*
- 27. Has a bridge assessment^[1] been conducted **within** the last 24 months^[2] to determine if the bridge is being used by bats?
 - [1] See <u>User Guide Appendix D</u> for bridge/structure assessment guidance
 - [2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

Yes

SUBMITTED DOCUMENTS

INDOT_Bridge_Culvert_Asssessment_Form_1801178 For IPaC.pdf https://ecos.fws.gov/ipac/project/LTB7WPQYHNBWHINLS7VQOYCFIA/
 projectDocuments/17889997

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28. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)^[1]?

[1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

No

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

No

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

No

- 31. Will the project involve the use of **temporary** lighting *during* the active season? *Yes*
- 32. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

Yes

33. Will the project install new or replace existing **permanent** lighting? *No*

34. 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

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- 35. 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

- 36. 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

37. 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

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

No

39. 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.

40. 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

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41. 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.

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

Automatically answered

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

43. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

44. 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

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45. 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

46. 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

47. 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

48. Lighting AMM 1

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

Yes

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Project Questionnaire

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

N/A

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

N/A

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

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

0.25

4. Please describe the proposed bridge work:

Proposed activities include replacing the bridge superstructure, widening the bridge, and substructure rehabilitation.

- 5. Please state the timing of all proposed bridge work: *Work is anticipated to take place in the spring/Summer of 2022.*
- 6. Please enter the date of the bridge assessment:

7/17/2019

Avoidance And Minimization Measures (AMMs)

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

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.

LIGHTING AMM 1

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

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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 <u>no bats observed</u>.

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.

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

This key was last updated in IPaC on December 02, 2019. Keys are subject to periodic revision.

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

This decision key should <u>only</u> be used to verify project applicability with the Service's <u>February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects</u>. 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 <u>not</u> 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.

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SR 250 over Slate Creek – Superstructure Replacement Jennings County, Indiana Des. No. 1701502

Appendix D: Section 106 of the NHPA

Minor Projects PA Project Assessment Form – Category B Projects with Archaeology Work

Date: 2/10/2020 **Project Designation Number:** 1701502 Route Number: State Road (SR) 250 **Project Description:** Superstructure Replacement SR 250, 04.16 miles W of SR 3 at Slate Creek The Indiana Department of Transportation (INDOT) is proposing a bridge superstructure replacement project (DES # 1701502) on State Road (SR) 250 over Slate Creek. The project is in a rural portion of Jennings County, approximately 4.16 miles west of SR 3. The proposed project will include replacement of the bridge superstructure, widening the existing bridge, and substructure rehabilitation. Approximately 0.66 acre of permanent right-of-way (ROW) and 0.29 acre of temporary ROW are anticipated for this project. Feature crossed (if applicable): Slate Creek Township: Marion Township City/County: Jennings County Information reviewed (please check all that apply): General project location map USGS map Aerial photograph Written description of project area \boxtimes General project area photos \boxtimes Previously completed archaeology reports \boxtimes Interim Report | | Previously completed historic property reports Soil survey data \boxtimes Bridge inspection information Other (please specify): Bridge Inspection Application System (BIAS); Indiana Historic Bridge Inventory; Indiana State Historic Architectural and Archaeological Research Database (SHAARD); Indiana Buildings, Bridges, and Cemeteries Map website; Indiana Historic Bridge Inventory; Jennings County Interim Report; online street-view imagery; ArcMap GIS, Jennings County GIS website, MPPA application (including maps and photographs) sent by HNTB dated December 20th, 2019 and on file at INDOT CRO. Curran, Michael J. 2019 A Phase Ia Archaeological Reconnaissance Survey for the Proposed Rehabilitation of the SR 250 Bridge 4.16 Miles West Of SR 3 at Slate Creek in Jennings County, Indiana (INDOT Des 1701502). Cultural Resource Analysist, Inc. Submitted to HNTB Corporation. Report on file at IDNR, DHPA.

Results of the Records Review for Above-Ground Resources:

With regard to 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 performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and

Last revised 9-23-08 Page 1 of 4

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National Register of Historic Places (National Register) lists for Jennings County. No listed resources are located within 0.25 mile of the project area, a distance that serves as an adequate potential area of effects given the scope of the project and the surrounding terrain.

The Indiana Historic Sites and Structures Inventory (IHSSI) and National Register information for Jennings County are available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The *Jennings County Interim Report* (1989; Marion Township) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. No IHSSI documented resources are located within 0.25 mile of 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.

The INDOT CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, consultant provided photographs, and the Jennings County GIS website (accessed via https://jenningsin.wthgis.com). The project area is located in a rural, agricultural setting; the adjacent building stock consists of mid-twentieth to early twenty-first century residential buildings. None of the resources appear to possess the historic significance or material integrity required to be considered NRHP-eligible.

The most-recent inspection report (C. Everman; 11/15/2019), accessed via the Bridge Inspection Application System (BIAS), was referenced to review the bridge. The subject structure (Bridge # 250-40-05952 B; NBI #030600) carries SR 250 over Slate Creek and is a single-span continuous reinforced concrete slab bridge. The bridge was constructed in 1968 and reconstructed in 1980. During the survey of bridges for the *Indiana Historic Bridge Inventory*, structures built after 1965 were not included in datagathering; therefore, *the* c. 1968 bridge was not evaluated as part of the inventory.

The Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges went into effect in 2012 and exempts common concrete and/or steel bridges and culverts built after 1945 from requirements under Section 106 of the National Historic Preservation Act. The *Program Comment* applies for Bridge # 250-40-05952 B because it has not been previously listed in or determined eligible for listing in the National Register of Historic Places and it is not located in or adjacent to a historic district (Section IV.A of the Program Comment). As an example of a continuous reinforced concrete slab structure, the bridge is also not one of the types exempted from the Program Comment (arch bridges, truss bridges, bridges with movable spans, suspension bridges, cablestayed bridges, or covered bridges [Section IV.B]). Additionally, this bridge has not been identified as having exceptional significance for association with a person or event, being a very early or particularly important example of its type in the state or the nation, having distinctive engineering or architectural features that depart from standard designs, or displaying other elements that were engineered to respond to a unique environmental context (Section IV.C). This bridge also has not been identified as having some exceptional quality. Based on consultation between FHWA, INDOT, SHPO and interested parties, no bridges with exceptional significance were identified in Indiana (Section IV.C). Because the above criteria from the *Program Comment* have been met, no individual consideration under Section 106 is required for Bridge #250-40-05952 B.

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

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Archaeology Report Author/Date:

Michael J. Curran/December 9, 2019

Summary of Archaeology Investigation Results:

With regard to archaeological resources, an INDOT Cultural Resources Office (CRO) archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the report submitted by Cultural Resource Analyst Inc. (Curran 2020). The records check found that a portion of the project area had been previously investigated. However, no archaeological sites were located within or adjacent to the current project area.

One archaeological site (12Jn671) was documented during the current investigation. Site 12Jn671 is a small lithic artifact scatter consisting of two chert flakes of unknown age. Because the site boundary was not fully defined south of the survey area, and because artifacts were found below the plow zone, the portion of the site within the survey area is recommended to be potentially eligible for inclusion in the National Register of Historic Places under Criterion D for their potential to yield significant data.

It was determined that the site is located outside proposed construction limits in an area that will not be impacted by the proposed project. Provided that firm commitments are in place to avoid project-related activities within or adjacent to 12Jn671 and these commitments are carried through the NEPA process, this project may be covered under the MPPA with no archaeological concerns.

Does the project appear to fall under the Minor Projects PA? yes	⊠ no □	

If yes, please specify category and number (applicable conditions are highlighted):

B-12.Replacement, widening, or raising the elevation of the superstructure on existing bridges, and bridge replacement projects (when both the superstructure and substructure are removed), under the following conditions [BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]:

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

The conditions listed below must be met (BOTH Condition i and Condition ii must be satisfied)

- i. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *AND*
- ii. With regard to the subject bridge, at least one of the conditions listed below is satisfied (AT LEAST one of the conditions a, b or c, must be fulfilled):
 - a. The latest Historic Bridge Inventory identified the bridge as non-historic (see http://www.in.gov/indot/2531.htm);

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- b. 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;
- c. 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.

Additional comments:

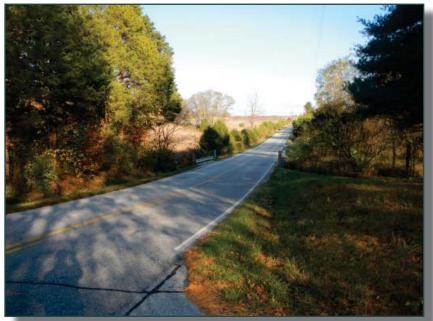
INDOT Cultural Resources staff reviewer(s): Clint Kelly and David Moffatt

***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.

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A PHASE IA ARCHAEOLOGICAL RECONNAISSANCE SURVEY FOR THE PROPOSED REHABILITATION OF THE SR 250 BRIDGE 4.16 MILES WEST OF SR 3 AT SLATE CREEK IN JENNINGS COUNTY, INDIANA (INDOT DES 1701502)





by Michael J. Curran

Prepared for

HNTB Corporation

Prepared by



Kentucky West Virginia Wyoming
Indiana Louisiana Tennessee Virginia

Des. No. 1701502 Appendix D, Page 5 of 8

A PHASE IA ARCHAEOLOGICAL RECONNAISSANCE SURVEY FOR THE PROPOSED REHABILITATION OF THE SR 250 BRIDGE 4.16 MILES WEST OF SR 3 AT SLATE CREEK IN JENNINGS COUNTY, INDIANA (INDOT DES 1701502)

by Michael J. Curran With a contribution by Andrew V. Martin

Prepared for

Kate Lucier
HNTB Corporation
111 Monument Circle, Suite 2000
Indianapolis, Indiana 46204
Phone: (317) 917-5333
Email: klucier@hntb.com

Prepared by

Cultural Resource Analysts, Inc. 201 NW 4th Street, Suite 204 Evansville, Indiana Phone: (812) 253-3009 Fax: (812) 253-3010 Email: amartin@crai-ky.com CRA Project No.: I19H011

> Andrew V. Martin, RPA Principal Investigator

December 16, 2019

Lead Agency: Indiana Department of Transportation INDOT Des. No.: 1701502
Indiana State Museum Accession No.: 71.19.1733

Des. No. 1701502 Appendix D, Page 6 of 8

Portions of this report have been redacted per INDOT Guidelines

ABSTRACT

On October 28, 2019, Cultural Resource Analysts, Inc., personnel conducted a phase Ia archaeological reconnaissance for the proposed SR 250 bridge rehabilitation over Slate Creek in Jennings County, Indiana (Indiana Department of Transportation Des. No. 1701502). The survey was conducted at the request of HNTB Corporation. The survey area covers approximately 0.6 ha (1.4 acres), encompassing the limits of the proposed right-of-way, and was investigated in its entirety by shovel testing, bucket augering, and visual inspection.

Prior to initiating the fieldwork, a records review was conducted utilizing data from the Indiana Division of Historic Preservation and Archaeology. As a result of the records review it was noted that a portion of the current survey area had been surveyed by two previous archaeological investigations. No previously recorded archaeological sites are in the current survey area.

The current reconnaissance resulted in the documentation of one previously unrecorded archaeological site (12Jn671). Site 12Jn671 is a small lithic artifact scatter of unknown age. Because the site boundary was not fully defined south of the survey area, and because artifacts were found beneath the plow zone, the National Register of Historic Places status of the site could not be fully assessed. However, the site will be located outside construction limits. Therefore, as long as Site 12Jn671 is avoided by the construction activities, archaeological clearance is recommended for the proposed project.

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Table 6. Artifacts by Provenience from Site 12Jn671.

Unit	Depth (cm bgs)	Prehistoric Artifacts
STP 1	45-60	1 flake of indeterminate lithic material
BA B	44-54	1 flake of Wyandotte chert
		Total: 2

due to the survey limits in this direction. Furthermore, the two flakes were found in deeper deposits. The depth of these artifacts may be related to erosion from a nearby hillside or adjacent disturbances. However, the artifacts may also be in a buried soil and ultimately the depositional context of these archaeological deposits remains unclear. Therefore, the NRHP status of the site could not be fully assessed and phase Ic deep testing is recommended at Site 12Jn671 if it would be affected by the project.

VI. CONCLUSIONS AND RECOMMENDATIONS

n October 28, 2019, CRA personnel conducted a phase Ia archaeological reconnaissance for the proposed SR 250 bridge rehabilitation over Slate Creek in Jennings County, Indiana (INDOT Des. No. 1701502). Prior to initiating the fieldwork, a records review was conducted utilizing data from the Indiana DHPA's SHAARD records. The records review indicated that a portion of the current survey area had been surveyed by two previous investigations (Moffatt 1993a, 1993b). The records review also showed that no previously documented archaeological sites are in the survey area. The survey area covers approximately 0.6 ha, encompassing the limits of the proposed ROW, and was investigated in its entirety by shovel testing, bucket augering, and visual inspection.

The current reconnaissance resulted in the documentation of one previously unrecorded archaeological site (12Jn671). Site 12Jn671 is a small lithic artifact scatter of unknown age. Because the site boundary was not fully defined south of the survey area, and because artifacts were found below the plow zone, the NRHP status of the site could not be fully assessed. However, the site is located outside proposed construction limits (see Figure 3). Therefore, as

long as Site 12Jn671 is avoided by construction activities, archaeological clearance is recommended for the proposed project.

Note that a principal investigator or field archaeologist cannot grant or withhold clearance to a project. Although the decision to grant or withhold clearance is reached, at least in part, on the recommendations made by the field investigator, clearance may be obtained only through an administrative decision made by a lead federal agency in consultation with INDOT and the State Historic Preservation Officer (Indiana DHPA).

If any previously unrecorded archaeological materials are encountered during construction activities, the DHPA should be notified immediately at (317) 232-1646, as well as the INDOT Cultural Resources Office (CRO) at (317) 233-6795. If human remains are discovered, construction activities should cease immediately, and the DHPA, the INDOT CRO, the local coroner, and the local law enforcement agency must be notified.

REFERENCES CITED

Anslinger, C. Michael

1990 The Akers Site: A Late Woodland Albee Phase Burial Mound in Warren County, West Central, Indiana. Technical Report No. 10. Anthropology Laboratory, Indiana State University, Terre Haute.

Anslinger, C. Michael, Albert. M. Pecora, III, Charles M. Niquette, and Jonathan P. Kerr 1994 Salvage Excavations at the Railway Museum Site (15JF630) Jefferson County, Kentucky. Contract Publication Series 94-15. Cultural Resource Analysts, Inc., Lexington, Kentucky.

SR 250 over Slate Creek – Superstructure Replacement Jennings County, Indiana Des. No. 1701502

Appendix E: Red Flag and Hazardous Materials



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 232-5113 FAX: (317) 233-4929 Eric Holcomb, Governor Joe McGuinness, Commissioner

Date: July 22, 2019

To: Site Assessment & Management

Environmental Policy Office - Environmental Services Division

Indiana Department of Transportation 100 N Senate Avenue, Room N642

Indianapolis, IN 46204

From: Gillian Clark/Susan Harrington

HNTB Corporation

111 Monument Circle, Suite 1200

Indianapolis, IN 46204 gnclark@hntb.com

Re: RED FLAG INVESTIGATION

DES # 1701502, State Project Superstructure Replacement State Road 250 over Slate Creek Jennings County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The Indiana Department of Transportation (INDOT) is proposing a superstructure replacement and widening at the bridge carrying State Road (SR) 250 over Slate Creek (Des. No. 1701502), located 4.16
miles west of SR 3 in Jennings County, Indiana. This replacement will address poor existing structure conditions.
Bridge and/or Culvert Project: Yes ⊠ No □ Structure # 250-40-05952 B
If this is a bridge project, is the bridge Historical? Yes \square No $oxtimes$, Select \square Non-Select \square
(Note: If the project involves a <u>historical</u> bridge, please include the bridge information in the Recommendations Section of the report).
Proposed right of way: Temporary ⊠ # Acres <0.5 acres Permanent ⊠ # Acres <0.5 acres, Not Applicable □
Type of excavation: Four to six feet of excavation may be required for widening the bridge foundation.
Maintenance of traffic: During construction, SR 250 will be closed and detoured.
Work in waterway: Yes $oxtimes$ No $oxtimes$ Below ordinary high water mark: Yes $oxtimes$ No $oxtimes$
State Project: ⊠ LPA: □
Any other factors influencing recommendations: Acquisition of additional right of way is anticipated, but the specific

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Des. No. 1701502 Appendix E, Page 1 of 10

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure

Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

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

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

Explanation: No infrastructure resources were identified within the 0.5-mile search radius.

WATER RESOURCES TABLE AND SUMMARY

IDEM 303d Listed Streams and

Lakes (Impaired)
Rivers and Streams

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:						
N/A	Canal Routes - Historic	N/A				
N/A	NWI - Wetlands	13				
N/A	Lakes	10				
N/A	Floodplain - DFIRM	1				
7	Cave Entrance Density	N/A				
	N/A N/A N/A	N/A Canal Routes - Historic N/A NWI - Wetlands N/A Lakes N/A Floodplain - DFIRM				

N/A

5

Explanation:

• NWI – Lines: Seven (7) NWI-Line features are located in the 0.5-mile search radius. One (1) NWI-Line feature is located within the project area. A Waters of the U.S. Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting (EWPO) will occur.

Sinkhole Areas

Sinking-Stream Basins

N/A

N/A

- Rivers and Streams: Five (5) river and stream segments are located in the 0.5-mile search radius. One (1) segment, Slate Creek, runs through the project area. A Waters of the U.S. Report will be prepared and coordination with INDOT ES EWPO will occur.
- NWI Wetlands: Thirteen (13) NWI-Wetland polygons are located within the 0.5-mile search radius. One wetland is located approximately 0.15 mile north of the project area. No impact is anticipated.
- Lakes: Ten (10) lakes are located in the 0.5-mile search radius. One lake is located 0.15 mile east of the project area. No impact is anticipated.
- Floodplain DFIRM: One (1) floodplain is located in the 0.5-mile search radius. The project area is within this floodplain polygon. Coordination with INDOT EWPO will occur.

URBANIZED AREA BOUNDARY SUMMARY

Explanation: The project is not located within an urbanized area boundary.

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MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Explanation: N/A

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

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

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

ECOLOGICAL INFORMATION SUMMARY

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

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by farm fields. The November 22, 2016, inspection report for Bridge #250-40-05952 B states that no evidence of bats was seen or heard under the bridge. Because the bridge inspection report is older than two years, additional investigation to confirm the presence or absence of bats will

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

An inquiry using the USFWS Information for Planning and Consultation (IPaC) website did not indicate the presence of the federally endangered species, the Rusty Patched Bumble Bee, in or within 0.5 mile of the project area. No impact is expected.

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE: N/A

WATER RESOURCES: The presence of the following water resources will require the preparation of a Waters of the U.S. Report and coordination with INDOT EWPO:

- NWI Lines: One (1) NWI-Line feature is located within the project area.
- Rivers and Streams: One (1) stream segment, Slate Creek, flows through the project area.
- Floodplain DFIRM: The project area is located within a floodplain (coordination only).

URBANIZED AREA BOUNDARY: N/A

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: N/A

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

Nicole Fohey Nicole Fohey Nicole Fohey-Breting

Breting Date: 2019.09.15

13:03:57-04'00' (Signature)

Prepared by: Gillian Clark/Susan Harrington Intern Engineer/Scientist III HNTB Corporation

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

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URBANIZED AREA BOUNDARY: N/A

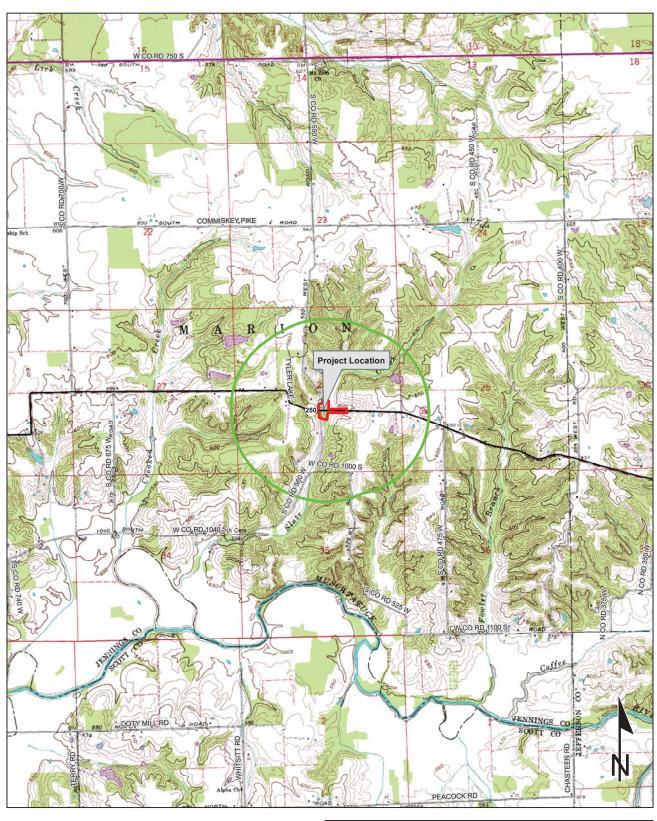
MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: N/A

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Red Flag Investigation - Site Location SR 250 over Slate Creek Des. No. 1701502, Bridge Project Jennings County, Indiana



0.5 Miles 0.5 0.25 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

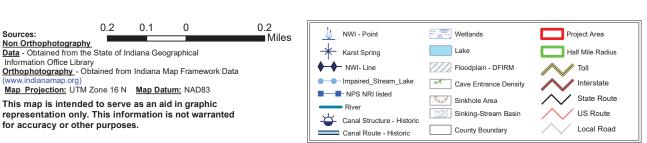
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

DEPUTY AND HAYDEN INDIANA QUADRANGLE 7.5 MINUTE SERIES (TOPOGRAPHIC)

Des. No. 1701502 Appendix E, Page 6 of 10

Red Flag Investigation - Water Resources SR 250 over Slate Creek Des. No. 1701502, Bridge Project Jennings County, Indiana





${\bf Indiana\ County\ Endangered,\ Threatened\ and\ Rare\ Species\ List}$

County: Jennings

Species Name		Common Name	FED	STATE	GRANK	SRANK
Platyhelminthes (Flatworms) Sphalloplana weingartneri		Weingartner's Cave Flatworm		WL	G4	S3
Diplopoda Conotyla bollmani Pseudopolydesmus collinus		Bollman's Cave Milliped A Millipede		WL SE	G5 G4	S3 S1
Crustacean: Malacostraca Caecidotea rotunda Crangonyx anomalus Crangonyx packardi		Northeastern Cave Isopod Anomalous Spring Amphipod Packard's Cave Amphipod		SR ST WL	G2G4 G4G5	\$3 \$2 \$3
Crustacean: Copepoda Diacyclops lewisi Diacyclops salisae		Lewis' Groundwater Copepod Salisa's Groundwater Copepod		SE SE	G1 G1	S1 S1
Mollusk: Bivalvia (Mussels) (Epioblasma triquetra) (Obovaria subrotunda) (Ptychobranchus fasciolaris) (Simpsonaias ambigua) (Toxolasma lividus) (Villosa lienosa)		Snuffbox Round Hickorynut Kidneyshell Salamander Mussel Purple Lilliput Little Spectaclecase	C C	SE SE SSC SSC SSC	G3 G4 G4G5 G3 G3Q G5	\$1 \$1 \$2 \$2 \$2 \$2 \$3
Ellipluran: Collembola Sinella alata Sinella cavernarum		Springtail A Springtail		WL WL	G5 G5	S4 S3
Insect: Coleoptera (Beetles) Pseudanophthalmus chthonius Insect: Lepidoptera (Butterflies & Moths)		Cave Ground Beetle		SR	G3	S3
Pieris virginiensis Insect: Odonata (Dragonflies & Damselflies) Hagenius brevistylus		West Virginia White Dragonhunter		SR SR	G3?	S2S3
Arachnida Porhomma cavernicola		Appalachian Cave Spider		SE	G5	S2
Amphibian Lithobates areolatus circulosus Necturus maculosus		Northern Crawfish Frog Common mudpuppy		SE SSC	G4T4 G5	S2 S2
Reptile Clonophis kirtlandii Nerodia erythrogaster neglecta Terrapene carolina carolina		Kirtland's Snake Copperbelly Water Snake Eastern Box Turtle	PS:LT	SE SE SSC	G2 G5T3 G5T5	S2 S2 S3
Bird Ammodramus henslowii		Henslow's Sparrow		SE	G4	S3B
Indiana Natural Heritage Data Center Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.	Fed: State: GRANK: SRANK:	LE = Endangered; LT = Threatened; C = candid: SE = state endangered; ST = state threatened; SR SX = state extirpated; SG = state significant; WI Global Heritage Rank: G1 = critically imperiled globally; G4 = widespread and abundant globally globally; G? = unranked; GX = extinct; Q = unc State Heritage Rank: S1 = critically imperiled in G4 = widespread and abundant in state but with state; SX = state extirpated; B = breeding status; unranked	t = state rare; SSC = watch list globally; G2 = imp y but with long terrertain rank; T = ta: state; S2 = imperil long term concern;	= state species periled globall m concerns; G xonomic subu led in state; S3 , SG = state sig	s of special conce y; G3 = rare or u 5 = widespread a nit rank 6 = rare or uncom gnificant; SH = h	ncommon nd abundant mon in state; istorical in

Des. No. 1701502 Appendix E, Page 8 of 10

unranked

Indiana County Endangered, Threatened and Rare Species List

County: Jennings

Species Name		Common Name	FED	STATE	GRANK	SRANK
Circus hudsonius		Northern Harrier		SE	G5	<u>S2</u>)
Cistothorus platensis		Sedge Wren		SE	G5	S3B
Haliaeetus leucocephalus		Bald Eagle		SSC	G5	S2)
Helmitheros vermivorus		Worm-eating Warbler		SSC	G5	S3B
Ixobrychus exilis		Least Bittern		SE	G5	S3B
Nyctanassa violacea		Yellow-crowned Night-heron		SE	G5	S2B
Pandion haliaetus		Osprey Osprey		SSC	G5	S1B
Rallus elegans		King Rail		SE	G4	S1B
Setophaga cerulea		Cerulean Warbler		SE	G4	S3B
Setophaga citrina		Hooded Warbler		SSC	G5	S3B
Tyto alba		Barn Owl		SE	G5	S2)
		Balli Owi		SL)	G5)	(02)
Mammal Mustela nivalis		Least Weasel		SSC	G5	S2?
Myotis grisescens		Gray Bat	LE	SE	G4	S1
Myotis sodalis		Indiana Bat	LE	SE	G2	<u>S1</u>
Nycticeius humeralis		Evening Bat		SE	G5	<u>S1</u>
Taxidea taxus		American Badger		SSC	G5	S2)
		Timerreal Budger				
Vascular Plant Asplenium ruta-muraria		Wallrue Spleenwort		SR	G5	S3
Carex pedunculata		Longstalk Sedge		WL	G5	S3
Carex straminea		Straw Sedge		ST	G5	S2
Croton michauxii var. elliptica		Elliptical Rushfoil		SE	G5	S1
Dendrolycopodium obscurum		Tree Clubmoss		SR	G5	S3
Dentaria multifida				SE	G4?	S1
Hydrastis canadensis		Divided Toothwort			G3G4	S3 S3
Juglans cinerea		Golden Seal		WL		
		Butternut		ST	G4	S2
Linum striatum		Ridged Yellow Flax		WL	G5	S3
Lycopodiella inundata		Northern Bog Clubmoss		ST	G5	S2
Lygodium palmatum		Climbing Fern		SE	G4	S1
Najas gracillima		Thread-like Naiad		SR	G5?	S3
Oenothera perennis		Small Sundrops		SR	G5	S3
Oxalis illinoensis		Illinois Woodsorrel		WL	G4Q	S3
Panax quinquefolius		American Ginseng		WL	G3G4	S3
Panax trifolius		Dwarf Ginseng		WL	G5	S3
Penstemon canescens		Gray Beardtongue		SE	G4	<u>S1</u>
Poa wolfii		Wolf Bluegrass		SR	G4	S3
Sagittaria australis		Longbeak Arrowhead		SR	G5	S3
Schoenoplectiella purshiana		Weakstalk Bulrush		SR	G4G5	S3
Spiranthes lucida		Shining Ladies'-tresses		SR	G4	S3
Spiranthes vernalis		Grassleaf Ladies'-tresses		WL	G5	S3
Indiana Natural Heritage Data Center	Fed:	LE = Endangered; LT = Threatened; C = candid	ate; PDL = propos	sed for delisting	3	
Division of Nature Preserves	State:	SE = state endangered; ST = state threatened; SF		= state species	s of special conce	rn;
Indiana Department of Natural Resources This data is not the result of comprehensive county	GRANK:	SX = state extirpated; SG = state significant; WI Global Heritage Rank: G1 = critically imperiled		periled globall	y; G3 = rare or u	ncommon
surveys.		globally; G4 = widespread and abundant globall	y but with long ter	m concerns; G	5 = widespread a	
	SRANK:	globally; G? = unranked; GX = extinct; Q = unc State Heritage Rank: S1 = critically imperiled in				mon in state:
		G4 = widespread and abundant in state but with	long term concern	; SG = state sig	gnificant; SH = h	storical in
		state; SX = state extirpated; B = breeding status;	S? = unranked; S	NR = unranked	l; SNA = nonbree	eding status

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unranked

Indiana County Endangered, Threatened and Rare Species List

County: Jennings

Species Name	Common Name	FED	STATE	GRANK	SRANK
Stachys clingmanii	Clingman Hedge-nettle		WL	G2	S3
Strophostyles leiosperma	Slick-seed Wild-bean		WL	G5	S3
Sullivantia sullivantii	Sullivantia		ST	G4	S2
Waldsteinia fragarioides	Barren Strawberry		SR	G5	S3
Woodwardia areolata	Netted Chainfern		SR	G5	S3
High Quality Natural Community					
Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	G3	S2
Forest - upland dry Bluegrass	Bluegrass Dry Upland Forest		SG	GNR	<u>S1</u>
Forest - upland dry-mesic Bluegrass	Bluegrass Dry-mesic Upland		SG	GNR	<u>S1</u>
	Forest				
Forest - upland mesic Bluegrass	Bluegrass Mesic Upland Forest		SG	GNR	S3
Primary - cliff limestone	Limestone Cliff		SG	GU	S1
Other Significant Feature Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

Indiana Natural Heritage Data Center Division of Nature Preserves Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting Fed:

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

 $SX = state \ extirpated; \ SG = state \ significant; \ WL = watch \ list$

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon

globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant

globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

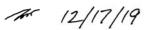
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status

unranked

State:

Des. No. 1701502 Appendix E, Page 10 of 10 SR 250 over Slate Creek – Superstructure Replacement Jennings County, Indiana Des. No. 1701502

Appendix F: Water Resources



Note: Certain attachments have been removed to avoid duplication. Figures and project photos can be found in Appendix B.

Waters of the U.S. Report

SR 250 OVER SLATE CREEK SUPERSTRUCTURE REPLACEMENT



JENNINGS, COUNTY

DES. No. 1701502 ASSET ID #250-40-05952 B

Prepared by:

HNTB

111 Monument Circle, Suite 1200

Indianapolis, IN, 46204

317,636,4682

November 27, 2019

Des. No. 1701502 Appendix F, Page 1 of 20

1. PROJECT INFORMATION

Date of Field Reconnaissance: July 17, 2019

Location

The project is located along State Road (SR) 250, approximately 4.16 miles west of SR 3 in Jennings County, Indiana.

- Section 26, Township 5 North, Range 7 East
- Deputy Quadrangle, Indiana
- 38.843764 N, 85.711434 W, NAD83

Project Description

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) are proposing to replace the superstructure of the bridge carrying SR 250 over Slate Creek. The need for this project is due to the deteriorated condition of the bridge, as documented in the INDOT Bridge Inspection Report dated November 13, 2017. The purpose of this project is to maintain a safe vehicular crossing of SR 250 over Slate Creek, while maintaining adequate hydraulic function.

2. DESKTOP RECONNAISSANCE

2.1 Soil Associations and Series Types

According to the Soil Survey Geographic (SSURGO) Database for Jennings County, Indiana, the following mapped soils series within the SR 250 over Slate Creek project area (Attachments, Pages 6 to 10).

- Holton silt loam (HleAW): very deep, somewhat poorly drained soils formed in loamy alluvium on flood plains. Slope ranges from 0 to 2 percent. Holton silt loam is not a hydric soil; however, hydric inclusions of typic fluvaquents occur in backswamps. This soil type has a hydric rating of 5%.
- **Pekin silt loam (PcrC2):** very deep soils that are moderately deep or shallow to a fragipan. Slopes range from 6 to 12 percent. This is not considered a hydric soil and has a hydric soil rating of 0%.
- Trappist-Rohan complex (DtxC3): moderately deep, well drained soils that formed in residuum weathered from acid shale on ridgetops. Slope ranges from 12 to 25 percent. This soil unit is not considered a hydric soil and has a hydric rating of 0%.

2.2 NATIONAL WETLANDS INVENTORY

Based on the U.S. Fish and Wildlife National Wetlands Inventory (NWI) data (www.fws.gov/wetlands/Data/State-Downloads.html) there are twenty wetlands mapped within a half-mile of the investigated area (Attachments,



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Page 5). One wetland polygon that represents the channel of Slate Creek is mapped within the investigated area. Slate Creek is noted as a riverine, lower perennial, unconsolidated bottom, permanently flooded wetland (R2UBH).

2.3 HYDROLOGY

The 12-digit Hydrologic Unit Code (HUC) for the entirety of the investigated area is #051202070606 which identifies the Coffee Creek – Muscatatuck River watershed (Attachments, Page 12). According to the Indiana floodplain Information Portal, the project is within a 100-year floodplain (http://dnrmaps.dnr.in.gov/appsphp/fdms/) and has a base flood elevation of 574.13 feet (NAVD88). SR 250 within the floodway is an impediment to floodwaters and this structure conveys floodwaters under SR 250 across the floodway.

3. FIELD RECONNAISSANCE

HNTB Indiana staff performed a field review of the investigated area on July 17, 2019. The purpose was to determine the presence of waters of the U.S. within the investigated area. HNTB Indiana staff collected data during the field review to appropriately characterize the investigated area and determine the presence or absence of jurisdictional waters. The investigated area encompassed the area required for construction access and completion of the superstructure replacement. HNTB staff photographed features and areas of interest throughout the investigated area. A photo location map and selected photographs are included as Attachment Pages 13 to 38.

The investigated area was analyzed using the methods outlined in the Routine Determination, On-site Inspection Necessary procedure in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual Midwest Region* (US Army Corps of Engineers, 2010). Identification of indicator status of plant species utilized the 2016 Midwest Region National Wetland Plant List. Field GIS data was collected using a Trimble R1 GNSS GPS with sub-meter accuracy.

4. WATERS

The July 2019 field reconnaissance for the SR 250 over Slate Creek investigation identified two streams. Information obtained during the field investigation is provided in detail below.

4.1 WETLANDS

No wetlands were delineated within the investigated area during the July 2019 field investigation. The surrounding area is rural, with residential properties in the northwest and southwest quadrants and agricultural properties in the northeast and southeast quadrants. Dominant vegetation along the roadway consisted of typical, maintained roadside vegetation that includes tall fescue (*Schedonorus arundinaceus*, FACU) and white clover (*Trifolium repens*, FACU). Dominant vegetation within the investigated area consist of annual ragweed (*Ambrosia artemisiifolia*, FACU), hairy white aster (*Symphyotrichum pilosum*, FACU), joe pye weed (*Eutorochium*



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maculatum, OBL), multiflora rose (Rosa multiflora, FACU) and Japanese stilt grass (Microstegium vimineum, FAC). Dominant tree species in the investigated area consist of eastern redcedar (Juniperus virginiana, FACU), American sycamore (Platanus occidentalis, FACW), sassafras (Sassafras albidum, FACU), tuliptree (Liriodendron tulipifera, FACU) and silver maple (Acer saccharinum, FACW). The conditions within the investigated area are not conducive to ponding and the formation of wetlands.

4.2 STREAMS

The field investigation resulted in the identification of two likely jurisdictional streams: unnamed tributary (UNT) to Slate Creek and Slate Creek. A total of approximately 175 linear feet of UNT to Slate Creek and 342 linear feet of Slate Creek lie within the investigated area. Characteristics of UNT to Slate Creek and Slate Creek are summarized in Table 1.

UNT TO SLATE CREEK

UNT to Slate Creek is an ephemeral stream feature that flows west to east into the southeast quadrant of the investigated area approximately 175 feet before reaching its confluence with Slate Creek. UNT to Slate Creek is not represented as a USGS blueline stream on the Deputy, Indiana quadrangle map. Approximately 175 feet of this feature was evaluated as part of this investigation. At the time of the investigation, the channel was not flowing but discreet pools were observed. The stream substrate consisted of silt. The average ordinary high water mark (OHWM) of UNT to Slate Creek is 3.17 feet wide by 0.08 feet deep. According to the classification codes developed by Cowardin *et al.* (1979), this stream feature would be classified as a riverine, ephemeral, (R6) resource. This likely jurisdictional feature is hydrologically connected to the Muscatatuck River, a traditional navigable waterway (TNW), through Slate Creek. According to the USGS StreamStats website, (https://water.usgs.gov/osw/streamstats/indiana.html), UNT to Slate Creek drains approximately 0.037 square mile upstream of the project area (Attachments, Page 12). Following a qualitative assessment, this resource is a poor-quality feature based on an ephemeral regime and lack of in stream development.

SLATE CREEK

Slate Creek is a perennial stream feature that enters the investigated area approximately 145 feet north of the SR 250 structure, flows south approximately 197 feet, then continues south outside of the investigated area. Slate Creek is represented as a USGS blueline stream on the Deputy, Indiana quadrangle map. Approximately 342 feet of this feature was evaluated as part of this investigation. The left bank of Slate Creek is moderately eroded and the right bank is severely eroded. The substrate consists primarily of gravel and sand with some bedrock. In stream cover is limited to logs and woody debris. The riparian area downstream of the bridge is wide and good quality. Vegetation within the riparian area consists of wood nettle (*Laportea canadensis*, FACW), wingstem (*Verbesina alternifolia*, FACW) and wild rye (*Elymus canadensis*, FACU). The OHWM of Slate Creek is 13.2 feet wide by 0.83 feet deep. According to the classification codes developed by Cowardin *et al.* (1979), this stream feature would be classified as a riverine, lower perennial, unconsolidated bottom, permanently flooded wetland (R2UBH) resource. This likely jurisdictional feature is hydrologically connected to the Muscatatuck River, a TNW. According to the USGS StreamStats website, (https://water.usgs.gov/osw/streamstats/indiana.html), Slate Creek drains approximately 1.38 square miles upstream of the SR 250 bridge (Attachments, Page 12). Following a qualitative



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assessment, this resource is an average-quality feature based on a perennial regime, partial bedrock substrate, and moderate development.

Table 1: Stream and Waterway Summary Table

Stream Name	Photo #	Lat/Long	ОНWМ	Quality	Substrate	USGS Blue Line	Riffles/Pools	Waters of U.S.
UNT to Slate Creek	12-16	38.843550 N 85.711152 W	3.17 feet wide by 0.08 feet deep	Poor	Silt	No	No	Yes
Slate Creek	1-11 & 31	38.843764 N 85.711434 W	13.2 feet wide by 0.83 feet deep	Average	Gravel/Sand/ Bedrock	Yes	No	Yes

4.1 Roadside Drainage Features

As illustrated in the ground level photographs included as Attachment Pages 14 to 38, no roadside ditches with OHWM characteristics or hydrophytic vegetation indicating wetland conditions were observed within the investigated area.

4.2 OPEN WATERS

Site investigations did not identify open water features within the investigated area.

5. CONCLUSION

The July 2019 field review for the SR 250 over Slate Creek Substructure Replacement project identified two likely jurisdictional streams, UNT to Slate Creek and Slate Creek. The two streams are likely jurisdictional features due to their hydrologic connection to the Muscatatuck River, a TNW.

Every effort should be taken to avoid and minimize the impacts to the water resources listed above. Disturbance of a stream could result in a mitigation requirement to secure the required permits for the superstructure replacement. If construction exceeds the limits of the investigated review area illustrated in this document, further field investigation will be needed. This report is this office's best judgement of water resources that are likely to be under federal jurisdiction, based on the guidelines set forth by the U.S. Army Corps of Engineers (USACE). The final determination of jurisdictional waters is ultimately the responsibility of the USACE. The INDOT Office of Environmental Services should be contacted immediately if impacts occur.

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience, and professional judgement in conformance with the 1987 *Corps of*



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Engineers Wetlands Delineation Manual, the appropriate regional supplement, the USACE Jurisdictional Determination Form Instructional Guidebook, and other appropriate agency guidelines.

Dan Logsdon, Scientist I

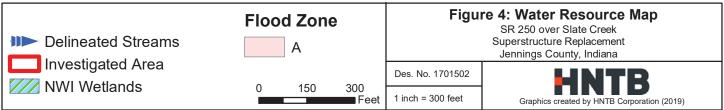
PREPARERS:

HNTB Inc., Staff	Position	Contributing Effort
Kate Lucier	Senior Project Manager	Project Management
		Field Data Collection
Dan Logsdon	Scientist I	Field Data Collection
		Graphics Preparation
		Report Preparation



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National Wetlands Inventory U.S. Fish and Wildlife Service

Superstructure Replacement Jennings County, Indiana Figure 5: NWI Map SR 250 over Slate Creek



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

November 7, 2019

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Forested/Shrub Wetland

Freshwater Emergent Wetland

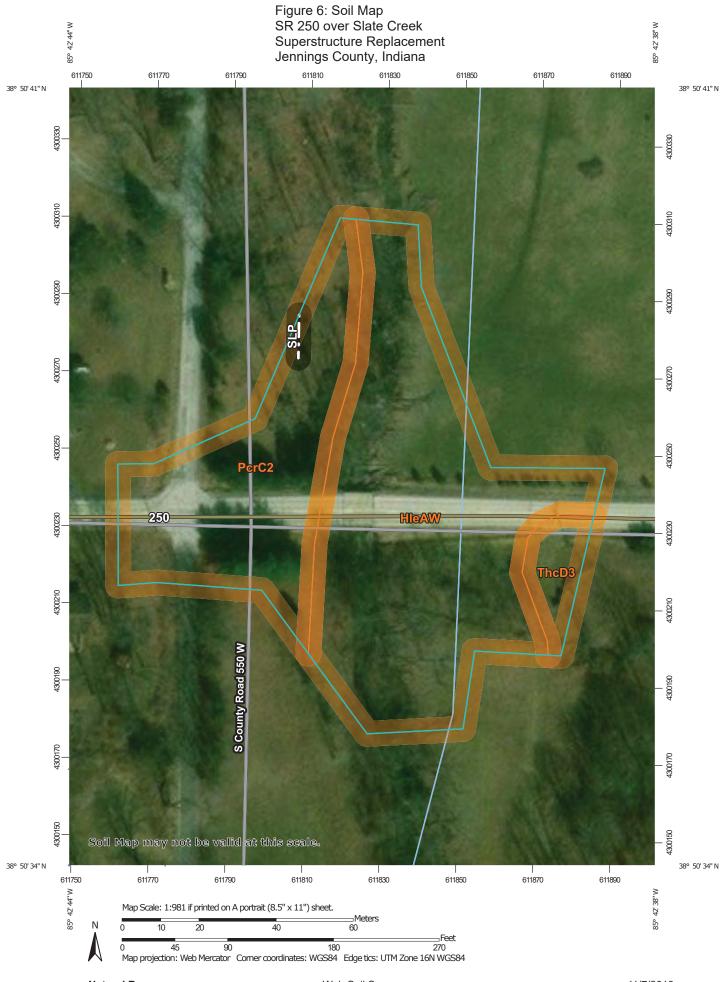
Lake

Other

Riverine

Freshwater Pond

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MAP LEGEND

Special Line Features Streams and Canals Interstate Highways Aerial Photography Very Stony Spot Major Roads Local Roads US Routes Stony Spot Spoil Area Wet Spot Other Rails Water Features **Fransportation** Background W 8 ŧ Soil Map Unit Polygons Severely Eroded Spot Area of Interest (AOI) Miscellaneous Water Soil Map Unit Points Soil Map Unit Lines Closed Depression Marsh or swamp Perennial Water Mine or Quarry Special Point Features Rock Outcrop **Gravelly Spot** Slide or Slip Saline Spot Sandy Spot Sodic Spot **Borrow Pit** Clay Spot Lava Flow **Gravel Pit** Area of Interest (AOI) Sinkhole Blowout Landfill 9 Soils

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of

Please rely on the bar scale on each map sheet for map

measurements.

Source of Map: Natural Resources Conservation Service

Coordinate System: Web Mercator (EPSG:3857) Web Soil Survey URL:

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jennings County, Indiana

Survey Area Data: Version 25, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Oct 1, 2011—Feb 14,

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HleAW	Holton silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	1.3	60.8%
PcrC2	Pekin silt loam, 6 to 12 percent slopes, eroded	0.7	34.4%
ThcD3	Trappist-Rohan complex, 12 to 25 percent slopes, severely eroded	0.1	4.8%
Totals for Area of Interest		2.1	100.0%

Des. No. 1701502

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HleAW	Holton silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	5	1.3	60.8%
PcrC2	Pekin silt loam, 6 to 12 percent slopes, eroded	0	0.7	34.4%
ThcD3	Trappist-Rohan complex, 12 to 25 percent slopes, severely eroded	0	0.1	4.8%
Totals for Area of Inter	est	1	2.1	100.0%

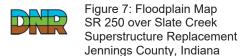
Report—Hydric Soil List - All Components

Hydric Soil List - All Components–IN079-Jennings County, Indiana											
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)						
HleAW: Holton silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	Holton	50-100	Flood plains	No	_						
	Oldenburg	0-25	Flood-plain steps,flood plains	No	_						
	Typic Fluvaquents- Very deep, loamy	0-20	Backswamps	Yes	2						
	Holton-Frequently flooded	0-20	Flood plains	No	_						
PcrC2: Pekin silt loam, 6 to 12 percent slopes, eroded	Pekin-Eroded	50-95	Stream terraces	No	_						
	Pekin-Severely eroded	0-35	Stream terraces	No	_						
	Pekin-Eroded	0-30	Stream terraces	No	_						
	Elkinsville	0-15	Stream terraces	No	_						
	Stendal	0-10	Flood-plain steps,flood plains	No	_						
ThcD3: Trappist-Rohan complex, 12 to 25 percent slopes, severely eroded	Trappist-Severely eroded	25-75	Hills,strath terraces	No	_						
	Rohan-Severely eroded	15-50	Hills,strath terraces	No	_						
	Trappist	0-35	Hills,strath terraces	No	_						
	Trappist	0-15	Hills,strath terraces	No	_						
	Rohan	0-20	Hills,strath terraces	No	_						
	Deputy	0-20	Hills,strath terraces	No	_						
	Stendal	0-10	Flood-plain steps,flood plains	No	_						

Data Source Information

Soil Survey Area: Jennings County, Indiana Survey Area Data: Version 25, Sep 16, 2019

Web Soil Survey National Cooperative Soil Survey



Indiana Floodplain Information Portal Report

Point of Interest

Approximate Address:

9595 South 550 West PARIS CROSSING, IN 47270

Effective Flood Zone:

Α

Preliminary Flood Zone:

N/A

Best Available Flood Zone:

Approximate Flood Elevation:

574.9ft NAVD88

Source:

Zone A Model Delineation

Nearest Stream:

SLATE CREEK

Map Legend

Point of Interest



Nearest Point on Stream

Effective Flood Zone

0.2% Annual Chance Flood Hazard

1% Annual Chance Flood Hazard - Zone A (Approximate Study)

1% Annual Chance Flood Hazard - Zone AE (Detailed Study)

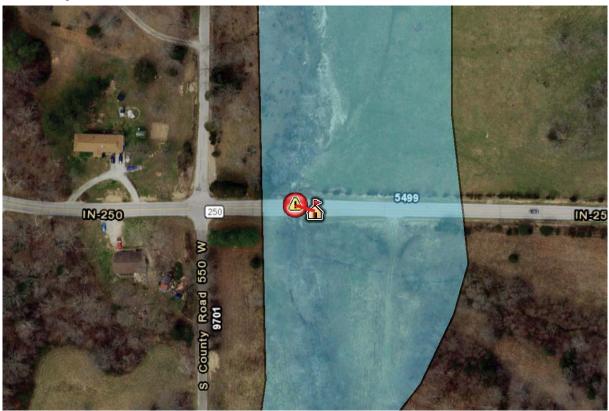
1% Annual Chance Flood Hazard - Floodway

1% Annual Chance Flood Hazard - Zone AH

1% Annual Chance Flood Hazard - Zone AO

Zone X - Protected by Levee

Site Map with Effective Flood Zone



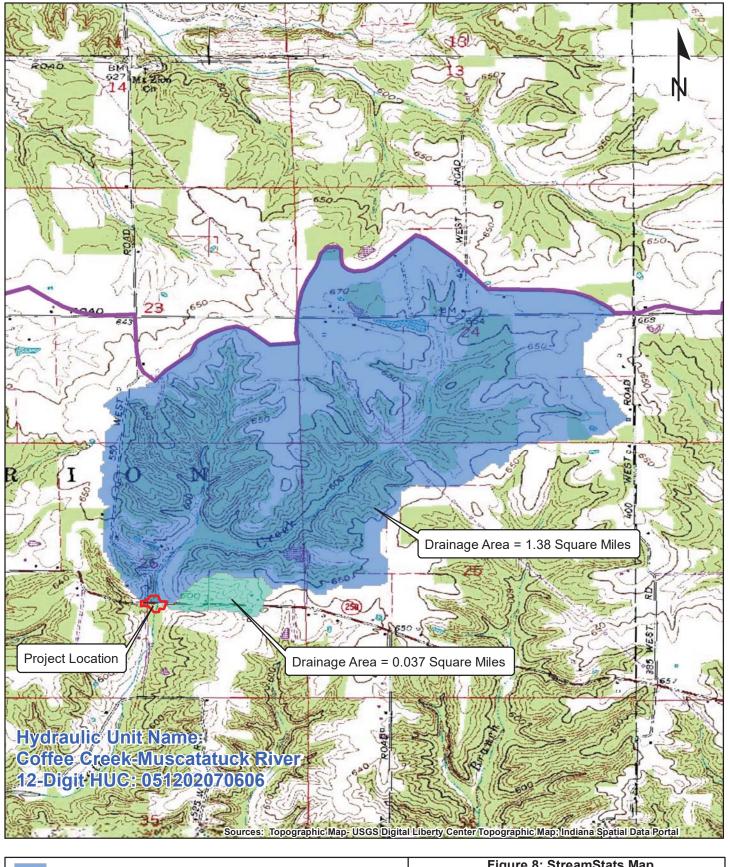
Approximate scale 1:2,400

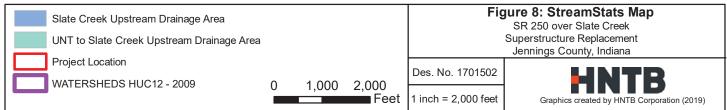
Disclaimer

This data is a digital representation of the former paper Flood Insurance Rate Maps (FIRMs) for counties that have completed the Map Modernization Initiative. The data on counties derived from the official FEMA digital products (DFIRM) represent official FEMA designations of the Special Flood Hazard Areas. This data can be used for official National Flood Insurance Program (NFIP) purposes in accordance with the FEMA Mitigation Directorate Policy document tiled "Use of Digital Flood Hazard Data" dated November 29, 2007. For the non-modernized counties, the Effective is enhanced by the addition of the floodplain data from digitized paper copies of the FIRMs and the information should be considered advisory only. For these non-modernized counties, the paper maps are the official FEMA documents for regulatory and insurance purposes. Once the NFHL is official, the Effective is updated with the newly published information. For the status of counties published by FEMA please see http://www.floodmaps.fema.gov/NFHL/status.shtml.

Generated on Wednesday September 4th 2019 at 02:55:59pm

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Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: November 27, 2019
B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Dan Logsdon, 111 Monument Circle, Suite 1200, Indianapolis, IN 46204; 317-917-5336; dlogsdon@hntb.d
C. DISTRICT OFFICE, FILE NAME, AND NUMBER:
D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

The FHWA and INDOT are proposing a superstructure replacement (Des. No. 1701502 for the SR 250 over Slate Creek project. The project is located along SR 250 approximately 4.16 miles west of SR 3 in Jennings County, Indiana. More specifically, the project is located in Section 26, Township 5 North, Range 7 East in Marion Township. Project plans

are still being developed.

Field Determination. Date(s):

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

		,	
	State: Indiana	County/parish/borough: Jennings	City: Hilltown
	Center coordinates of	site (lat/long in degree decimal format):	
	Lat.: 38.843764	Long.: -85.711434	
	Universal Transverse	Mercator: Zone 16n Easting: 611826 Northing: 4300228	
	Name of nearest water	erbody: Slate Creek	
E.	REVIEW PERFORME	ED FOR SITE EVALUATION (CHECK ALL 1	HAT APPLY):
	Office (Desk) Dete	ermination. Date:	

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TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
UNT to Slate Creek	38.843550	-85.711152	175' / 0.013 acre	Non-wetland	Section 404
Slate Creek	38.843764	-85.711434	342' / 0.104 acre	Non-wetland	Section 404

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- 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 "preconstruction 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: Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Map: HNTB Indiana 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: IndianaMAP USGS NHD data. ■ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Deputy Natural Resources Conservation Service Soil Survey. Citation: Jennings County ■ National wetlands inventory map(s). Cite name: USFWS GIS Database ☐ State/local wetland inventory map(s): FEMA/FIRM maps: IDNR Floodplain Database ____.(National Geodetic Vertical Datum of 1929) 100-year Floodplain Elevation is: _____ Photographs: Aerial (Name & Date): 2016 USDA/NRCS NAIP Other (Name & Date): Site Investigation on July 17, 2019 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. Digitally signed by Daniel Logsdon Date: 2019.11.27 08:38:32 -05'00' Signature and date of Signature and date of Regulatory staff member person requesting PJD completing PJD (REQUIRED, unless obtaining

the signature is impracticable)1

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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.

Daniel Logsdon

From: Daniel Logsdon

Sent: Tuesday, December 17, 2019 9:48 AM

To: Kate Williams; Erica Haas

Subject: FW: final approval of waters report for SR250 Des 1701502 **Attachments:** FINAL_SR250_1701502 waters report 11-27-2019 1.pdf

From: Kang, Li [mailto:LKANG@indot.IN.gov]
Sent: Tuesday, December 17, 2019 9:44 AM
To: Daniel Logsdon <dlogsdon@HNTB.com>
Cc: Fortson, William <wfortson@indot.IN.gov>

Subject: final approval of waters report for SR250 Des 1701502

Dan,

The above referenced project Waters Report (11/27/2019) has been approved. Attached is the first page of the report with my signature FYI. If you have any questions please let me know. Thanks,

LK

SR 250 over Slate Creek – Superstructure Replacement Jennings County, Indiana Des. No. 1701502

Appendix G: Public Involvement



NOTICE OF SURVEY

August 28, 2018

RE:

SR 250 Bridge Replacement Survey

Jennings County, Indiana

Sample Notice of Survey Letter

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.

Andrew B. McClelland, P.S.

3. Welllard

Project Surveyor 317-293-3542, x-178

Des. No. 1701502

SR 250 over Slate Creek – Superstructure Replacement Jennings County, Indiana Des. No. 1701502

Appendix H: Air Quality

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*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.

Des. No. 1701502

Indiana Department of Transportation (INDOT) State Preservation and Local Initiated Projects FY 2020 - 2024

									_										
2024																			
2023															\$1,139,256.00	\$27,500.00		\$397,218.00	
2022	\$2,432.02	\$9,728.08	\$1,155,200.00	\$288,800.00	\$1,710,646.00		\$721,929.00		\$2,030,400.00	\$507,600.00	\$8,658,000.00								
2021	\$12,707.27	\$50,829.09				\$20,000.00		\$25,000.00				\$2,368,031.00	\$129,003.00	\$110,867.00			\$30,000.00		
0202	\$2,682.42	\$10,729.68														\$466,000.00			\$150,000.00
	\$17,821.71	\$0.00	\$0.00	\$288,800.00	\$342,129.20	\$4,000.00	\$144,385.80	\$5,000.00	\$0.00	\$507,600.00	\$0.00	\$473,606.20	\$25,800.60	\$22,173.40	\$227,851.20	\$98,700.00	\$6,000.00	\$79,443.60	\$30,000.00
	\$0.00	\$71,286.85	\$1,155,200.00	\$0.00	\$1,368,516.80	\$16,000.00	\$577,543.20	\$20,000.00	\$2,030,400.00	\$0.00	\$8,658,000.00	\$1,894,424.80	\$103,202.40	\$88,693.60	\$911,404.80	\$394,800.00	\$24,000.00	\$317,774.40	\$120,000.00
	PE	PE	N _O	S	N O	W.	NO	S.	S	N O	N O	N O	S	N _O	N _O	PE	W.	N O	P
PA STORY	Local Funds	Local Bridge Program	Group IV Program	ocal Funds	Bridge Construction	Bridge ROW	Bridge Construction	Bridge ROW	Group III Program	Local Funds	Group III Program	Road	Bridge Construction	Safety Construction	Bridge Construction	Bridge Consulting	Bridge ROW	Road Construction	Road Consulting
Cost left to Complete Project*					ш С	ш	ш О	ш	<u> </u>				ш	0, 0			<u> </u>		
CATEGORY	0 STPBG		.14 STPBG		<u>d</u> 4		0 STPBG		PBG		PBG	STPBG	STPBG	STPBG	STPBG			STPBG	
	.80		S		0 0		<u>.s</u>		.086 STPBG		.379 STPBG	2.512 S	.s 0	2.512 S	0			0	
2	Seymour		Seymour		Seymour		Seymour		Seymour		Seymour	Seymour	Seymour	Seymour	Seymour			Seymour	
LOCATION	Countywide Bridge Inspection and Inventory Program for Cycle Years 2019-2022		Bridge #76 CR 800S over Big Graham Creek 0.5 miles E of CR 90W		5.64 miles E of US 31 at Six Mile Creek		04.16 miles W of SR 3 at Slate Creek		O&M Ave 400ft E of Kipper Ln to Brownstown Rd to the end Havden Pi		Walnut Street (US 50) from 7th Street to West Poplar Street	US 50 to SR 3	00.41 mile W of SR 3 over Unt Six Mile Creek	From SR 3 to US 50	N of SR 250			.77 miles N of SR 7 in Vernon	
	VA VARI Bridge Inspections		Bridge Replacement, Concrete		Br Repl, Comp. Cont. Conc. Construction		Replace Superstructure		Road Reconstruction (3R/4R Standards)		Road Rehabilitation (3 R/4R Standards)	Concrete Pavement Preservation (CPP)	Bridge Thin Deck Overlay	Centerline Rumble Stripes Installation	Small Structure Replacement			Slide Correction	
	VA VARI		IR 1011		US 50		SR 250		IR 1012		ST 1015	SR 750	SR 750	SR 750	SR 3			SR 3	
NAME	9 Init.	-	/ Init.	-	/ Init.	-	nit.	-	nit.	-	ra Init	nit.	, Init.	3 Init.	7 Init.	-		/ Init.	-
ACT#/ LEAD DES	38187 / 1500219	-	40276 / 1600797	-	t 40414 / 1700203	-	t 40437 / 1701502	-	40461 / 1600793	-	40896 / 1702963	t 40949 / 1801091	t 40990 / 1800719	1801313	t 41447 / 1800994	-		t 41535 / 1801692	-
SPONSOR	Jennings County Jennings County		Jennings County		Indiana Department of Transportation		Indiana Department of Transportation		Jennings County		North Vernon	Indiana Department of Transportation	Indiana Department of Transportation	Indiana Department of Transportation	Indiana Department of Transportation			Indiana Department of Transportation	

SR 250 over Slate Creek – Superstructure Replacement Jennings County, Indiana Des. No. 1701502

Appendix I: Additional Studies





Legend:

Your Selections

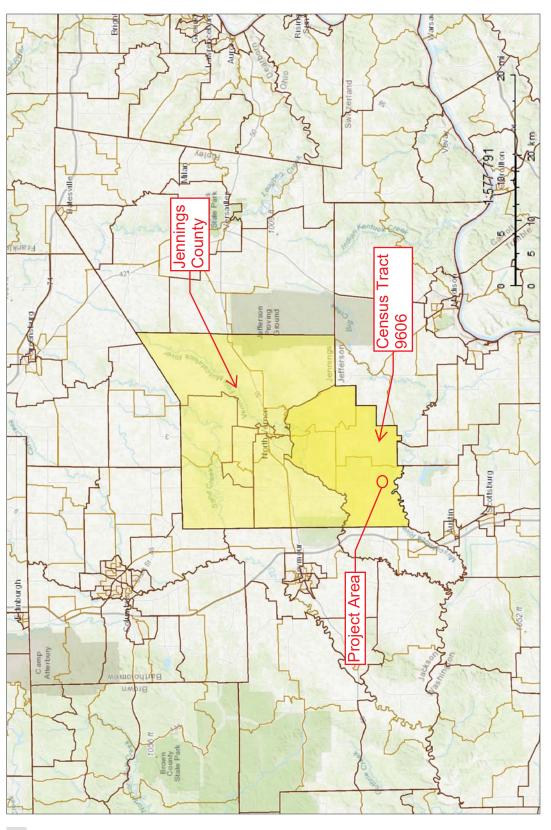
2017 boundaries were used to map 'Your Selections'

Selection Results

No Legend

- 2018 Boundaries

 Census Tract
 Block Group







B03002

HISPANIC OR LATINO ORIGIN BY RACE

Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

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.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that 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.

	Jennings Cou	nty, Indiana	Census Tract 96 County, I	,
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	27,840	****	5,016	+/-371
Not Hispanic or Latino:	27,195	****	4,909	+/-357
White alone	26,550	+/-12	4,883	+/-354
Black or African American alone	380	+/-133	0	+/-16
American Indian and Alaska Native alone	62	+/-60	0	+/-16
Asian alone	123	+/-116	26	+/-41
Native Hawaiian and Other Pacific Islander alone	0	+/-21	0	+/-16
Some other race alone	0	+/-21	0	+/-16
Two or more races:	80	+/-71	0	+/-16
Two races including Some other race	5	+/-12	0	+/-16
Two races excluding Some other race, and three or more races	75	+/-71	0	+/-16
Hispanic or Latino:	645	****	107	+/-97
White alone	490	+/-125	50	+/-65
Black or African American alone	0	+/-21	0	+/-16
American Indian and Alaska Native alone	0	+/-21	0	+/-16
Asian alone	0	+/-21	0	+/-16
Native Hawaiian and Other Pacific Islander alone	0	+/-21	0	+/-16
Some other race alone	155	+/-125	57	+/-70
Two or more races:	0	+/-21	0	+/-16
Two races including Some other race	0	+/-21	0	+/-16
Two races excluding Some other race, and three or more races	0	+/-21	0	+/-16

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 Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions 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 definitions due to differences in the effective dates of the geographic entities.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- 2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
 - 4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
- 5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
 - 6. An '***** entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.

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B17001

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Universe: Population for whom poverty status is determined 2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

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.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that 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.

	Jennings Cou	nty, Indiana	Census Tract 96 County, I	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	27,411	+/-181	4,991	+/-370
Income in the past 12 months below poverty level:	3,815	+/-625	425	+/-185
Male:	1,856	+/-361	183	+/-100
Under 5 years	152	+/-88	28	+/-34
5 years	86	+/-67	28	+/-32
6 to 11 years	331	+/-143	0	+/-16
12 to 14 years	95	+/-74	0	+/-16
15 years	44	+/-47	0	+/-16
16 and 17 years	32	+/-33	10	+/-17
18 to 24 years	158	+/-76	6	+/-11
25 to 34 years	216	+/-84	23	+/-23
35 to 44 years	226	+/-92	0	+/-16
45 to 54 years	247	+/-112	35	+/-32
55 to 64 years	166	+/-72	53	+/-53
65 to 74 years	84	+/-64	0	+/-16
75 years and over	19	+/-28	0	+/-16
Female:	1,959	+/-352	242	+/-104
Under 5 years	122	+/-93	16	+/-22
5 years	43	+/-39	10	+/-16
6 to 11 years	159	+/-82	0	+/-16
12 to 14 years	19	+/-24	0	+/-16
15 years	31	+/-29	0	+/-16
16 and 17 years	130	+/-75	0	+/-16
18 to 24 years	194	+/-94	0	+/-16
25 to 34 years	273	+/-112	86	+/-47
35 to 44 years	167	+/-71	17	+/-28
45 to 54 years	385	+/-135	34	+/-30
55 to 64 years	154	+/-102	47	+/-50
65 to 74 years	138	+/-67	13	+/-22
75 years and over	144	+/-71	19	+/-23
Income in the past 12 months at or above poverty level:	23,596	+/-625	4,566	+/-403
Male:	11,893	+/-398	2,265	+/-228
Under 5 years	707	+/-76	110	+/-70

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	Jennings Cou	nty, Indiana	Census Tract 96 County, I	
	Estimate	Margin of Error	Estimate	Margin of Error
5 years	86	+/-57	0	+/-16
6 to 11 years	832	+/-179	136	+/-68
12 to 14 years	431	+/-173	59	+/-49
15 years	132	+/-61	55	+/-45
16 and 17 years	418	+/-87	98	+/-55
18 to 24 years	1,140	+/-82	179	+/-96
25 to 34 years	1,289	+/-89	235	+/-78
35 to 44 years	1,520	+/-120	293	+/-76
45 to 54 years	1,903	+/-110	331	+/-86
55 to 64 years	1,686	+/-91	312	+/-74
65 to 74 years	1,156	+/-84	222	+/-70
75 years and over	593	+/-54	235	+/-69
Female:	11,703	+/-365	2,301	+/-250
Under 5 years	640	+/-112	67	+/-44
5 years	80	+/-52	27	+/-28
6 to 11 years	920	+/-151	298	+/-78
12 to 14 years	433	+/-124	125	+/-63
15 years	151	+/-75	47	+/-35
16 and 17 years	391	+/-117	60	+/-67
18 to 24 years	983	+/-106	163	+/-97
25 to 34 years	1,173	+/-113	108	+/-52
35 to 44 years	1,556	+/-86	260	+/-103
45 to 54 years	1,699	+/-126	356	+/-85
55 to 64 years	1,670	+/-104	372	+/-87
65 to 74 years	1,203	+/-60	196	+/-74
75 years and over	804	+/-77	222	+/-62

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 Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions 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 definitions 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 Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- 2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
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 - 6. An '***** entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.

8. An '(X)' means that the estimate is not applicable or not available.

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Land and Water Conservation Fund Property List - Gibson County

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated December 2019)

ProjectNumber	SubProjectCode	County	Property
1800405	1800405Н	Jennings	Wells (Commiskey) Woods Nature Preserve

Source: Indiana Department of Natural Resources, Outdoor Recreation

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