FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	**County Road (CR) 100 South / Jackson County**
Designation Number(s):	**1703018**
Project Description/Termini:	**Bridge Project / 0.01 mile East of CR 500 West**

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

Approval

INDOT DE Signature and Date

INDOT ESD Signature and Date

FHWA Signature and Date

Release for Public Involvement

N/A
INDOT DE Initials and Date

ADWP April 16, 2025
INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Name and Organization of CE/EA Preparer: Susan Castle / Metric Environmental, LLC

Part I – Public Involvement

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

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

**A public hearing is required for all historic bridges processed under the Historic Bridges Programmatic Agreement between INDOT, FHWA, SHPO, and the ACHP.*

Discuss what public involvement activities (legal notices, letters to affected property owners and residents (i.e. notice of entry), meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.

Notice of Entry letters were mailed to potentially affected property owners near the project area on April 13, 2020, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in Appendix G, page G-1.

A legal notice to interested parties for proposals for the rehabilitation and reuse, or the storage and future reuse of the bridge was published in the *Indianapolis Star* on May 19, 2021, and the notice was published on May 14, 2021, in the *Seymour Tribune*. The advertisement was also included on the Indiana Department of Transportation (INDOT) Historic Bridges Marketing Program website (Appendix D, pages D-62 to D-63). Signs were posted at the bridge site on January 4, 2021 (Appendix D, pages D-54 to D-55). This bridge is classified as a Non-Select Historic Bridge as illustrated in the *Indiana Historic Bridge Inventory* (December 2010). Jackson County has expressed a commitment to obtain ownership of Jackson County Bridge No. 197 and relocate the bridge to the Jackson County fairgrounds for pedestrian use. The marketing period will end when the public hearing comment period ends. The legal notices and the affidavits of publication are provided in Appendix D, pages D-56 to D-61.

To meet the public involvement requirements of Section 106, a legal notice of Federal Highway Administration-Indiana Division's (FHWA's) finding of "No Historic Properties Affected" was published in the *Seymour Tribune* on May 8, 2024, offering the public an opportunity to submit comment pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The public comment period closed after 30 days on June 7, 2024. No comments or responses were received. The legal notice and the affidavit of publication are provided in Appendix D, pages D-69 to D-71.

Pursuant to the "*Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges*" (Historic Bridges Programmatic Agreement (HBPA)) and the Indiana Department of Transportation (INDOT) *Project Development Public Involvement Procedures Manual,* the project sponsor is required to hold a public hearing for the project. Once this document is released for public involvement, a legal notice will be published twice in the most widely circulated local publication(s) announcing the location, date and time of the public hearing. The legal notice will also be mailed to adjacent property owners and project stakeholders impacted by the project. All comments obtained as part of the public hearing will be evaluated and considered as part of the ongoing design process. This document will be updated and revised after the public involvement requirements are fulfilled.

Public Controversy on Environmental Grounds

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

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

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

Sponsor of the Project: Jackson County INDOT District: Seymour
Local Name of the Facility: CR 100 South

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

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

PURPOSE AND NEED:

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

The purpose of this project is to provide a bridge structure that meets a physical condition rating of at least 7 out of 9 [condition ratings range from 1-9: 1 (imminent failure), 2 (critical), 3 (serious), 4 (poor), 5 (fair), 6 (satisfactory), 7 (good), 8 (very good), 9 (excellent condition)]; meets the required load capacity of 15 tons and the required bridge clear roadway width of 24 feet, while also addressing hydraulic adequacy to prevent incidental scour/erosion along the banks of McHargue Ditch. In addition, the project also aims to address the substandard roadway geometrics at the intersection of CR 100 South and CR 500 West.

The need for this project is due to the deteriorated physical condition and reduced load capacity of Jackson County Bridge No. 197. The Bridge Inspection Report (BIR) dated April 25, 2023, reported the superstructure and the substructure to be in fair condition (rated 5 out of 9). The timber deck/wearing surface was rated 5 out of 9. The overall structural evaluation of the bridge was rated 4 out of 9, indicating the bridge meets the minimum tolerable limits for continued use.

The current posted weight limit for Jackson County Bridge No. 197 is 10 tons, per the *Historic Bridge Alternative Analysis* (HBAA 12/11/2023) which does not meet the minimum design standard of 15 tons. The current expected service life of the bridge is 5 years (HBAA 12/11/2023) Appendix I, page I-17. A service life of 25 years is required per the HBPA. Furthermore, the sufficiency rating for the bridge is 43.6 out of a possible 100 points (Appendix I, page I-11). Excerpts from the BIR are provided in Appendix I, pages I-2 to I-8 and the HBAA, Appendix I, pages I-9 to I-24.

A secondary need for the project is the inadequate clear roadway width of the bridge (17 ft.-8 inch) which does not meet current roadway geometric design standards. The BIR evaluated the bridge deck geometry and assigned a rating of 3 out of 9 (high priority rating for corrective action (Appendix I, page I-9)). The clear roadway width across the bridge requires that Jackson County Bridge No. 197 be posted as a one-lane bridge. In addition, the hydraulic rating of the bridge was assigned a rating of 3 out of 9 (3 poor) due to the 90 degree bend of McHargue Ditch downstream of the bridge, which results in sediment buildup at the east abutment resulting in frequent flooding of the intersection. Per the Indiana Design Manual (IDM 412-5.04(02)) the poor hydraulic performance of the bridge is a primary need for the project. The poor hydraulic performance of the bridge is a critical factor in the determination of a preferred alternative, as illustrated in the HBAA (Appendix I, page I-21).

Due to the reduced load capacity and inadequate roadway geometrics the bridge does not accommodate the passage of agricultural vehicles, emergency response vehicles (firetrucks/ambulances) or school buses which generally exceed the 15 ton load capacity. In addition, CR 100 South is a primary route for local emergency response services; however, the deficient load capacity and substandard roadway geometrics have necessitated that emergency response services use a three-mile detour route (HBAA Appendix I, page I-14).

There is also a need to address the substandard roadway geometrics at the intersection of CR 500 West (north/south roadway) and CR 100 South. Approximately 20 ft. west of the west bridge approach, CR 500 West intersects CR 100 South. The intersection is approximately 2 ft. lower in grade than the bridge deck. A stop sign is located west of the bridge at the intersection, but visibility to westbound traffic on CR 100 South is completely obscured by the truss structure of the bridge. In addition, the small turn radii from the bridge crossing limits the ability of drivers to safely complete a right-turn movement from westbound CR 100 South onto northbound CR 500 West. See Appendix I, page I-13 for additional details regarding the inadequate/limited sight distance at the intersection.

County Jackson Route CR 100 South Des. No. 1703018

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Jackson Municipality: N/A

Limits of Proposed Work: The project limits will extend approximately 253 ft. (not including incidental construction) along CR 100 South in addition to the bridge length of 90 ft. for a total project length of 343 ft.

Total Work Length: 0.065 mile Mile Total Work Area: 1.25 Acres

	Yes[1]	No
Is an Interstate Access Document (IAD)[1] required?		X

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

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

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

Jackson County with oversight from INDOT and the Federal Highway Administration (FHWA) propose to address the deteriorated condition of the existing bridge that carries CR 100 South over McHargue Ditch in Jackson County, Indiana. The project is located on CR 100 South, approximately 0.1 mile east of CR 500 West in Jackson County. Specifically, the project is located in Sections 18 and 19, Township 5 North, Range 4 East as illustrated on the Medora, Indiana 7.5-minute United States Geological Survey (USGS) topographic quadrangle (Appendix B, page B-2).

CR 100 South consists of a Local Road and is classified as a Low-Volume local rural road. Low-Volume Roads are generally classified as rural roadways that have less than 400 vehicles per day. The existing cross-section provides one 10 ft. travel lane in each direction with no usable shoulders. The approach roadway width at the bridge is 20 ft. There are no approach guardrails at the bridge crossing and no curbs or sidewalks. The intersection of CR 500 West and CR 100 South is controlled with a 2-way stop condition for westbound and eastbound traffic on CR 100 South. The posted speed on CR 100 South is 35 miles per hour (mph). Land use in the vicinity of the project consists of agricultural land (Appendix B, page B-3).

Jackson County Bridge No. 197 (National Bridge Inventory No. (NBI) 3600132) is a single-span, steel pony truss structure that was constructed in 1920. The bridge is 64 ft. -7 inches in length with a clear roadway width of 17 ft. -3 inches. The bridge deck consists of wooden planks placed on steel I-beam stringers. Wide longitudinal timber runners are fastened to the planks in the tire paths. The bridge is posted as a one-lane bridge. There is no approach guardrail along CR 100 South and no guardrail on the bridge structure. The bridge is supported by concrete abutments on spread footings. The bridge is currently posted for a 10 ton weight limit. This bridge is classified as a Non-Select Historic Bridge as illustrated in the *Indiana Historic Bridge Inventory* (December 2010).

Alternatives Analysis Process

Per the terms of the "*Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges*" (Historic Bridges Programmatic Agreement (HBPA), the FHWA will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the Historic Bridges PA (Stipulation III).

Jackson County Bridge No. 197, a historic property, has been classified as a Non-Select Bridge by the *Indiana Historic Bridge Inventory*, and thus, the procedures outlined in Stipulation III.B of the Historic Bridges PA has been followed to determine the preferred alternative that meets the purpose and need of the project. The various alternatives shall be evaluated based on whether the alternative is feasible and prudent. Prudence of projects involving Non-Select bridges on low-volume roads should be assessed based on cost-effectiveness and other criteria as noted in the Indiana Design Manual (IDM 412-5.04(02)). If the bridge rehabilitation cost is greater than 40% of the replacement cost, then replacement is warranted. A *Historic Bridge Alternatives Analysis* (HBAA 12/11/2023) was prepared for the project to evaluate the required alternatives. Table 3 on page I-22 of the HBAA summarizes these costs. Excerpts of the HBAA are provided in Appendix I, pages I-9 to I-24.

Preferred Alternative

Alternative E: Bridge Replacement with Channel Realignment

This alternative will consist of shifting the bridge location approximately 100 ft. to the east of its current position and modifying the alignment of McHargue Ditch to eliminate the existing 90-degree bend in the channel. The existing waterway opening beneath the bridge is inadequate per the HBAA (Appendix I, page I-13), which is the first criterion to warrant bridge replacement. This will improve the hydraulic performance of the bridge. The proposed channel realignment will include two 45-degree bends; the first bend will be located north of the bridge approximately 200 ft. along CR 500 West and the second bend will be located approximately 25 ft. south of the bridge (Appendix B, pages B-10 to B-12).

The preferred alternative will provide a new bridge structure across McHargue Ditch on the existing roadway alignment since there will be no movement of the bridge north or south. The existing pony truss bridge will be replaced with a three-span, continuous reinforced slab bridge that will be 90 ft. in length. The bridge will have an out-to-out deck width of 31 ft., a clear roadway width of 28 ft. and two 14 ft. travel lanes. The waterway opening of the new bridge will be 384 square feet, an increase of 80.4 square feet (Appendix B, page B-11). The bridge will be constructed on a new substructure consisting of steel piles. New reinforced concrete bridge approach slabs (20 ft - 6 inches) will be installed at each bridge approach.

Concrete bridge rails will be installed on the new bridge structure and steel W-Beam approach guardrail will be installed along CR 100 South per design standards. An existing 15-inch corrugated metal pipe is located north of the bridge crossing, beneath CR 500 West. The pipe will be extended with 25 ft. of 15-inch corrugated metal pipe that will continue to outlet into McHargue Ditch.

Impacts to the historic bridge will be mitigated through the stipulations outlined within the HBPA process for Non-Select bridges. Per the HBPA III-B, if rehabilitation alternatives are not feasible and prudent, the bridge owner shall market the historic bridge for re-use. Jackson County has expressed a commitment to obtain ownership of Jackson County Bridge No. 197 and relocate the bridge to the Jackson County fairgrounds for pedestrian use (Appendix I, pages I-26 to I-28). Therefore, Alternative E is the preferred feasible and prudent alternative.

No additional permanent or temporary right-of-way will be required to construct the project. The project will be constructed within the limits of the legal drain easement of McHargue Ditch, which will be covered by a Jackson County legal drain permit if applicable. There will be approximately 572 linear feet of permanent impacts and 24 linear feet of temporary impacts to McHargue Ditch. In addition, there will be approximately 0.46 acre of permanent wetland impacts. There will be no temporary wetland impacts. All efforts to avoid and minimize stream and wetland impacts have been considered as part of the ongoing design process.

The limits of the preferred alternative will extend approximately 253 ft. (not including incidental construction) along CR 100 South in addition to the bridge length of 90 ft. for a total project length of 343 ft. (0.065 mile). This total project length includes the removal of the existing bridge. The preferred alternative will meet the purpose and need of the project by improving the physical condition rating of the crossing structure to at least 7 (good condition) out of 9 (excellent condition), providing the necessary load capacity, improving the roadway geometrics and addressing the hydraulic inadequacies of McHargue Ditch. In addition, shifting the bridge 100 ft. to the east will meet design standards for turn radii and sight distance at the intersection of CR 100 South and CR 500 West, improving intersection sight distance. The cost of the preferred alternative is approximately $1,948, 700.00. Table 3 of the HBAA summarizes the costs of each alternative (Appendix I, page I-22).

The project termini are logical because they encompass only the area necessary to install the new bridge and tie the improvements into the existing roadway for a smooth transition. The project has independent utility as its construction does not depend on the completion of a secondary project. Design plans are provided in Appendix B, pages B-7 to B-13.

Traffic will not be maintained on CR 100 South during construction and a detour will be necessary. The detour will utilize CR 500 West, Base Road and CR 400 West. The detour will add approximately three additional travel miles. The detour will not add any additional travel time for emergency response because the proposed detour route is currently utilized due to the reduced load capacity and substandard geometrics of Jackson County Bridge No. 197. The detour will be in place for approximately nine to eleven months. Additional details are discussed in the *Maintenance of Traffic* Section of this CE document.

Construction is scheduled to begin Spring 2026 and be completed by Fall 2026. The State Historic Preservation Office (SHPO) requested that photo documentation of the bridge be conducted in accordance with the Historic Bridges PA: *Attachment B-Standard Treatment Approach for Historic Bridges* prior to disassembly and relocation of the bridge.

OTHER ALTERNATIVES CONSIDERED:

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

Alternative A: Do Nothing/No Build

This alternate would not directly affect the historic significance of the bridge but would allow for the continued deterioration of the bridge. This alternative would avoid any work to the existing bridge. As the bridge deteriorates the load capacity would decrease and require a lower load posting. Additionally, the structure may be closed at some time in the future due to deterioration and potential failure. This alternative would not require the expenditure of funds and would have no environmental impact. Although it is feasible to do nothing because of the low volume of traffic on CR 100 South, this solution is not prudent since it does not meet the purpose and need of the project. This alternative does not meet the purpose and need of the project and was discarded from further consideration (Appendix I, pages I-16 to I-17).

Alternative B-1: Rehabilitation for Continued Vehicular Use Meeting Secretary of Interior's Standards for Rehabilitation without Intersection Relocation

This alternative would rehabilitate the existing structure for continued one lane vehicular use. The existing clear roadway width of 17.8 ft would remain and would meet the required minimum clear roadway width of 15 ft. per the *Indiana Design Manual* (IDM) Figure 412-2B.

This alternative would rehabilitate the existing bridge to a standard that meets the Secretary of Interior's Standards (SOIS) for Rehabilitation. This alternative would include cleaning and painting the existing truss. Based on deterioration and load capacity, it is estimated that all lower chord and top vertical member gusset-plates would need to be replaced in-kind, matching the existing elements in appearance. Structural materials would be replaced in-kind, and the historic integrity of the bridge would be retained. The bridge's existing alignment and skew would not be altered, and the bridge would not be widened. Jacking and temporary shoring would be used to support the bridge during the rehabilitation process. These repairs would improve the condition of the truss and achieve the required load capacity to 15 tons (H15 per IDM Figure 412-2A). Alternative B-1 is feasible. However, this alternative doesn't meet the purpose and need of the project because it fails to address the substandard roadway geometry, inadequate bridge width, and would not achieve the necessary load capacity or improve the hydraulic adequacy of McHargue Ditch (Appendix I, page I-18). Furthermore, the existing roadway width would not allow use by agricultural vehicles, emergency response vehicles or school buses. The 25-year required year life span for the existing bridge is expected to be achieved with this alternative.

The estimated total cost of this alternative is approximately $453,000.00, which is 23.2% of the cost of Alternative F. This alternative does not exceed the 40% economic threshold that warrants full bridge replacement of Non-Select Bridges in a low-volume rural setting per IDM 412-5.04(02). However, the following two criteria of IDM 412-5.04(02) warrant a replacement: the bridge waterway opening is inadequate with a rating of 3 out of 9 and the bridge is structurally deficient (fractural critical). This alternative is feasible, but it is not prudent because it does not meet the purpose and need of the project. For these reasons, this alternative was discarded from further consideration

Alternate B-2: Rehabilitation for Continued Vehicular Use Meeting Secretary of Interior's Standards for Rehabilitation with Intersection Relocation

This alternative involves rehabilitating the existing structure in accordance with Alternative B-1, except this option includes moving the intersection slightly west approximately 110 ft and increasing the turn radii of the intersection. This realignment of the intersection would also include correcting the existing grade difference from the bridge deck to the intersection with CR 500 West. Alternative B-2 is feasible. The 25-year required year life span for the existing bridge is expected to be achieved with this alternative. The estimated total cost of this alternative is approximately $1,147,000, which is 58.9% of Alternative E. Although Alternative B-2 is feasible it is not prudent because it does not meet the purpose and need of the project because it fails to correct the bridge width and structural load capacity. For these reasons, this alternative was discarded from further consideration (Appendix I, page I-19).

Alternative C-1: Rehabilitation Meeting Secretary of Interior's Standards (1-way pair option)

This alternative would rehabilitate the existing structure for continued vehicular use, for one lane of traffic, in the same manner as outlined in Alternative B-1. It also proposes the construction of a new one-lane bridge on an adjacent alignment to carry the opposing lane of traffic, thus creating a one-way pair. The new bridge would consist of a signal-span bridge similar in length to the existing bridge. The new bridge would carry one lane of traffic and be designed to meet all current structural and geometric design criteria. The new structure would be located north of the existing structure. This alternative would also involve building a new approach roadway to provide enough length for tapering the existing roadway for the one-way bridge pair. Approximately three acres of additional permanent right-of-way would need to be acquired. This alternative would result in greater environmental impacts. In addition to the rehabilitation costs in Alternative B-1, this option includes costs associated with a new bridge, right-of-way costs, and road approach modification.

Identical to the B-1 Alternative, the rehabilitated truss would achieve the capacity for the H-15 loading. The 25-year required year life span for the existing bridge would be achieved with this alternative. The estimated total cost of this alternative is approximately $1,615,200, which is 83% of the cost of Alternative E. Although Alternative C-1 is feasible, it is not prudent due to the high relative cost compared to the replacement Alternative E. Furthermore, this alternative does not meet the purpose and need of the project. For these reasons, this alternative was discarded from further consideration (Appendix I, page I-19).

Alternative C-2: Two-Way Bypass with Non-Vehicular Use

Alternative C-2 involves creating a two-way bypass in conjunction with Alternative C-1. The bypass option would provide a concrete beam bridge with a 28 ft. clear roadway width along with the relocation of the intersection slightly west. The right-of-way required would be equivalent to that prescribed in Alternative C-1. This alternative does not include rehabilitation of the existing structure. The existing bridge currently can handle a 10 ton load weight, which meets the design requirements for pedestrian bridges. Due to the lack of pedestrian access at the site, a pedestrian walkway would be created adjacent to the existing facility so the bridge may be accessed. Currently, there are no existing pedestrian facilities in the project vicinity.

Due to this bridge's remote location, a small pull-off parking area would be created for visitors since the existing roadway facility is too narrow to accommodate this kind of use.

The estimated cost of Alternative C-2 ($1,499,700) is approximately 77% of the cost Alternative E. Alternative C-2 is feasible; however, it is not prudent because of the high relative cost to the replacement alternative and it wouldn't resolve the hydraulic deficiencies, nor does it address the reduced load capacity; the two criteria that warrant full bridge replacement per IDM 412-5.04(02). The 25-year required year life span for the existing bridge is not expected to be achieved with this alternative. Additionally, this alternative would require a responsible party to assume ownership of the bridge at the existing location, maintaining the bridge for perpetuity. Without a responsible party assuming ownership of the existing bridge, this alternative is not prudent. For these reasons, this alternative was discarded from further consideration (Appendix I, pages I-20 to I-21).

Alternative D: Bridge Replacement In-Place with Existing Channel Alignment

This project would involve constructing a new bridge with a 28 ft. clear roadway width to replace the existing truss bridge. Alternative D, like previous bypass/rehab alternatives, would slightly move the intersection west. For this alternative, there is no need to move the intersection as far west because there would be no truss obstructing visibility of westbound traffic on CR 100 South. The estimated cost of Alternative D is $1,541,800, which is 79.1% of Alternative E. Although Alternative D provides a replacement structure with a larger hydraulic opening and removes the need for continued fracture critical inspections due to reduced load capacity, the inadequate alignment of the channel would result in sediment buildup over time resulting in a reduced and insufficient hydraulic opening, therefore Alternative D is considered not prudent. For these reasons, this alternative was discarded from further consideration (Appendix I, page I-21).

Alternatives D and E (the preferred alternative) would remove the existing bridge superstructure for potential relocation and reuse, with construction of a new bridge on the existing alignment; thus, they would meet the project purpose and need. While the bridge would be relocated to another location, these alternatives would minimize the changes to the historic character of the bridge. However, Alternative D would result in a reduced and insufficient hydraulic opening over time. Alternative E is the chosen feasible and prudent alternative to meet the overall purpose and need of the project.

County Jackson Route CR 100 South Des. No. 1703018

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

It would not correct existing capacity deficiencies;	
It would not correct existing safety hazards;	
It would not correct the existing roadway geometric deficiencies;	X
It would not correct existing deteriorated conditions and maintenance problems; or	X
It would result in serious impacts to the motoring public and general welfare of the economy.	
Other (Describe):	

ROADWAY CHARACTER:

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

Name of Roadway: CR 100 South
Functional Classification: Low-Volume Local Rural Road
Current ADT: 50 VPD (2013) Design Year ADT: 70 VPD (2033)
Design Hour Volume (DHV): N/A Truck Percentage (%) N/A
Designed Speed (mph): 35 Legal Speed (mph): 35

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	10 ft. travel lanes		14 ft. travel lanes	
Pavement Width:	20	ft.	28	ft.
Shoulder Width:	0	ft.	0	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s): Jackson County Bridge No. 197(NBI No. 3600132) Sufficiency Rating: 43.6 out of 100
2023 Bridge Inspection Report and HBAA

	Existing		Proposed	
Bridge/Structure Type:	steel pony truss		continuous reinforced slab bridge	
Number of Spans:	1		3	
Weight Restrictions:	10 (posted)	ton	36	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	17.3	ft./in	28	ft.
Outside to Outside Width:	17.3	ft.	31.0	ft./in
Shoulder Width:	0	ft.	0	ft.

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

Jackson County Bridge No. 197 (NBI No. 3600132) is a single-span, steel pony truss structure that was constructed in 1920. The bridge is 64 ft. -7 inches in length with a clear roadway width of 17 ft. -3 inches. The bridge is posted as a one-lane bridge. There is no roadway approach guardrail and no guardrail on the bridge structure. The bridge is supported by concrete abutments. The bridge is currently posted for a 10 ton weight limit. The bridge's proximity to the intersection reduces the turn radii on the east side of the intersection. The bridge is classified as a Non-Select Historic Bridge as illustrated in the *Indiana Historic Bridge Inventory* (December 2010).

The preferred alternative will provide a new bridge structure across McHargue Ditch on the existing roadway alignment. This alternative will consist of shifting the bridge location approximately 100 ft. to the east of its current position and modifying the alignment of McHargue Ditch to eliminate the existing 90-degree bend in the channel. The proposed channel realignment will include two 45-degree bends; the first bend is located north of the bridge approximately 200 ft. along CR 500 West and the second bend is located approximately 25 ft. south of the bridge (Appendix B, pages B-10 to B-12).

The existing pony truss bridge will be replaced with a three-span, continuous reinforced slab bridge that will be 90 ft. in length. The bridge will have an out-to-out deck width of 31 ft., a clear roadway width of 28 ft. and two, 14 ft. travel lanes. The bridge will be constructed on a new substructure consisting of steel piles. New reinforced concrete bridge approach slabs (20 ft - 6 inches) will be installed at each bridge approach. Concrete bridge rails will be installed on the new bridge structure and steel W-Beam approach guardrail will be installed along CR 100 South per design standards. The project limits will extend approximately 253 ft. (not including incidental construction) along CR 100 South in addition to the bridge length of 90 ft. for a total project length of 343 ft.

An existing 15-inch corrugated metal pipe is located north of the bridge crossing, beneath CR 500 West used for agricultural drainage. The pipe will be extended with 25 ft. of 15-inch corrugated metal pipe that will continue to outlet into McHargue Ditch. Design plans are provided in Appendix B, pages B-7 to B-13.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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

Traffic will not be maintained on CR 100 South during construction and a detour will be necessary. The detour will utilize CR 500 West, Base Road and CR 400 West. The detour will add approximately three additional travel miles. The detour will not add any additional travel time for emergency response services because the proposed detour route is currently utilized due to the reduced load capacity and substandard bridge width geometrics of Jackson County Bridge No. 197. The detour will be in place for approximately nine to eleven months. The construction will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated, and all inconveniences and delays will cease upon project completion. The MOT plan sheet is provided in Appendix B, page B-8.

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

County Jackson Route CR 100 South Des. No. 1703018

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: $89,000.00 (2024) Right-of-Way: $20,000.00 Construction: $1,336,000.00 (2026)

Anticipated Start Date of Construction: Spring 2026

Note: The 2024-2028 STIP has right-of-way costs ($20,000.00) listed that do not apply since no additional permanent right-of-way will be necessary. The STIP will be updated if necessary, prior to approval of the Environmental Consultation Form (ECF).

RIGHT OF WAY:

	Amount (acres)	
Land Use Impacts	Permanent	Temporary
Residential	0.00	0.00
Commercial	0.00	0.00
Agricultural	0.00	0.00
Wooded	0.00	0.00
Wetlands	0.00	0.00
Other:	0.00	0.00
TOTAL	**0.00**	**0.00**

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

The existing right-of-way limits along CR 100 South extend approximately 9 ft. north and south of the centerline (18ft. from edge of existing roadway). No additional permanent or temporary right-of-way will be required to complete the project. The project will be constructed within the limits of the existing legal drain easement and the proposed replacement of the existing drainage pipe (filed tile) will not require additional permanent or temporary right-of-way. Design plans are provided in Appendix B, pages B-7 to B-13.

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

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

SECTION A – EARLY COORDINATION:

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

Early coordination letters were sent on October 3, 2022, and October 24, 2024. A copy of the early coordination letter is provided in Appendix C, pages C-1 to C-2.

Agency	Date Sent	Response Received	Appendix
Indiana Department of Natural Resources- Division of Fish and Wildlife (IDNR-DFW)	October 3, 2022	November 2, 2022	C-4 to C-6
US Fish and Wildlife Service (USFWS) Bloomington Field Office	October 3, 2022	October 4, 2022	C-35 to C-36
US Army Corps of Engineers	October 3, 2022	No Response	N/A
Indiana Geological and Water Survey	October 25, 2024	October 25, 2024	C-32 to C-33
Indiana Department of Environmental Management (IDEM) Groundwater Section, Wellhead Proximity	October 3, 2022	Auto Response	N/A
INDOT Office of Aviation	October 24, 2024	October 25, 2024	C-34
INDOT Seymour District	October 3, 2022	No Response	N/A
US Department of Housing and Urban Development	October 3, 2022	No Response	N/A
US National Park Service	October 3, 2022	No Response	N/A
Natural Resources Conservation Service	October 24, 2024	November 4, 2024	C-37
USFWS Bloomington Field Office	February 5, 2025	February 5, 2025	C-38
Jackson County Drainage Board	September 15, 2024	No Response	N/A
Jackson County Highway Department	October 3, 2022	No Response	N/A
Jackson County Surveyor	October 3, 2022	No Response	N/A
Jackson County Emergency Management	October 3, 2022	No Response	N/A
Jackson County Commissioners	October 3, 2022	No Response	N/A
Jackson County Floodplain Administrator	October 3, 2022	No Response	N/A
Medora Community School Corporation	October 3, 2022	No Response	N/A

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

SECTION B – ECOLOGICAL RESOURCES:

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

Total stream(s) in project area: 991 Linear feet Total impacted stream(s): 572 Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
McHargue Ditch	Perennial	991	572	Likely Jurisdictional Water of the U.S

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

Based on a desktop review, the aerial map of the project area, and the Red Flag Investigation report (RFI) (Appendix B, page B-3 and Appendix E, page E-2), there are five streams, rivers, watercourse or other jurisdictional features within the 0.5 search radius. There is one stream, river, watercourse or other jurisdictional feature within or adjacent to the project area. That number was confirmed by the site visit on October 13, 2021, by Metric Environmental.

A *Waters of the U.S. Determination/Wetland Delineation Report* was prepared for the project on January 3, 2022, by Metric Environmental. Please refer to Appendix F for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that one likely jurisdictional waterway is present within or adjacent to the project area. The U.S. Army Corps of Engineers (USACE) makes all final determinations regarding jurisdiction.

McHargue Ditch

McHargue Ditch flows from northeast to southwest and flows north then turns ninety degrees and flows east. McHargue Ditch is associated with a solid blue line on the USGS topographic map, indicating it is likely a perennial waterway. The ordinary high water mark (OHWM) is 21 ft. wide and 1.4 ft. in depth. The dominant stream substrate consisted of sand and silt and functional riffles and pools were observed. Low sinuosity and moderate current velocity were observed. Vegetation observed along the streambanks included sandbar willow (*Salix interior*) and reed canary grass (*Phalaris arundinacea*). McHargue Ditch is classified as an average quality stream. Because McHargue Ditch contributes flow to East Fork White River, a Section 10 Traditional Navigable Waterway (TNW) McHargue Ditch should likely be considered a jurisdictional Water of the U.S.

McHargue Ditch will be permanently impacted by grading associated with the channel relocation and bridge replacement. The new bridge will be positioned approximately 100 ft. east of the current bridge and McHargue Ditch will be realigned to eliminate the existing 90-degree bend in the channel. The proposed channel realignment will include two 45-degree bends; the first bend is located north of the bridge approximately 200 ft. along CR 500 West and the second bend is located approximately 25 ft. south of the bridge (Appendix B, pages B-10 to B-12). This will improve the hydraulic performance of the bridge, while increasing the hydraulic opening as well. The channel will be relocated to the east with an orientation that provides improved hydraulic flow to prevent channel erosion and sediment buildup. Riprap will be installed along the east and west banks of McHargue Ditch around the new bridge piers for scour protection. A 2 ft. wide area of compacted aggregate will be incorporated within the riprap to provide a wildlife crossing beneath the bridge.

There will be approximately 572 linear feet (0.37 acre) of permanent impacts to McHargue Ditch. In addition, there will be approximately 24 linear feet (0.012 acre) of temporary impacts from the use of temporary cofferdams at four different locations along the existing channel during construction. The stream impacts will require an IDEM Section 401 Water Quality Certification permit and a Section 404 permit from the USACE. Mitigation will likely be required as the cumulative acreage of permanent impacts to streams (0.37 acre) and impacts to wetlands (0.46 acre) is greater than 0.1 acre (cumulative stream and wetland impact (0.83 acre)). To compensate for unavoidable impacts, In Lieu Fee (ILF) mitigation option has been proposed as part of the ongoing permitting process. The ILF mitigation option is proposed to be purchased from the Whitewater River-East Fork White Indiana Stream and Wetland Mitigation Program (IN SWMP) Service Area.

The IDNR-DFW responded on November 2, 2022, with recommendations to minimize waterway impacts including bank stabilization measures, methods for riprap placement, and the minimization of in-channel disturbance. The IDNR-DFW also recommended that the replacement structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. The IDNR-DFW also recommended improving fish and wildlife passage conditions, when possible (Appendix C, pages C-4 to C-6).

The USFWS Service, Bloomington Suboffice responded on October 4, 2022, with standard recommendations to 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. The USFW also recommended minimizing the extent of hard armor (riprap) in bank stabilization and using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat (Appendix C, pages C-35 to C-36). All applicable IDNR-DFW and USFWS recommendations are provided in the *Environmental Commitments* section of this CE document.

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

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

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix B, page B-3 and Appendix E, page E-2) there is one open water features within the 0.5-mile search radius. There are no open water features within or adjacent to the project area, which was confirmed by the site visit on October 13, 2021, by Metric Environmental. Therefore, no impacts are expected.

A *Waters of the U.S. Determination/Wetland Delineation Report* was prepared on January 3, 2022, by Metric Environmental. Please refer to Appendix F for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that no open water feature(s) are present within or adjacent to the project area. Therefore, no impacts are expected.

	Presence	**Impacts**	
		Yes	**No**
Wetlands	**X**	**X**	

Total wetland area: 0.82 Acre(s) Total wetland area impacted: 0.46 Acre(s)

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

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments (i.e. location, likely Water of the US, appendix reference)
Wetland A	PEM1A	0.41	0.24	Likely Jurisdictional Water of the U.S
Wetland B	PEM1A	0.18	0.1	Likely Jurisdictional Water of the U.S
Wetland C	PEM1A	0.10	0.06	Likely Jurisdictional Water of the U.S
Wetland D	PEM1A	0.12	0.06	Likely Jurisdictional Water of the U.S
Wetland E	PEM1A	0.01	0.00	Likely Jurisdictional Water of the U.S

Wetlands (*Mark all that apply*)	**Documentation**	**ESD Approval Dates**
Wetland Determination	**X**	**N/A**
Wetland Delineation	**X**	**N/A**
USACE Isolated Waters Determination		

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

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

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

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix B, page B-3 and Appendix E, page E-2) there are ten wetlands within the 0.5-mile search radius. There are five wetlands within or adjacent to the project area. That number was confirmed by the site visit on October 13, 2021, conducted by Metric Environmental.

A *Waters of the U.S. Determination/Wetland Delineation Report* was prepared by Metric Environmental on January 3, 2022. Please refer to Appendix F for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that five likely jurisdictional wetlands are present within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

Wetland A
Wetland A was classified as a Palustrine, Emergent, Persistent, Temporarily Flooded (PEM1A) wetland. This wetland is located in a depression south of McHargue Ditch and southeast of the intersection of CR 100 S and CR 500 W. The boundaries of Wetland A were delineated by lack of wetland vegetation and increased elevation. Due to its location within a floodplain, Wetland A likely receives flood waters and drainage on a consistent basis during rain events. The wetland exhibited poor plant species diversity and contained a dominant invasive species of reed canary grass (*Phalaris arundinacea*). These factors contribute to the conclusion that Wetland A can support a limited amount of wildlife or aquatic habitat, and it should be considered poor quality. Based on topography, it can be deduced that water drains north into McHargue Ditch, a likely jurisdictional Water of the U.S. Therefore, Wetland A should likely be considered a jurisdictional water of the U.S. Wetland A will be impacted by grading associated with the stream relocation and bridge replacement (0.24 acre).

Wetland B
Wetland B was classified as a PEM1A wetland. This wetland is located on a terrace north of McHargue Ditch and southeast of the intersection of CR 100 S and CR 500 West. The boundaries of Wetland B were delineated by lack of wetland vegetation. Due to its location within a floodplain, Wetland B likely receives flood waters and drainage on a consistent basis during rain events. The wetland exhibited poor plant species diversity and contained a dominant invasive species of reed canary grass (*Phalaris arundinacea*). These factors contribute to the conclusion that Wetland B can support a limited amount of wildlife or aquatic habitat and should be considered poor quality. Based on topography, it can be deduced that water drains south into McHargue Ditch, a likely jurisdictional Water of the U.S. Therefore, Wetland B should likely be considered a jurisdictional water of the U.S. Wetland B will be impacted by grading associated with the stream relocation and bridge replacement (0.1 acre).

Wetland C
Wetland C was classified as a PEM1A wetland. This wetland is located east of McHargue Ditch, and northeast of the intersection of CR 100 S and CR 500 West. The boundaries of Wetland C were delineated by lack of wetland vegetation. Due to its location within a floodplain, Wetland C likely receives flood waters and drainage on a consistent basis during rain events. The wetland exhibited poor plant species diversity and contained a dominant invasive species of reed canary grass (*Phalaris arundinacea*). These factors contribute to the conclusion that Wetland C can support a limited amount of wildlife or aquatic habitat and should be considered poor quality. Based on topography, it can be deduced that water drains southwest into McHargue Ditch, a likely jurisdictional Water of the U.S. Therefore, Wetland C should likely be considered a jurisdictional water of the U.S. Wetland C will be impacted by grading associated with the stream relocation and bridge replacement (0.06 acre).

Wetland D
Wetland D was classified as a PEM1A wetland. This wetland is located west of McHargue Ditch and northeast of the intersection of CR 100 S and CR 500 West. The boundaries of Wetland D were delineated by lack of wetland vegetation. Due to its location within a floodplain, Wetland D likely receives flood waters and drainage on a consistent basis during rain events. The wetland exhibited poor plant species diversity and contained a dominant invasive species of reed canary grass (*Phalaris arundinacea*). These factors contribute to the conclusion that Wetland D can support a limited amount of wildlife or aquatic habitat and therefore should be considered poor quality. Based on topography, it can be deduced that water drains southwest into McHargue Ditch, a likely jurisdictional Water of the U.S. Therefore, Wetland D should likely be considered a jurisdictional water of the U.S. Wetland D will be impacted by grading associated with the stream relocation and bridge replacement (0.06 acre).

Wetland E
Wetland E was classified as a PEM1A wetland. This wetland is located northwest of the intersection of CR 100 S and CR 500 West. The boundaries of Wetland E were delineated by lack of wetland vegetation. Due to its location within a floodplain, Wetland E likely receives flood waters and drainage on a consistent basis during rain events. The wetland exhibited poor plant species diversity and contained a dominant invasive species of reed canary grass (*Phalaris arundinacea*). These factors contribute to the conclusion that Wetland E can support a limited amount of wildlife or aquatic habitat and should be considered poor quality. Wetland E carries flow to Wetland D, a likely jurisdictional water of the U.S.
Therefore, Wetland E should likely be considered a jurisdictional water of the U.S. Wetland E will not be permanently impacted.

Conclusions
Wetlands A-D will be permanently impacted by the project. Wetland A will be impacted by grading associated with the stream relocation and bridge replacement (0.24 acre). Wetland B will be impacted by grading associated with the stream relocation and bridge replacement (0.1 acre). Wetland C will be impacted by grading associated with the stream relocation and bridge replacement (0.06 acre). Wetland D will be impacted by grading associated with the stream relocation and bridge replacement (0.06 acre). Wetland E will not be permanently impacted.

In total, there will be approximately 0.46 acre of permanent wetland impacts. All efforts to avoid and minimize wetland impacts have been considered as part of the ongoing design process. To meet the purpose and need of the project and incorporate the necessary design parameters, avoidance of the adjacent wetlands would have presented unique design considerations and risked the project not meeting the stated purpose and need.

There will be no temporary impacts to the wetlands as all cofferdams are located within the permanently impacted areas of the wetlands. Specialized fencing and "Do Not Disturb" signs will be installed along the construction limits to avoid impacts to Wetlands A, B, C, D and E beyond the construction boundaries. The wetlands will be illustrated on the design plans demarcating the placement of specialized fencing and "Do Not Disturb" signage. This avoidance and minimization measure to protect the wetlands has been included as a firm commitment in the *Environmental Commitments* section of this CE document.

The wetland impacts will require an IDEM Section 401 Water Quality Certification permit and a Section 404 permit from the USACE. Mitigation will likely be required as the cumulative acreage of permanent impacts to streams (0.37 acre) and impacts to wetlands (0.46 acre) is greater than 0.1 acre (cumulative stream and wetland impact (0.83 acre)). To compensate for unavoidable impacts, In Lieu Fee (ILF) mitigation option has been proposed as part of the ongoing permitting process. The ILF mitigation option is proposed to be purchased from the Whitewater-East Fork White IN SWMP Service Area.

The IDNR-DFW responded on November 2, 2022, and had no specific recommendations regarding impacts to wetlands (Appendix C, pages C-4 to C-6). All applicable IDNR-DFW recommendations are provided in the *Environmental Commitments* section of this CE document.

	Presence	**Impacts**	
		Yes	**No**
Terrestrial Habitat	**X**	**X**	

Total terrestrial habitat in project area: 1.25 Acres Total tree clearing: 0.00 Acres

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

Based on a desktop review, a site visit on October 13, 2021, by Metric Environmental, and the aerial map of the project area (Appendix B, page B-3) there is cultivated agricultural land located adjacent to the project site. Approximately 1.25 acres of terrestrial disturbance will be conducted along CR 100 South to conduct the proposed project. No tree clearing will occur to construct the project. The disturbed areas will be stabilized, graded and re-vegetated per INDOT standard specifications. All efforts to minimize terrestrial impacts were considered during the design phase of the project. The construction limits have been reduced to the extent that it is practical to build the project while implementing the required design standards and limiting terrestrial disturbance.

The IDNR-DFW responded on November 2, 2022 (Appendix C, pages C-4 to C-6) with recommendations to minimize terrestrial impacts including revegetating all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Southern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least five species of grasses and sedges and five species of wildflowers.

The IDNR-DFW also recommended that appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from leaving the construction area and maintaining these measures until construction is complete and all disturbed areas are stabilized (Appendix C, pages C-4 to C-6). All applicable agency recommendations are provided in the *Environmental Commitments* section of this document.

Protected Species

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

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

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

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

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

Based on a desktop review and the RFI report (Appendix E, page E-4), completed by Metric Environmental on March 17, 2022, the IDNR Jackson County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated November 22, 2022 (Appendix C, pages C-4 to C-6), the Natural Heritage Program's Database has been checked and no threatened, endangered or rare species have been reported within 0.5 mile of the project site. An INDOT 0.5-mile bat review occurred on March 10, 2022. No endangered bat species were identified within the search radius.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages C-18 to C-30). The project is within range of the federally endangered Indiana Bat (*Myotis sodalis*), the federally endangered Northern Long-eared Bat (NLEB) (*Myotis septentrionalis*) and the federally endangered Gray Bat (*Myotis grisescens*). Other species were generated in the IPaC species list along with the Indiana Bat, NLEB and Gray Bat. A "No Effect" determination was made for all other species indicated on the species list. On February 5, 2025, the USFWS Ecological Services Field Office responded that no additional coordination is necessary regarding the Gray Bat (Appendix C, page C-38).

The official species list generated from IPaC indicated two other listed species present within the project area: the whooping crane (*Grus americana*) and the monarch butterfly (*Danaus plexippus*). The whooping crane is listed as endangered wherever found, except where listed as an experimental population according to the Environmental Conservation Online System (https://ecos.fws.gov/ecp/species/758). The whooping crane is listed as an experimental population in this location. The monarch butterfly is identified as a candidate species and is not yet listed or proposed for listing. The project is not expected to impact the whooping crane or the monarch butterfly. No further coordination for these species is needed with USFWS.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. A bridge inspection occurred on September 26, 2024, and no bats or birds were observed. An effect determination key was completed on October 11, 2024, and based on the responses provided, the project was found to *"Not*

Likely to Adversely Affect (NLAA)" the Indiana bat and/or the NLEB (Appendix C, pages C-7 to C-17). INDOT reviewed and verified the effect finding on October 11, 2024, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding.

Avoidance and Minimization Measures (AMMs) include directing temporary lighting away from suitable habitat, and ensuring all operators and contractors are aware of all environmental commitments and AMMs. The AMMs are included as firm commitments in the *Environmental Commitments* section of this document.
Jackson County Bridge No. 197 over McHargue and the project's surrounding habitat is conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 - April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 - September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP/RSP. This is included as firm commitment in the *Environmental Commitments* section of this document.

A bridge inspection occurred on September 26, 2024, and no signs of bats or birds were found using the structure USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after September 26, 2026, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the *Environmental Commitments* of this document

The USFWS Service, Bloomington Suboffice responded on October 4, 2022, with no additional recommendations regarding endangered species (Appendix C, pages C-35 to C-36). This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act, as amended. If new information on endangered species at the site becomes available, or if project plans are changed, USFWS will be contacted for consultation.

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

Date Karst Evaluation reviewed by INDOT EWPO (if applicable): _____

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

Based on a desktop review and the Indiana Karst Region map, the project is located within the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topo map of the project area (Appendix B, page B-2), and the RFI report (Appendix E, page E-2) there are no karst features identified within or adjacent to the project area. In the early coordination response dated October 25, 2024, the Indiana Geological and Water Survey (IGWS) did not indicate that karst features exist in the project area (Appendix C, pages C-32 to C-33).

The IGWS did identify geological hazards including a 1% annual flood hazard; a high liquefaction potential; a low potential for bedrock resources and a high potential for sand/gravel resources. The aforementioned geological features will not be affected because scope of work will not involve deep excavation (i.e., greater than 15 feet below ground surface). Response from IGWS has been communicated with the designer on October 25, 2024. No impacts are expected.

SECTION C – OTHER RESOURCES

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

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

Check the appropriate boxes and discuss each topic below. Provide details about impacts and summarize resource-specific coordination responses and any mitigation commitments. Reference responses in the Appendix.

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

The Indiana Department of Environmental Management's Wellhead Proximity Determinator website (http://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on September 3, 2024, by Metric Environmental. This project is not located within a Wellhead Protection or Source Water Protection Area. No impacts are expected.

The Indiana Department of Natural Resources Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on September 3, 2024, by Metric Environmental. No wells are located near this project. Therefore, no impacts are expected.

Based on a desktop review of the INDOT MS4 website (https://entapps.indot.in.gov/MS4/) by Metric Environmental on September 3, 2024, and the RFI report, this project is not located within an Urban Area Boundary. No impact is expected.

Based on a desktop review, a site visit on October 13, 2021, by Metric Environmental, a review of the aerial map of the project area (Appendix B, page B-3) no public water systems were identified. Therefore, no impacts are expected.

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

If applicable, indicate the Floodplain Level?

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

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

Based on a desktop review of the Indiana Department of Natural Resources Indiana Floodway Information Portal website (http://dnrmaps.dnr.in.gov/appsphp/fdms/) by Metric Environmental on January 15, 2024, and the RFI report, this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, page F-20).

An early coordination letter was sent on October 3, 2022, to the local Floodplain Administrator for Jackson County. The floodplain administrators did not respond within the 30-day time frame. The project will require an IDNR Construction in a Floodway Permit. It is not anticipated that mitigation for floodway impacts will be required. The new bridge will be constructed approximately 100 ft. east of its current location.

This project qualifies as a Category 4 project which involves the replacement of existing drainage structures on essentially the same alignment, per the current *INDOT CE Manual*, which states:

There are no homes located within the base floodplain within 1,000 ft. upstream, and there are no homes located within the base floodplain within 1,000 ft. downstream. The proposed structure will have an effective capacity such that backwater surface elevations are not expected to significantly increase. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values; no significant change in flood risks; and no significant increase in potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant. A hydraulic design study that addresses various structure size alternates was completed by JSE Engineering during the preliminary design phase. A summary of this study will be included with the Field Check Plans.

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

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

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

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

Based on a desktop review, a site visit on October 13, 2021, by Metric Environmental, and the aerial photograph of the project area (Appendix B, page B-3) there is farmland as defined by the Farmland Protection Policy Act located adjacent to the project area. The project will not convert any farmland as the project will be constructed within the existing limits of the legal drain easement. No additional permanent right-of-way will be required to construct the project. An early coordination letter was sent on October 24, 2024, to the Natural Resources Conservation Service (NRCS). The NRCS responded in a letter dated November 4, 2024, and stated the project would not cause a conversion of prime farmland (Appendix C, page C-37). No alternatives other than those previously discussed in this document will be investigated without re-evaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
Minor Projects PA			**X**

Full 106 Effect Finding

No Historic Properties Affected	**X**	No Adverse Effect		Adverse Effect	

Eligible and/or Listed Resources Present

NRHP Building/Site/District(s)		Archaeology		NRHP Bridge(s)	**X**

County Jackson Route CR 100 South Des. No. 1703018

Documentation Prepared (mark all that apply)		**ESD Approval Date(s)**	**SHPO Approval Date(s)**
APE, Eligibility and Effect Determination	X	April 3, 2024	May 2, 2024
800.11 Documentation	X	April 3, 2024	May 2, 2024
Historic Properties Report or Short Report	X	May 2, 2022	May 31, 2022
Archaeological Records Check and Assessment	X	May 2, 2022	May 31, 2022
Archaeological Phase Ia Survey Report	X	May 2, 2022	May 31, 2022
Archaeological Phase Ic Survey Report			
Other: Historic Bridge Alternative Analysis	X	December 14, 2023	February 9, 2024
		MOA Signature Dates (List all signatories)	
Memorandum of Agreement (MOA)			

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

Per the terms of the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), the Federal Highway Administration-Indiana Division (FHWA) will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the Historic Bridges PA (Stipulation III).

Jackson County Bridge No. 197 has been classified as a Non-Select Bridge by the INDOT Historic Bridge Inventory, and thus, the procedures outlined in Stipulation III.B of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the bridge. Therefore, the finding for this project only applies to other resources located within the APE and not Jackson County Bridge No. 197. This document will satisfy the Section 106 responsibilities for other resources located in the APE.

Area of Potential Effects

Qualified professionals working for Metric Environmental and meeting the Secretary of the Interior's Professional Qualifications Standards defined an Area of Potential Effect. The Area of Potential Effects (APE) is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking" [36 CFR § 800.16(d)]. The APE for aboveground resources was drawn to include all locations where visual, physical, and traffic-related impacts that may occur as a result of the project, whichever alternative is selected. The established Area of Potential Effects (APE) encompasses a 0.25 mile radius from Jackson County Bridge No. 197. The APE for archaeology is represented by the project area, which consists of all proposed existing right-of-way that was archaeologically investigated. A map of the APE can be found in Appendix D, page D-10.

Coordination with Consulting Parties:

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. In accordance with 36 CFR 800.2(c), individuals and groups with a demonstrated interest in the undertaking and those with consultative roles in the process. were invited to participate in efforts to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. The Indiana State Historic Preservation Officer is housed in the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology (SHPO/DNR-DHPA) and is automatically considered a consulting party for federally funded transportation projects due to its mandated or designated role as specified in 36 C.F.R. § 800.2. In addition to the SHPO, the parties listed below were invited to participate as consulting parties for this undertaking.

Invited Consulting Party	Accepted/Decline Invitation
Indiana Landmarks, Southern Regional Office	No Response
Jackson County Highway Superintendent	No Response
Jackson County History Center	No Response
Jackson County Historian	No Response
Jackson County Commissioners	No Response
History and Library Museum	No Response
Historic Spans Task Force	No Response
Historic Bridge Foundation	No Response
Historicbridges.org	No Response
Hoosier Historic Bridges	No Response
Eastern Shawnee Tribe of Oklahoma	Accepted
Miami Tribe of Oklahoma	Accepted
Peoria Tribe of Indians Oklahoma	Accepted
Pokagon Band of Potawatomi	No Response
Shawnee Tribe	No Response
Delaware Tribe of Indians, Oklahoma	No Response

A hard copy of the Early Coordination Letter (ECL) was sent electronically to the SHPO on January 26, 2021, and the other non-Tribal consulting parties received it via email (Appendix D, pages D-40 to D-42). On January 26, 2021, the INDOT-CRO also emailed the ECL to Tribal consulting parties. All parties were requested to indicate whether they agreed or did not agree to participate as a consulting party within thirty (30) days of receipt of the invitation. It was noted that if the invited consulting party did not reply, they would not be considered a consulting party and would not receive further information about the undertaking unless the scope changed.

In a letter dated February 10, 2021, the SHPO acknowledged receipt of the ECL and noted they were not aware of any further stakeholders who should be invited to be consulting parties (Appendix D, pages D-31 to D-32). The letter from the Miami Tribe of Oklahoma dated March 9, 2021 (Appendix D, page D-33) offered no objection to the project but stated that "if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery." On May 3, 2022, the Peoria Tribe of Indians of Oklahoma acknowledged receipt of the HPSR and Phase Ia archaeological reconnaissance report and accepted the consulting party invitation (Appendix D, Page D-40). On May 23, 2022, the Eastern Shawnee Tribe of Oklahoma accepted the consulting party invitation (Appendix D, page D-41).

Archaeology:
Pursuant to 36 CFR § 800.4(b), a Qualified Professional Archaeologist with Metric Environmental prepared an Archaeological Short Report (ASR) for the project. The ASR was prepared by Megan Copenhaver and Sydney Heidenreich under the supervision of Samuel Snell (Snell, 4/27/22). A literature review of the SHAARD database indicated that there are no previously recorded archaeological sites within 1.0 miles of the project. Metric staff conducted field work that included a visual inspection, pedestrian survey, and the excavation of shovel test probes. No additional archaeological resources were identified as a result of the investigation. The ASR recommended the project be allowed to proceed with no additional work. Excerpts of the ASR are provided in Appendix D, pages D-19 to D-21. The INDOT-CRO distributed the report to consulting parties on April 27, 2022 (Appendix D, pages D-34 to D-36). In a letter dated May 31, 2022, the SHPO concurred with the opinion of the archaeologist that no further archaeological investigations are necessary (Appendix D, pages D-42 to D-43).

Historic Properties:
Pursuant to 36 CFR § 800.4(b), personnel with Metric Environmental, who meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61, reviewed the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM), NRHP database, Indiana Bridge Inspection Application System (BIAS), *Indiana Historic Bridges Inventory*, the INDOT-Cultural Resources Office (CRO) Public Web Map App, the *Indiana Register of Historic Sites and Structures* (IRHSS) and the Indiana Historical Bureau's Historic Markers database. The Indiana Historic Sites and Structures Inventory (IHSSI) for Jackson County was also reviewed.

Additionally, a field survey was conducted on March 24, 2022, to identify and evaluate any historic resources present within the APE. One NRHP eligible resource is situated within the proposed APE: Jackson County Bridge No. 197, which was determined eligible for the NRHP per the 2010 *Indiana Historic Bridge Inventory*. The bridge is eligible under Criterion C for its representation of an early or distinctive phase in bridge construction, design, or engineering, and it retains historic integrity necessary to convey its engineering significance. The classification of bridges into "Select" or "Non-Select," as part of the Historic Bridges PA, also resulted in the determination of Jackson County Bridge No. 197 as a "Non-Select" bridge because it is not considered an excellent example of its type and/or it is not suitable for preservation. There are no other resources listed in or eligible for listing in the NRHP nor in the Indiana Register of Historic Sites and Structures within the proposed APE of this project.

A Historic Property Short Report (HPSR) (Garrard and Hudziak, 4/27/2022) was developed and provided recommendations concerning the historic significance of the properties within the APE. Excerpts of the HPSR are provided in Appendix D, pages D-16 to D-18. The INDOT-CRO released the HPSR for consulting party review on May 2, 2022. Metric Environmental submitted the HPSR to SHPO and other consulting parties. In a letter dated May 31, 2022, the SHPO acknowledged receipt of the HPSR and that the FHWA is satisfying its Section 106 responsibilities for the NRHP-eligible Jackson County Bridge No. 197 following the procedures outlined in Stipulation III.B of the Indiana Historic Bridges PA (Appendix D, pages D-42 to D-43). The SHPO agreed with the HPSR's proposed APE and recommendations that there are no other historic properties listed or eligible for inclusion in the NRHP with the project's APE.

On May 3, 2022, the Miami Tribe of Oklahoma acknowledged receipt of the HPSR and Phase Ia archaeological reconnaissance report (Appendix D, Page D-39). On May 3, 2022, the Peoria Tribe of Indians of Oklahoma acknowledged receipt of the HPSR and Phase Ia archaeological reconnaissance report and accepted the consulting party invitation (Appendix D, Page D-40). On May 23, 2022, the Eastern Shawnee Tribe of Oklahoma acknowledged receipt of the HPSR and Phase Ia archaeological reconnaissance survey report materials and accepted the consulting party invitation (Appendix D, page D-41). The Tribe's offered objection to the undertaking but requested to be immediately notified and consulted if human remains or Native American cultural items are discovered during any phase of the proposed project. On March 12, 2024, the Eastern Shawnee Tribe of Oklahoma acknowledged receipt of the HBAA (Appendix D, page D-53). They stated the project would have no adverse effect upon known sites of interest to the Eastern Shawnee Tribe.

Documentation Findings:
Per the terms of the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), the Federal Highway Administration-Indiana Division (FHWA) will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the Historic Bridges PA (Stipulation III). Jackson County Bridge No. 197 is classified as a "Non-Select" bridge by the *Indiana Historic Bridge Inventory* and thus, the procedures outlined in Stipulation III. of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities.

Per the terms of the Historic Bridge PA, the finding for this project only applies to other resources located within the APE and not Jackson County Bridge No. 197. Regarding other resources in the project area, INDOT, on behalf of the FHWA, has determined a "No Historic Properties Affected" finding is appropriate because no other properties listed in or eligible for listing in the National Register are present within the APE. On April 3, 2024, the INDOT-CRO, on behalf of the FHWA approved the "No Historic Properties Affected" finding for this project (Appendix D, Page D-1 to D-7). The finding of effect and 800.11 documentation were provided to the SHPO and the other consulting parties for a 30-day review and comment period. On May 2, 2024, the Indiana SHPO responded and concurred with the "No Historic Properties Affected" finding (Appendix D, Page D-67 to D-68). No additional responses were received.

Public Involvement:
In accordance with 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4), the views of the public were sought regarding the effect of the proposed project. To meet the public involvement requirements of Section 106, a legal notice of Federal Highway Administration-Indiana Division's (FHWA's) finding of "No Historic Properties Affected" was published in the *Seymour Tribune* on May 8, 2024, offering the public an opportunity to submit comment pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The public comment period closed after 30 days on June 7, 2024. No comments or responses were received. The legal notice and the affidavit of publication are provided in Appendix D, pages D-69 to D-71.

The HBAA was sent out to CPs on January 11, 2024. In a letter dated February 9, 2024, the SHPO provided comments regarding the HBAA (Appendix D, Pages D-50 to D-52). The SHPO concurred with the HBAA's recommendations that Alternatives A, B-1, B-2, C-1, and C-2 are not prudent alternatives. Additionally, the SHPO stated they understood that Alternatives D and E would remove the existing bridge substructure, but Alternative D would not meet the purpose and need of the project.

The SHPO agreed that Alternative E is the preferred alternative because it is prudent and feasible and allows the relocation and preservation of the bridge at another location. They stated their understanding that the Jackson County Fairgrounds expressed interest in taking ownership of the bridge and if the preferred alternative selected includes transferring ownership, that INDOT shall execute an agreement between the INDOT, Jackson County Highway Department, the Jackson County Fair Board (Fairgrounds), and the Indiana SHPO.

SHPO has determined that photo documentation of the bridge is required consistent with the *Historic Bridges PA: Attachment B-Standard Treatment Approach for Historic Bridges.* The documentation shall be produced in keeping with the applicable photographic standards of the *Indiana DNR–Division of Historic Preservation and Archaeology Minimum Architectural Documentation.* One CD or DVD of the documentation shall be provided to the Indiana State Archives, and one CD or DVD shall be provided to at least one local public or not-for-profit organization that agrees to retain the CD or DVD permanently and make it available to the public. The local public/not-for-profit repository has not yet been determined; however, it will likely be retained by a historical preservation organization in Jackson County. SHPO will be notified once the local repository is determined as part of the photo documentation process.

In accordance with the HBPA, Stipulation III.B.2, a legal notice to interested parties for proposals for the rehabilitation and reuse, or the storage and future reuse of the bridge was published in the *Indianapolis Star* on May 19, 2021, and the notice was published on May 14, 2021, in the *Seymour Tribune*. The advertisement was also included on the INDOT Historic Bridges Marketing Program website (Appendix D, pages D-62 to D-63). Signs were posted at the bridge site on January 4, 2021 (Appendix D, pages D-54 to D-55). Jackson County has expressed a commitment to obtain ownership of Jackson County Bridge No. 197 and relocate the bridge to the Jackson County fairgrounds for pedestrian use (Appendix I, pages I-26 to I-28). INDOT shall execute an agreement between INDOT, the Jackson County Highway Department, the Jackson County Fair Board (Fairgrounds), and the Indiana SHPO.

The marketing period will end when the public hearing comment period ends. The legal notices and the affidavits of publication are provided in Appendix D, pages D-56 to D-61.

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

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

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

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

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

Based on a desktop review, the aerial photograph of the project area (Appendix B, page B-3), and the RFI report (Appendix E, page E-2) there are no Section 4(f) resources located within the 0.5 mile search radius. According to additional research and the site visit conducted on October 13, 2021, by Metric Environmental, it was determined that Jackson County Bridge No. 197 is located within the project area. Jackson County Bridge No. 197, a historic property, has been classified as a Non-Select Bridge by the INDOT *Historic Bridge Inventory* and is considered a Section 4(f) resource.

The Section 4(f) statute places restrictions on the use of land from historic sites for highway improvements but makes no mention of historic bridges or highways that are already serving as transportation facilities. FHWA therefore determined that Section 4(f) will only apply when a historic bridge is demolished, or if the historic quality for which the facility was determined eligible for the NRHP is substantially affected by the proposed improvements. This resource is used for transportation purposes. Jackson County Bridge No. 197 will be evaluated through the *Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges*. The proposed bridge project qualifies for the programmatic Section 4(f) evaluation and approval for FHWA projects that necessitate the use of a historic bridge when the project meets the following criteria:

1. The bridge is to be replaced or rehabilitated with Federal funds.
2. The project will require the use of a historic bridge structure which is on or is eligible for listing on the NRHP.
3. The bridge is not a National Historic Landmark.
4. The FHWA Division Administrator determines that the facts of the project match those set forth by the investigation of the appropriate Alternatives, Findings, and Mitigation.
5. Agreement among the FHWA, the SHPO, and the ACHP has been reached through procedures pursuant to Section 106 of the NHPA.

The Jackson County Bridge No. 197 bridge project meets these criteria. To apply the Historic Bridge Programmatic Section 4(f) Evaluation, three alternatives that avoid any use of the historic bridge must be examined: do nothing, build a new structure at a different location without affecting the historic integrity of the historic bridge, and rehabilitate the historic bridge without affecting the historic integrity of the structure. The Indiana Historic Bridges PA requires a more extensive alternatives analysis evaluating additional alternatives. Per the terms Historic Bridges PA, FHWA will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the PDP of the Historic Bridges PA (Stipulation III).

Jackson County Bridge No. 197 has been classified as a Non-Select Bridge by the INDOT Historic Bridge Inventory, and thus, the procedures outlined in Stipulation III.B of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the bridge. The alternatives described in this document are based on the guidance for writing a historic bridge Section 4(f) alternatives analysis, produced by Janssen & Spaans Engineering, Inc. Per the guidance, alternatives A, B1, B2, C1, C2, D1, D2, and E must be analyzed in consecutive order until a feasible and prudent alternative has been determined which also results in the least amount of harm to the protected resource. A feasible alternative is one that is possible to engineer, design, and build, and a prudent alternative is one that does not present significantly unique or unusual factors (e.g. cost; social, economic, or environmental impacts; community disruption). Once a feasible and prudent alternative has been determined, the remaining alternatives do not need to be analyzed.

Additional details regarding each alternative can be found in the HBAA located in Appendix I, pages I-9 to I-24. The Alternatives Analysis Comparison Table provided in the HBAA document illustrates costs that were generated at the completion of the HBAA in 2023 (Appendix I, page I-22).

Alternative A: Do Nothing/No Build
This alternate would not directly affect the historic significance of the bridge but would allow for the continued deterioration of the bridge. This alternative would avoid any work to the existing bridge. As the bridge deteriorates the load capacity would decrease and require a lower load posting. Additionally, the structure may be closed at some time in the future due to deterioration and potential failure. This alternative would not require the expenditure of funds and would have no environmental impact. Although it is feasible to do nothing because of the low volume of traffic on CR 100 South, this solution is not prudent since it does not meet

the purpose and need of the project. This alternative does not meet the purpose and need of the project and was discarded from further consideration (Appendix I, pages I-16 to I-17).

Alternative B-1: Rehabilitation for Continued Vehicular Use Meeting Secretary of Interior's Standards for Rehabilitation without Intersection Relocation

This alternative would rehabilitate the existing structure for continued one lane vehicular use. The existing clear roadway width of 17.8 ft would remain and would meet the required minimum clear roadway width of 15 ft. per the Indiana Design Manual (IDM) Figure 412-2B. This alternative would rehabilitate the existing bridge to a standard that meets the Secretary of Interior's Standards (SOIS) for Rehabilitation. This alternative would include cleaning and painting the existing truss. Based on deterioration and load capacity, it is estimated that all lower chord and top vertical member gusset-plates would need to be replaced in-kind, matching the existing elements in appearance. Structural materials would be replaced in-kind, and the historic integrity of the bridge would be retained. The bridge's existing alignment and skew would not be altered, and the bridge would not be widened. Jacking and temporary shoring would be used to support the bridge during the rehabilitation process. These repairs would improve the condition of the truss and achieve the required load capacity to 15 tons (H15 per IDM Figure 412-2A).

Alternative B-1 is feasible. However, this alternative doesn't meet the purpose and need of the project because it fails to address the substandard roadway geometry, inadequate bridge width, and would not achieve the necessary load capacity or improve the hydraulic adequacy of McHargue Ditch (Appendix I, page I-18). Furthermore, the existing roadway width would not allow use by agricultural vehicles, emergency response vehicles or school buses. The 25-year required year life span for the existing bridge is not expected to be achieved with this alternative.

The estimated total cost of this alternative is approximately $453,000.00, which is 23.2% of the cost of Alternative E. This alternative does not exceed the 40% economic threshold that warrants full bridge replacement of Non-Select Bridges in a low-volume rural setting per IDM 412-5.04(02). However, the following two criteria of IDM 412-5.04(02) warrant a replacement: the bridge waterway opening is inadequate with a rating of 3 out of 9 and the bridge is structurally deficient (fractural critical). This alternative is feasible, but it is not prudent because it does not meet the purpose and need of the project. For these reasons, this alternative was discarded from further consideration

Alternate B-2: Rehabilitation for Continued Vehicular Use Meeting Secretary of Interior's Standards for Rehabilitation with Intersection Relocation

This alternative involves rehabilitating the existing structure in accordance with Alternative B-1, except this option includes moving the intersection slightly west approximately 110 ft and increasing the turn radii of the intersection. This realignment of the intersection would also include correcting the existing grade difference from the bridge deck to the intersection with CR 500 West. Alternative B-2 is feasible. The estimated total cost of this alternative is approximately $1,147,000, which is 58.9% of Alternative E. Although Alternative B-2 is feasible it is not prudent because it does not meet the purpose and need of the project because it fails to correct the bridge width and structural load capacity. For these reasons, this alternative was discarded from further consideration (Appendix I, page I-19).

Alternative C-1: Rehabilitation Meeting Secretary of Interior's Standards (1-way pair option)

This alternative would rehabilitate the existing structure for continued vehicular use, for one lane of traffic, in the same manner as outlined in Alternative B-1. It also proposes the construction of a new one-lane bridge on an adjacent alignment to carry the opposing lane of traffic, thus creating a one-way pair. The new bridge would consist of a signal-span bridge similar in length to the existing bridge. The new bridge would carry one lane of traffic and be designed to meet all current structural and geometric design criteria. The new structure would be located north of the existing structure. This alternative would also involve building a new approach roadway to provide enough length for tapering the existing roadway for the one-way bridge pair. Approximately three acres of additional permanent right-of-way would need to be acquired. This alternative would result in greater environmental impacts. In addition to the rehabilitation costs in Alternative B-1, this option includes costs associated with a new bridge, right-of-way costs, and road approach modification.

Identical to the B-1 Alternative, the rehabilitated truss would achieve the capacity for the H-15 loading. The 25-year required year life span for the existing bridge would be achieved with this alternative. The estimated total cost of this alternative is approximately $1,615,200, which is 83% of the cost of Alternative E. Although Alternative C-1 is feasible, it is not prudent due to the high relative cost compared to the replacement Alternative E. Furthermore, this alternative does not meet the purpose and need of the project. For these reasons, this alternative was discarded from further consideration (Appendix I, page I-19).

Alternative C-2: Two-Way Bypass with Non-Vehicular Use

Alternative C-2 involves creating a two-way bypass in conjunction with Alternative C-1. The bypass option would provide a concrete beam bridge with a 28 ft. clear roadway width along with the relocation of the intersection slightly west. The right-of-way required would be equivalent to that prescribed in Alternative C-1. This alternative does not include rehabilitation of the existing structure.

The existing bridge currently can handle a 10 ton load weight, which meets the design requirements for pedestrian bridges. Due to the lack of pedestrian access at the site, a pedestrian walkway would be created adjacent to the existing facility so the bridge may be accessed. Currently, there are no existing pedestrian facilities in the project vicinity. Due to this bridge's remote location, a small pull-off parking area would be created for visitors since the existing roadway facility is too narrow to accommodate this kind of use.

The estimated cost of Alternative C-2 ($1,499,700) is approximately 77% of the cost Alternative E. Alternative C-2 is feasible; however, it is not prudent because of the high relative cost to the replacement alternative and it wouldn't resolve the hydraulic deficiencies, nor does it address the reduced load capacity; the two criteria that warrant full bridge replacement per IDM 412-5.04(02). The 25-year required year life span for the existing bridge is not expected to be achieved with this alternative. Additionally, this alternative would require a responsible party to assume ownership of the bridge at the existing location, maintaining the bridge for perpetuity. Without a responsible party assuming ownership of the existing bridge, this alternative is not prudent. For these reasons, this alternative was discarded from further consideration (Appendix I, pages I-20 to I-21).

Alternative D: Bridge Replacement In-Place with Existing Channel Alignment

This project would involve constructing a new bridge with a 28 ft. clear roadway width to replace the existing truss bridge. Alternative D, like previous bypass/rehab alternatives, would slightly move the intersection west. For this alternative, there is no need to move the intersection as far west because there would be no truss obstructing visibility of westbound traffic on CR 100 South. The estimated cost of Alternative D is $1,541,800, which is 79.1% of Alternative E. Although Alternative D provides a replacement structure with a larger hydraulic opening and removes the need for continued fracture critical inspections due to reduced load capacity, the inadequate alignment of the channel would result in sediment buildup over time resulting in a reduced and insufficient hydraulic opening, therefore Alternative D is considered not prudent. For these reasons, this alternative was discarded from further consideration (Appendix I, page I-21).

Alternatives D and E (the preferred alternative) would remove the existing bridge superstructure for potential relocation and reuse, with construction of a new bridge on the existing alignment; thus, they would meet the project purpose and need. While the bridge would be relocated to another location, these alternatives would minimize the changes to the historic character of the bridge. However, Alternative D would result in a reduced and insufficient hydraulic opening over time. Alternative E is the chosen feasible and prudent alternative to meet the overall purpose and need of the project.

Alternative E: Bridge Replacement with Channel Realignment

This alternative will consist of shifting the bridge location approximately 100 ft. to the east of its current position and modifying the alignment of McHargue Ditch to eliminate the existing 90-degree bend in the channel. The existing waterway opening beneath the bridge is inadequate per the HBAA (Appendix I, page I-13), which is the first criterion to warrant bridge replacement. This will improve the hydraulic performance of the bridge. The proposed channel realignment will include two 45-degree bends; the first bend will be located north of the bridge approximately 200 ft. along CR 500 West and the second bend will be located approximately 25 ft. south of the bridge (Appendix B, pages B-10 to B-12).

The preferred alternative will provide a new bridge structure across McHargue Ditch on the existing roadway alignment since there will be no movement of the bridge north or south. The existing pony truss bridge will be replaced with a three-span, continuous reinforced slab bridge.

Impacts to the historic bridge will be mitigated through the stipulations outlined within the HBPA process for Non-Select bridges. Per the HBPA III-B, if rehabilitation alternatives are not feasible and prudent, the bridge owner shall market the historic bridge for re-use. Jackson County has expressed a commitment to obtain ownership of Jackson County Bridge No. 197 and relocate the bridge to the Jackson County fairgrounds for pedestrian use. The existing bridge will be disassembled and reassembled at the new location. See Appendix F of the HBAA for Jackson County's commitment to relocate the bridge (Appendix I, pages I-26 to I-28).

Alternative E is feasible and would meet the purpose and need of the project and would also provide an opportunity to preserve the bridge. Alternative E is considered prudent because it would improve the physical condition rating of the crossing structure, provide the necessary load capacity, improve the roadway geometrics and address the hydraulic inadequacies of McHargue Ditch. In addition, shifting the bridge 100 ft. to the east will meet design standards for turn radii and sight distance at the intersection of CR 100 South and CR 500 West, improving intersection sight distance. The cost of the preferred alternative is approximately $1,948, 700.00 (Appendix I, page I-22 Table 3 of the HBAA).

Conclusions

Alternatives A, B-1, B-2, C-1, and C-2 retain the existing structure in its current location. Alternative A, the Do Nothing alternative minimizes all impacts by allowing the bridge to remain in its current condition; however, this alternative does not meet the project purpose and need. Alternatives B-1, B-2 and C-1 propose to rehabilitate the bridge to the SOIS for rehabilitation, which would minimize the impacts to the historic structure; however, these alternatives have been demonstrated to have an additional cost involved and do not meet the purpose and need of this project. Thus, they are not prudent alternatives.

Alternative C-2 proposes a two-way bypass with non-vehicular use of the existing bridge. This alternative minimizes the impacts to the historic structure and is feasible. This alternative would require a responsible party to step forward to take ownership and maintenance responsibility for the existing bridge. The inadequate waterway opening and channel alignment would remain at the existing bridge. Therefore, it would not satisfy the purpose and need and is considered not prudent. Alternatives D and E would remove the existing bridge superstructure for potential relocation and reuse, with construction of a new bridge on the existing alignment; thus, they would meet the project purpose and need. While the bridge would be relocated to another location, this alternative would minimize the changes to the historic character of the bridge.

Alternative E is the chosen feasible and prudent alternative. The documentation shall be produced in keeping with the applicable photographic standards of the *Indiana DNR–Division of Historic Preservation and Archaeology Minimum Architectural Documentation.* One CD or DVD of the documentation shall be provided to the Indiana State Archives and one CD or DVD shall be provided to at least one local public or not-for-profit organization that agrees to retain the CD or DVD permanently and make it available to the public. The local public/not-for-profit repository has not yet been determined; however, it will likely be retained by a historical preservation organization in Jackson County.

SHPO will be notified once the local repository is determined as part of the photo documentation process. This is a firm commitment included in the *Environmental Commitments* section of this document. Pursuant to the Programmatic Section 4(f) Evaluation and Approval for FHWA projects that necessitate the use of historic bridges, the preferred alternative, Alternative E, will result in a use of the historic bridge. The FHWA signature of this environmental document will act as FHWA concurrence of this *Programmatic* Section 4(f) evaluation for Jackson County Bridge No. 197.

Section 6(f) Involvement	**Presence**	**Use**	
		Yes	**No**
Section 6(f) Property	☐	☐	☐

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

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use. A review of Section 6(f) properties on the INDOT ESD website revealed six properties in Jackson County that have received LWCF funding (Appendix I, page I-1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

SECTION F – Air Quality

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

Location in STIP: Page 180

Name of MPO (if applicable):

Location in TIP (if applicable):

Level of MSAT Analysis required?

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

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

This project is included in the Fiscal Year (FY) 2024-2028 Statewide Transportation Improvement Program (STIP) (Appendix H, page H-1). The 2024-2028 STIP has right-of-way costs ($20,000.00) listed that do not apply since no additional permanent right-of-way will be necessary. The STIP will be updated if necessary prior to approval of the Environmental Consultation Form (ECF). This is included as a firm commitment.

This project is located in Jackson County, which is currently in attainment for all criteria pollutants according to the EPA Nonattainment/Maintenance Status List located at https://www3.epa.gov/airquality/greenbook/anayo_in.html. Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

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

SECTION G - NOISE

Noise	Yes	No
Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?		X

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

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

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

SECTION H – COMMUNITY IMPACTS

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

Discuss how the project complies with the area's local/regional development patterns; whether the project will impact community cohesion; and impact community events. Discuss how the project conforms with the ADA Transition Plan.

The U.S. Department of Housing and Urban Development (HUD) was consulted as part of the early coordination process regarding possible regional, community or neighborhood factors associated with this project. No response was received. On August 21, 2023, Metric conducted an on-line review of the Indiana Festivals website (http://www.indianafestivals.org). There are no events identified within or near the project area that would be potentially impacted during construction of the project. No impact is expected.

The Americans with Disabilities Act (ADA) requires a transition plan by local and state governments. Such a plan includes how the government will remove barriers to accessibility over time for persons with disabilities, such as installing curb ramps at intersections, making a web site accessible for persons with low vision, ensuring public meetings are fully accessible to persons with disabilities and other related issues. Jackson County has an approved ADA transition plan; however, there are no existing ped facilities within the project area and the project scope does not include them. However, this project will not preclude the future development of ped facilities; therefore, the project complies with the ADA transition plan.

This project will not change the general development patterns, population density, or residential or commercial growth rate of the project area. Furthermore, there will be no permanent impacts to community cohesion, local mobility, access, pedestrian or motorist safety or emergency services as a result of the project. The project will enable access to emergency vehicles that currently have to detour because of the condition of the bridge. The project will not have any adverse impacts on the local tax base or property values.

Public Facilities and Services

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

Based on a desktop review, a review of the aerial map of the project area (Appendix B, page B-3), and the RFI report (Appendix E, page E-2), there are no public facilities located within the 0.5 mile search radius. The site visit conducted on October 13, 2021, by Metric Environmental confirmed that there are no public facilities located within or adjacent to the project area, therefore, no impacts are expected. Access to all properties will be maintained during construction.

The INDOT Office of Aviation responded to early coordination on October 25, 2024, stating there are no issues with surrounding airspace; however, if any object will exceed 200 ft. in height coordination with the Federal Aviation Administration (FAA) will be required (Appendix C, page C-34).

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

County Jackson Route CR 100 South Des. No. 1703018

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

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

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

No relocations of people, businesses or farms will be necessary to complete the proposed project.

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

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

Date RFI concurrence by INDOT SAM (if applicable): August 17, 2022

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

Based on a review of GIS and available public records, and a RFI completed by Metric Environmental on March 17, 2022, and INDOT-SAM provided their concurrence on August 17, 2022 (Appendix E, page E-4). No sites with hazardous material concerns (hazmat sites) or sites involved with regulated substances were identified in or within 0.5 mile of the project area. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)	**Likely Required**
Army Corps of Engineers (404/Section10 Permit)	
Nationwide Permit (NWP)	
Regional General Permit (RGP)	**X**
Individual Permit (IP)	
Other	
IN Department of Environmental Management (401/Rule 5)	
Nationwide Permit (NWP)	
Regional General Permit (RGP)	
Individual Permit (IP)	
Isolated Wetlands	**X**
Rule 5	**X**
Other	
IN Department of Natural Resources	
Construction in a Floodway	**X**
Navigable Waterway Permit	
Other	
Mitigation Required	**X**
US Coast Guard Section 9 Bridge Permit	
Others (Please discuss in the discussion below)	**X**

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

The project will require a Construction Stormwater General Permit (CSGP), formerly known as a Rule 5 due to the disturbance of more than 1.0 acre of land.

The permanent stream and wetland impacts will require an IDEM Section 401 Water Quality Certification permit and a Section 404 permit from the USACE. Mitigation will likely be required as the cumulative acreage of permanent impacts to streams and wetlands is greater than 0.1 acre (0.1199 acre). To compensate for unavoidable impacts, In Lieu Fee (ILF) mitigation option has been proposed as part of the ongoing permitting process. The ILF mitigation option is proposed to be purchased from the Whitewater-East Fork White IN SWMP Service Area.

An IDNR Construction in a Floodway permit will also be required. Floodway mitigation is not likely anticipated. In addition, a legal drain permit will likely be required from the Jackson County Drainage Board.

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

ENVIRONMENTAL COMMITMENTS

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

Firm:

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

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

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

4. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)

5. Pursuant to the Indiana Historic Bridges PA, this bridge must be photographically documented prior to the approval of the Environmental Consultation Form (ECF) by a qualified professional historian, architectural historian, or architect. Provide overall views of the bridge and representative photographs of its deck, abutments, piers, along with any additional character defining features. The documentation shall be produced in keeping with the applicable photographic standards of the *Indiana DNR–Division of Historic Preservation and Archaeology Minimum Architectural Documentation.* One CD or DVD of the documentation shall be provided to the Indiana State Archives and one CD or DVD shall be provided to at least one local public or not-for-profit organization that agrees to retain the CD or DVD permanently and make it available to the public. Once the local repository is determined, SHPO will be notified. (IDNR-SHPO)

6. Specialized fencing and "Do not Disturb" signs will be installed along the construction limits to avoid impacts to Wetlands A, B, C, D and E beyond the construction boundaries. The wetlands will be illustrated on the design plans demarcating the placement of specialized fencing and "Do Not Disturb" signage. (INDOT ESD)

7. Jackson County Bridge 197 over McHargue Ditch and the project's surrounding habitat is conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 - April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 - September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP/RSP. (INDOT ESD)

8. A bridge inspection occurred on September 26, 2024, and no signs of bats or birds were found using the structure USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after September 26, 2026, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)

9. Any work in a wetland area within right-of-way or in borrow/waste areas is prohibited unless specifically allowed in the U.S. Army Corps of Engineers permit. (INDOT ESD)

10. If any object will exceed 200 ft. in height coordination with the Federal Aviation Administration (FAA) will be required. (INDOT, Office of Aviation)

11. If warranted, the INDOT PM will update the STIP before approval of the Environmental Consultation Form (ECF). (INDOT ESD)

For Further Consideration:

12. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR-DFW)

13. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pump-arounds. (IDNR-DFW)

14. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR-DFW)

15. Limit the use of riprap on the channel banks, if needed, to toe protection extending up to the ordinary high water mark (OHWM). Do not place riprap in the bed of the channel (unless sumped across the bed to avoid creating a fish passage obstruction) and use alternative erosion protection materials whenever possible. From the OHWM to the top of the banks, heavy duty erosion control blankets or turf reinforcement mats or a similar bioengineering method should be used and these materials should be seeded with native plants to allow a natural, vegetated stream bank to develop (IDNR-DFW)

16. The new, replacement, or rehabbed structure, and any bank stabilization under the structure should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR-DFW)

17. Avoid all work within the inundated part of the stream channel 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. (USFWS)

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

19. Restrict below low-water work in streams to placement of culverts, piers, pilings, and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)

20. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat. (USFWS)

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

APPENDICES

APPENDIX G: Public Involvement

APPENDIX H: Air Quality

APPENDIX I: Additional Studies

Appendix A

INDOT Supporting Documentation

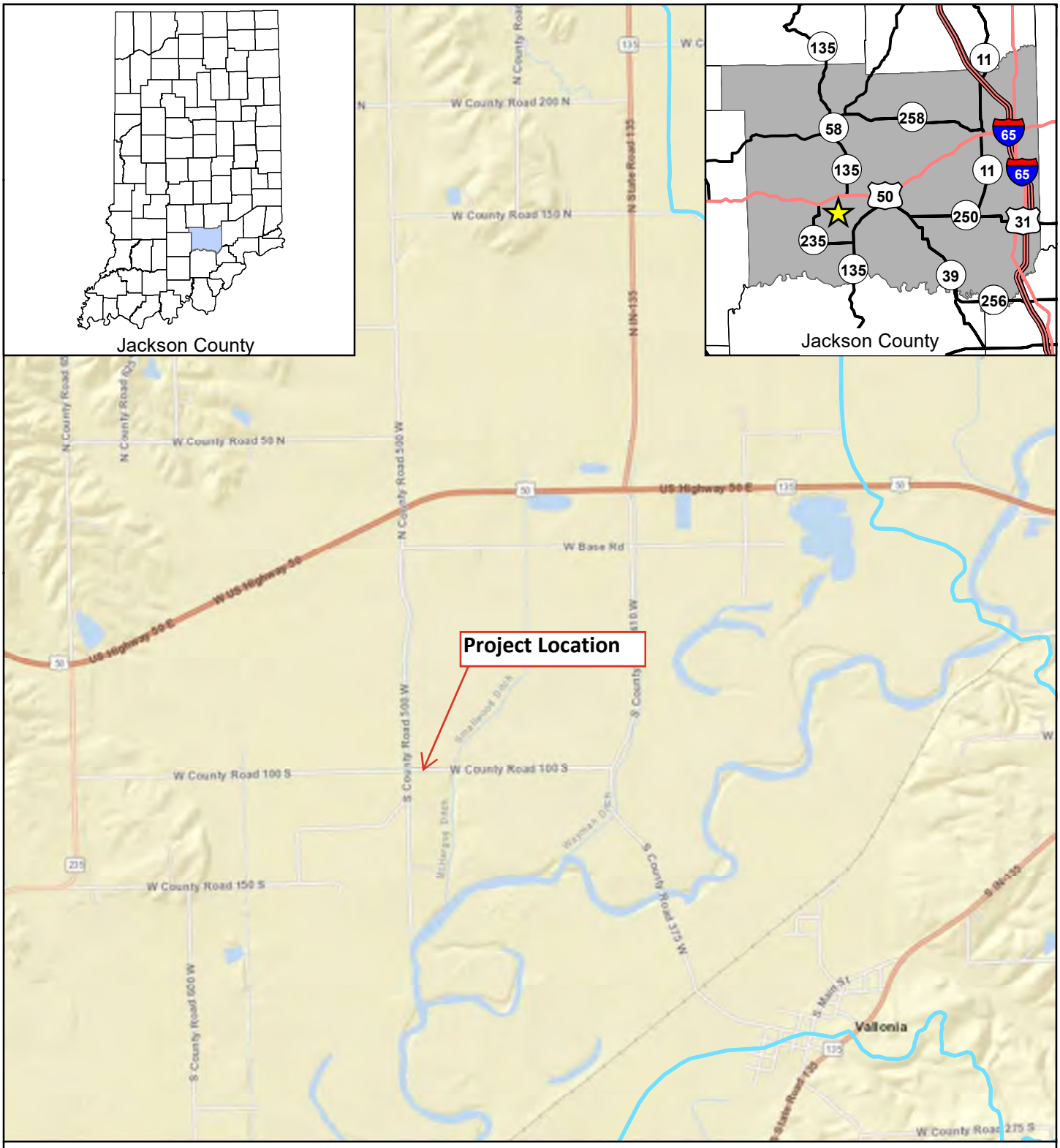
Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4[1]
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect" Or Historic Bridge involvement[2]
Stream Impacts[3]	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit[4]
Wetland Impacts[3]	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way[5]	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations[6]	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	"No Effect", "Not likely to Adversely Affect" (With select AMMs[7])	"Not likely to Adversely Affect" (With any AMMs or commitments)	-	"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic[8]
Threatened/Endangered Species (Any other species)*	Falls within guidelines of USFWS 2013 Interim Policy or "No Effect"	"Not likely to Adversely Affect"	-	-	"Likely to Adversely Affect"
[redacted]					
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any[10]
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes[11]
Approval Level • **District Env. (DE)** • **Env. Serv. Div. (ESD)** • **FHWA**	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA

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

Appendix B

Graphics



Project Location Map

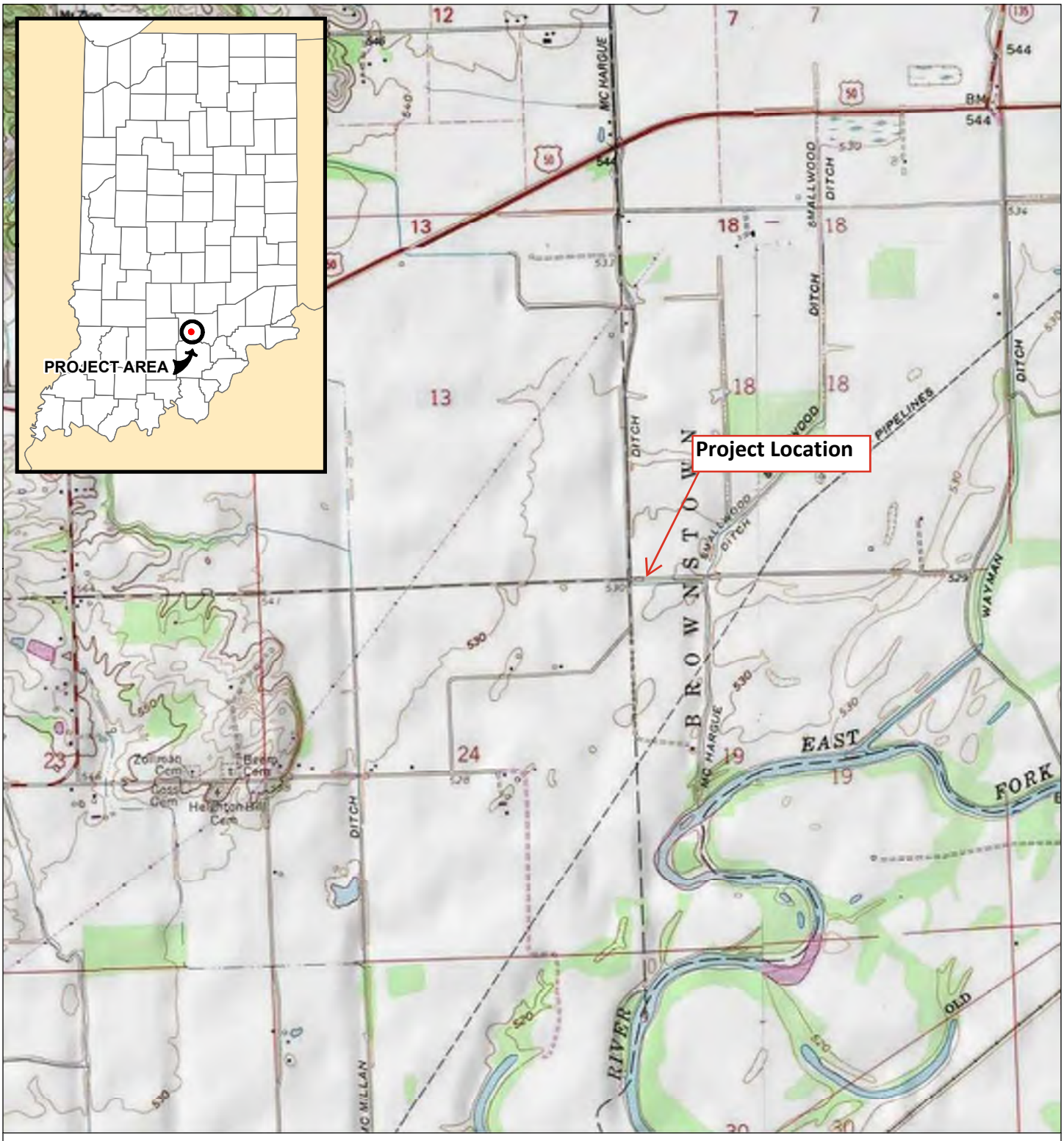
Bridge Project
Des. No. 1703018
Jackson County Bridge No. 197
CR 100 South over McHargue Ditch
Jackson County, Indiana

All locations approximate
2018 Basemap
Latitude: 38.86201 Longitude: -86.13111

N

0 0.25 0.5 1
Miles

METRIC ENVIRONMENTAL



USGS Topographical Map

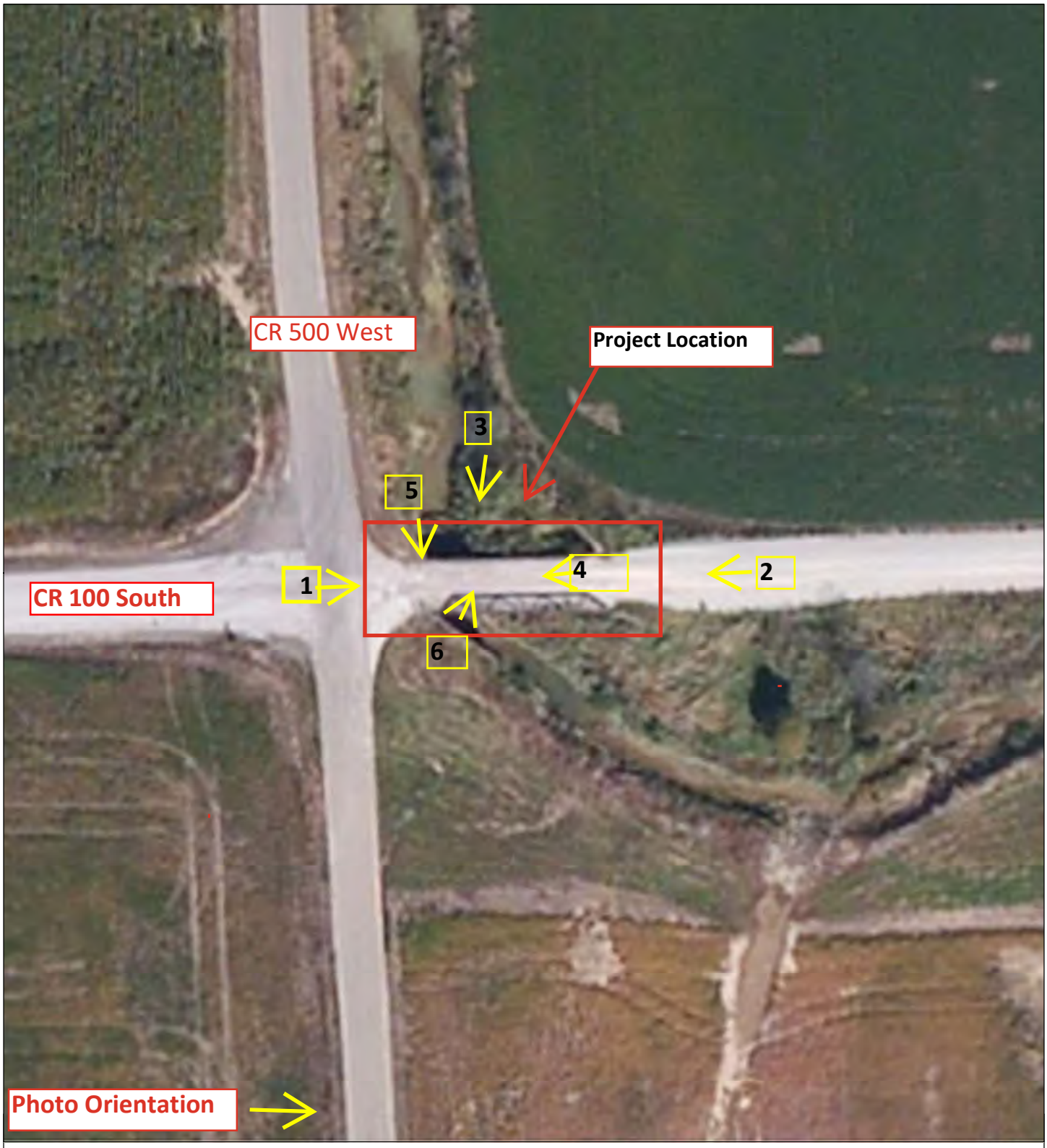
Bridge Project
Des. No. 1703018
Jackson County Bridge 197
CR 100 South over McHargue Ditch
Jackson County, Indiana

All Locations Approximate
1992 Basemap

N

Feet
0 1,000 2,000
1 inch = 2,000 feet

METRIC ENVIRONMENTAL



Aerial Photograph

Bridge Project
Des. No. 1703018
Jackson County Bridge 197
CR 100 South over McHargue Ditch
Jackson County, Indiana

All Locations Approximate
2013 Basemap
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 inch = 50 feet

N

Feet
0 50 100

METRIC ENVIRONMENTAL

(Photo Date: 4/25/23)

Photo 1. View of Jackson County Bridge No. 197 Looking East

Photo 2. View of Jackson County Bridge No. 197 Looking West

Photo 3. View of Jackson County Bridge No. 197 Looking South

Photo 4. View of Jackson County Bridge No. 197 Wearing Surface (Bridge Deck)

Photo 5. View of Crack in Northwest Wingwall

Photo 6. View of Bridge Underside and West Abutment

PROJECT	DESIGNATION
1703018	1703018
CONTRACT	BRIDGE FILE
R-40891	36-00197

STRUCTURE	DESIGNATION	TYPE	SPAN AND SKEW	OVER	STATION
36-00197	1703018	Continuous Reinforced Slab Bridge	3 Spans @ 30'-0" 45°00'00" Skew Lt.	McHargue Ditch	23+44.79 Line "PR-A"

INDIANA DEPARTMENT OF TRANSPORTATION

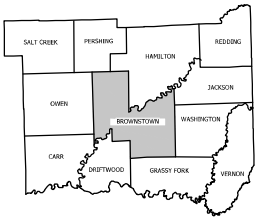
BRIDGE PLANS

FOR SPANS OVER 20 FEET

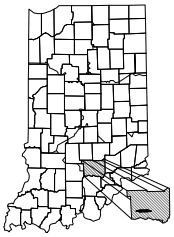
ROUTE: CR 100 S OVER McHARGUE DITCH

PROJECT NO. 1703018 P.E.
1703018 R/W
1703018 CONST.

TRAFFIC DATA		W. CR 100 S.
A.A.D.T.	(2024)	50 V.P.D.
A.A.D.T.	(2044)	82 V.P.D.
D.H.V.	(2044)	9 V.P.D.
DIRECTIONAL DISTRIBUTION		50% - 50%
TRUCKS		5 % A.A.D.T.
DESIGN DATA		
DESIGN SPEED		35 M.P.H.
PROJECT DESIGN CRITERIA		(38) NON-FREEWAY
FUNCTIONAL CLASSIFICATION		LOCAL ROAD
RURAL/URBAN		RURAL
TERRAIN		LEVEL
ACCESS CONTROL		NONE



TOWNSHIP MAP



PROJECT LOCATION SHOWN BY
JACKSON COUNTY

LATITUDE: 38°51'43.22"N LONGITUDE: 86°07'52.56"W

Bridge Replacement of Structure No. 197 over McHargue Ditch, located along County Road 100 South at the intersection with 500 West, 1.17 miles south of SR 50 in Sections 18 & 19, T-5-N, R-4-E, Brownstown Township, Jackson County, Indiana

BRIDGE LENGTH:	0.017	MI.
ROADWAY LENGTH:	0.048	MI.
TOTAL LENGTH:	0.065	MI.
MAX. GRADE:	5.00	%

APPROVED:
JACKSON COUNTY BOARD OF COMMISSIONERS

DATE: _____

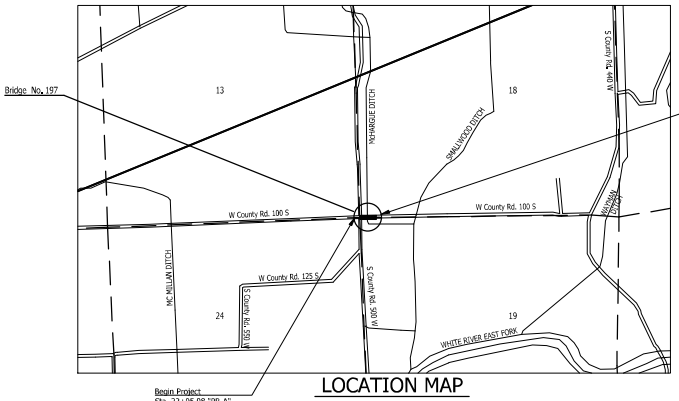
MATT REEDY
MEMBER

DREW MARKEL
MEMBER

BOB GILLASPY
MEMBER

ROGER HURT
JACKSON COUNTY AUDITOR

JERRY AULT
JACKSON COUNTY HIGHWAY DEPARTMENT, ERC



LOCATION MAP
JACKSON COUNTY

SCALE: 1" = 1000'

JANSSEN & SPAANS ENGINEERING
9120 Harrison Park Court
Indianapolis, Indiana 46216
(317) 254-9686 Fax: (317) 254-9262
5921 Stratton Circle
Columbus, Indiana 47203
(812) 375-6870 Fax: (812) 375-7364

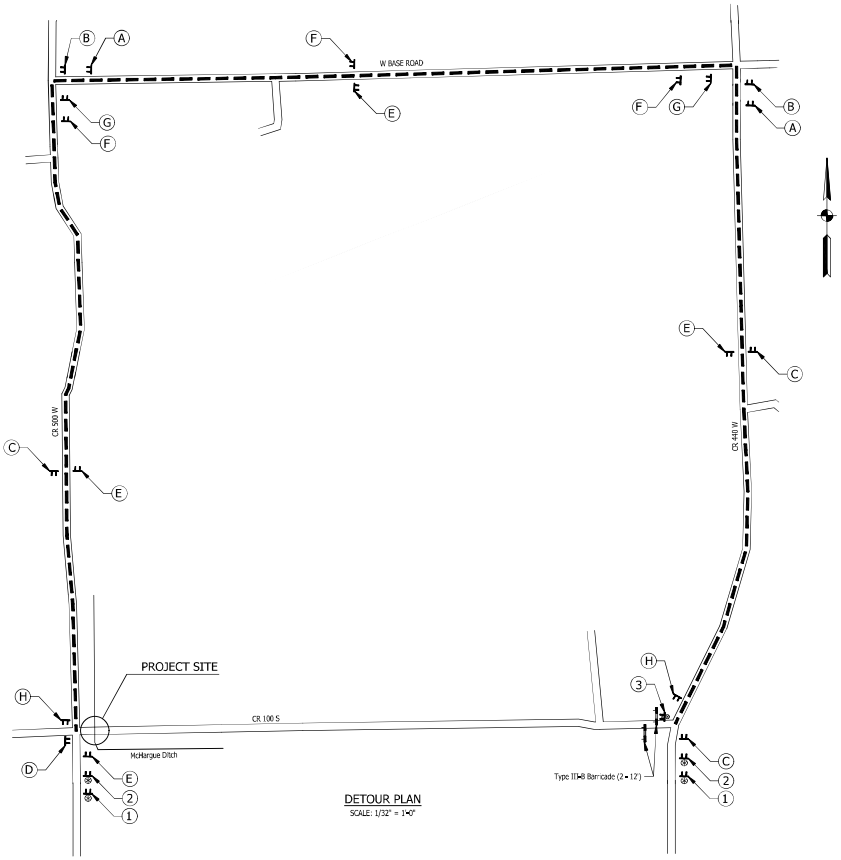
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2024
TO BE USED WITH THESE PLANS

PLANS PREPARED BY: JANSSEN & SPAANS ENGINEERING, INC. (317) 254-9686 PHONE NUMBER

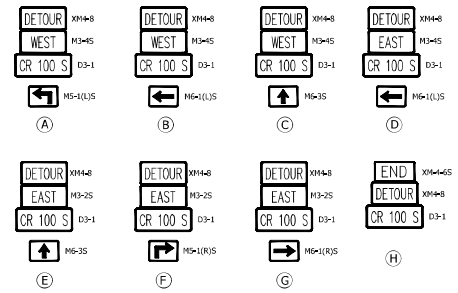
CERTIFIED BY: _____ 10/29/2018 DATE

APPROVED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

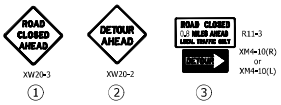
BRIDGE FILE	
36-00197	
DESIGNATION	
1703018	
SURVEY BOOK	SHEETS
	1 of 15
CONTRACT	PROJECT
R-40891	1703018

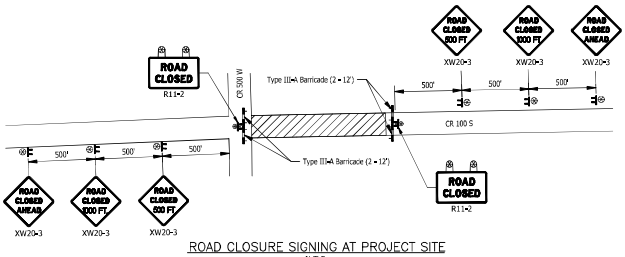


DETOUR PLAN
SCALE: 1/32" = 1'-0"



SUMMARY OF QUANTITIES	
ITEM	QUANTITY
Type "A" Construction Sign	X Each
Detour Route Marker Assembly	X Each
Road Closure Sign Assembly	X Each
Type III-A Barricade	X Lft
Type III-B Barricade	X Lft





ROAD CLOSURE SIGNING AT PROJECT SITE
N.T.S.

LEGEND

- Detour Route
- Road Closure Sign Assembly
- Type "A" Construction Sign
- Construction Warning Light
- Type III-A Barricade
- Type III-B Barricade

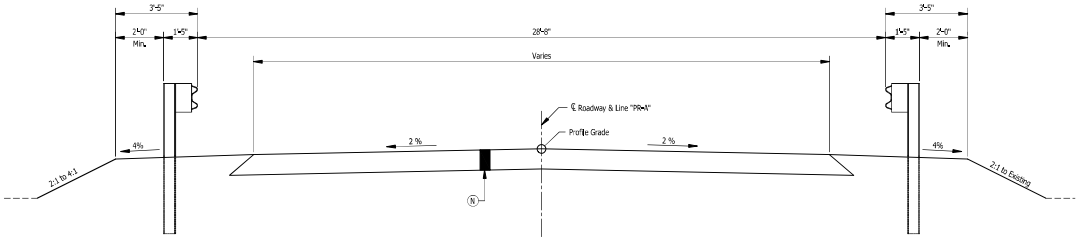
RECOMMENDED FOR APPROVAL: _____ xx/xx/24
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH
CHECKED: JMM CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

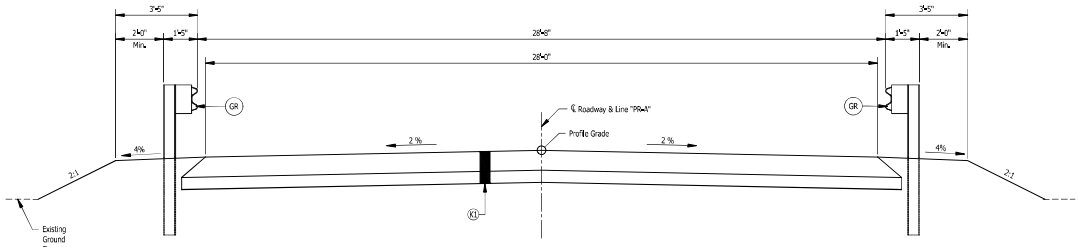
DETOUR

HORIZONTAL SCALE	FILE
AS NOTED	36-00197
VERTICAL SCALE	DESIGNATION
AS NOTED	1703018
SURVEY BOOK	SHEET
	3 of 15
CONTRACT	PROJECT
B-60891	1703018



TYPICAL VARIABLE-DEPTH SECTION

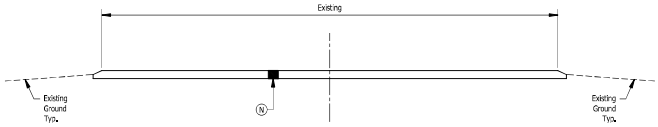
Sta. 25+00.49 to 25+50.03 (Varies from 28'-8" to existing)



TYPICAL FULL-DEPTH SECTION

Sta. 22+05.08 to Sta. 22+63.73

Sta. 24+24.85 to 25+00.49



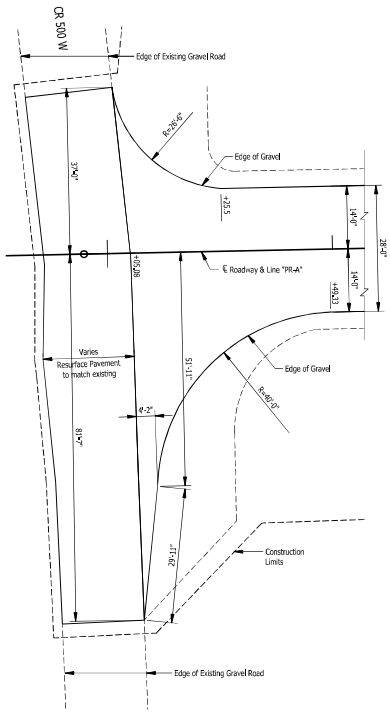
TYPICAL INCIDENTAL SECTION

Sta. 25+50.83 to Sta. 26+00.83

LEGEND

(K1) Full Depth Aggregate Pavement
4 in. Compacted Aggregate, No. 73 on
6 in. of Compacted Aggregate, No. 53 on
Subgrade Treatment Type II

(N) Resurface
Variable-Depth Compacted Aggregate, No. 53



PLAN

PUBLIC ROAD APPROACH

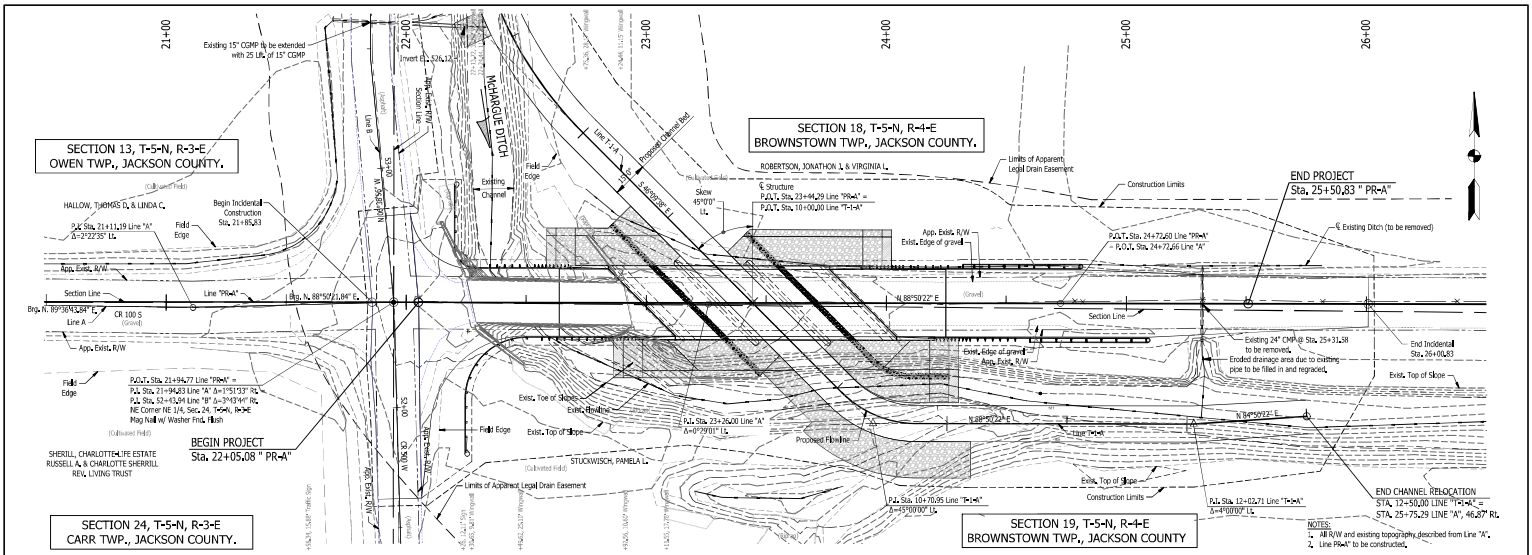
Sta. 22+05.08 to Sta. 22+49.13

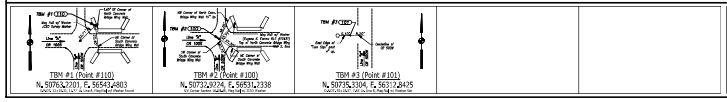
NOTES:

For variable depth resurface sections, areas where pavement depth is greater than 4" in thickness shall be compacted in 3" to 6" lifts.

						RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER xx/xx/24 DATE	INDIANA DEPARTMENT OF TRANSPORTATION
						DESIGNED: ZGC DRAWN: TLH CHECKED: JMM CHECKED: ZGC	TYPICAL SECTIONS

HORIZONTAL SCALE	FILE
1"=20'	36-00197
VERTICAL SCALE	DESIGNATION
1"=10'	1703018
SURVEY BOOK	SHEET
	4 of 15
CONTRACT	PROJECT
B-40891	1703018





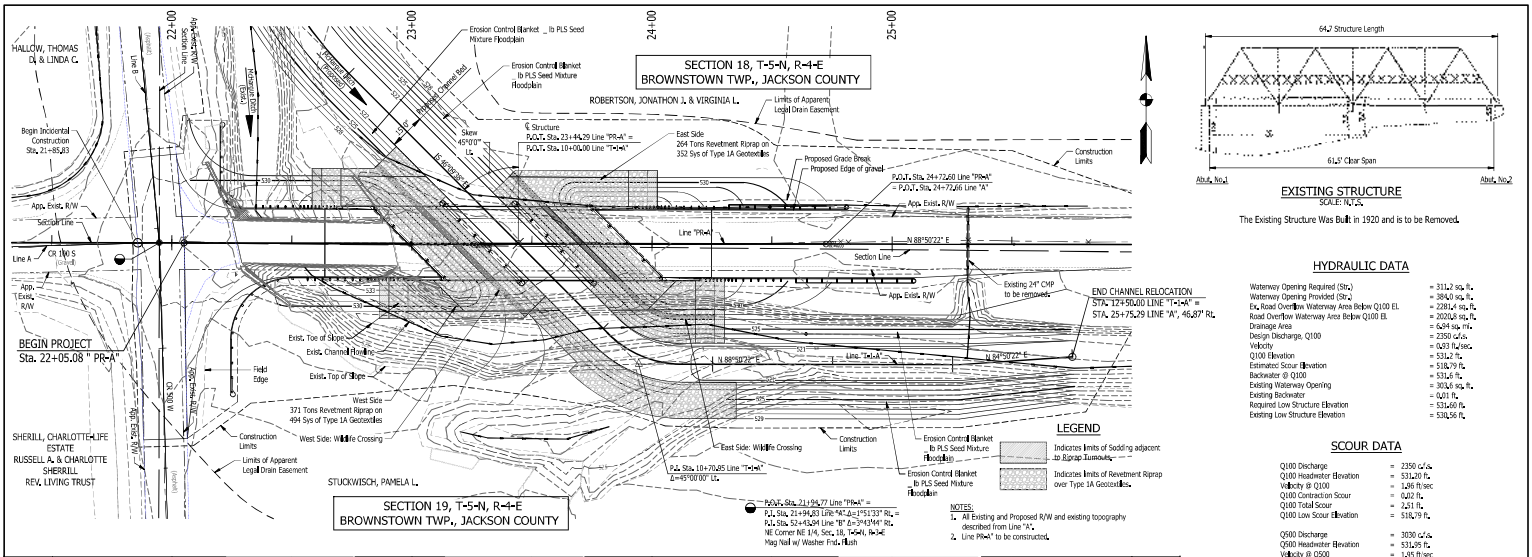
RECOMMENDED FOR APPROVAL: _____ xx/xx/24
DESIGN ENGINEER DATE

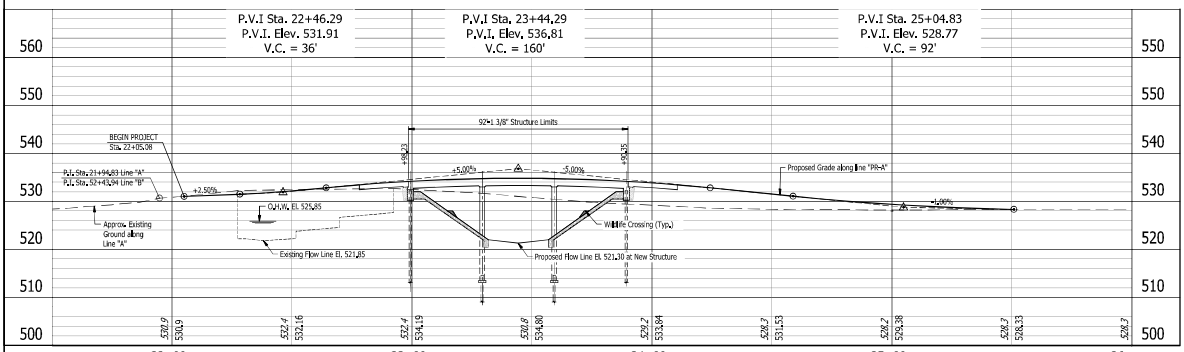
DESIGNED: ZGC DRAWN: TLH
CHECKED: JMM CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
LINE "PR-A"

HORIZONTAL SCALE	FILE
1"=20'	36-00197
VERTICAL SCALE	DESIGNATION
1"=10'	1703018
SURVEY BOOK	SHEET
5	of 15
CONTRACT	PROJECT
B-40891	1703018





EXISTING STRUCTURE

SCALE: N.T.S.

The Existing Structure Was Built in 1920 and is to be Removed.

HYDRAULIC DATA

Waterway Opening Required (Str.)	= 311.2 sq. ft.
Waterway Opening Provided (Str.)	= 384.0 sq. ft.
Fe, Road Overflow Waterway Area Below Q100 El.	= 2281.4 sq. ft.
Road Overflow Waterway Area Below Q100 El.	= 2020.8 sq. ft.
Drainage Area	= 6.94 sq. mi.
Design Discharge, Q100	= 2350 c.f.s.
Velocity	= 0.83 ft./sec.
Q100 Elevation	= 531.2 ft.
Estimated Scour Elevation	= 518.79 ft.
Backwater @ Q100	= 531.6 ft.
Existing Waterway Opening	= 301.6 sq. ft.
Existing Backwater	= 0.01 ft.
Required Low Structure Elevation	= 531.60 ft.
Existing Low Structure Elevation	= 534.56 ft.

SCOUR DATA

Q100 Discharge	= 2350 c.f.s.
Q100 Headwater Elevation	= 531.20 ft.
Velocity @ Q100	= 1.86 ft/sec
Q100 Contraction Scour	= 0.02 ft.
Q100 Total Scour	= 2.51 ft.
Q100 Low Scour Elevation	= 518.79 ft.
Q500 Discharge	= 3030 c.f.s.
Q500 Headwater Elevation	= 531.95 ft.
Velocity @ Q500	= 1.05 ft/sec
Q500 Contraction Scour	= 0.0 ft.
Q500 Total Scour	= 2.54 ft.
Q500 Low Scour Elevation	= 518.76 ft.

EARTHWORK TABULATION

Fill + 20%	= 3150 Cys
Common Excavation	= 1540 Cys
Borrow	= 1610 Cys

NOTES:

1. All Existing R/W and Proposed R/W on this sheet is described from Line "A".
2. See RSP 621-01-007 for seed mixture information.
3. PLS = Pure Live Seed

CONTINUOUS REINFORCED CONCRETE SLAB
3 SPANS: 30'-0", 30'-0", & 30'-0"
SKEW: 45° LT, CLEAR ROADWAY = 28'-0"
W COUNTY ROAD 100 S OVER McHARGUE DITCH
JACKSON COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER xx/xx/24 DATE

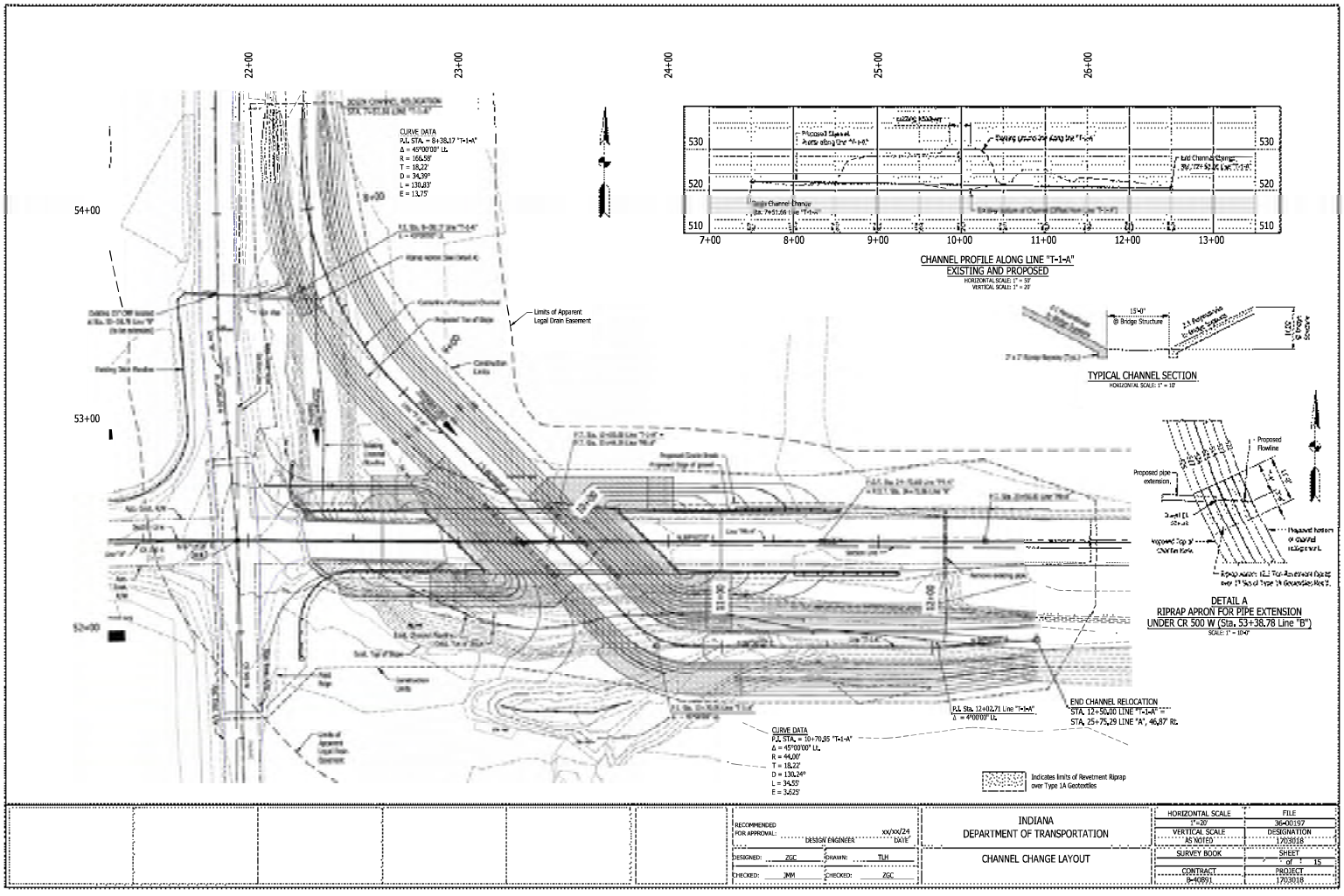
DESIGNED: ZGC DRAWN: TLH

CHECKED: JMM CHECKED: ZGC

INDIANA DEPARTMENT OF TRANSPORTATION

LAYOUT
LINE "PR-A"

HORIZONTAL SCALE	FILE
1"=20'	36-00197
VERTICAL SCALE	DESIGNATION
1"=10'	1703018
SURVEY BOOK	SHEET
	6 of 15
CONTRACT	PROJECT
B-40891	1703018



RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — xx/xx/24 DATE

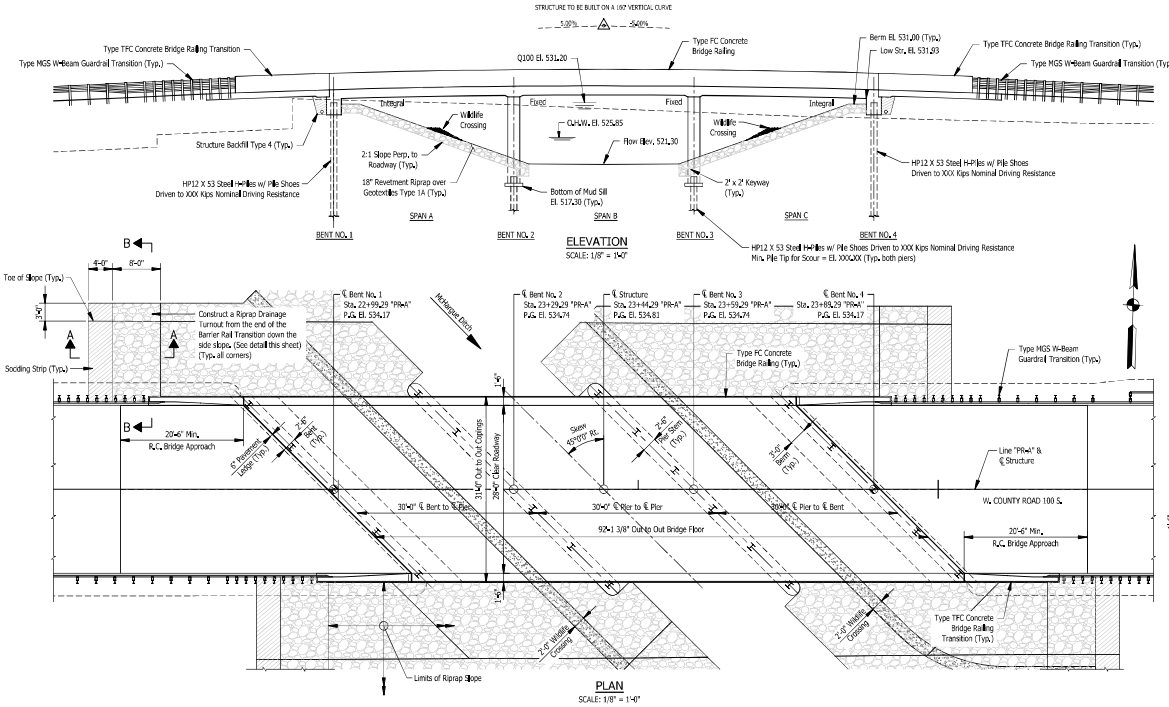
DESIGNED: ZGC DRAWN: TLH

CHECKED: JMM CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

CHANNEL CHANGE LAYOUT

HORIZONTAL SCALE 1"=20'	FILE 36400197
VERTICAL SCALE AS NOTED	DESIGNATION 1703018
SURVEY BOOK	SHEET 7 of 15
CONTRACT R-40891	PROJECT 1703018



GENERAL NOTES

There are no plans for the current existing structure.

Reinforcing steel covering shall be 2½ inches in top and 2" minimum in bottom of floor slab, and 2" in all other parts, unless noted.

DESIGN STRESSES

CONCRETE
Class C f'_c = 4000 psi
Class B f'_c = 3000 psi
Class A f'_c = 3500 psi

REINFORCING STEEL
Grade 60 f_y = 60,000 psi

STRUCTURAL STEEL FOR PILES
ASTM A272, Grade 50 F_y = 50 ksi

DESIGN DATA

Superstructure and substructure designed for HL-93 loading, in accordance with the AASHTO LRFD Bridge Design Specifications, Ninth Edition and its subsequent interims.

DEAD LOAD
Actual weight plus 35lb/ft² for future wearing surface.

WIND LOAD
Designed for 70 mph wind loading in accordance with LRFD 3.8.1.

FLOOR SLAB
Designed with a Variable structural depth plus 1/2" sacrificial wearing surface.

SEISMIC DESIGN DATA

Seismic Performance Zone	Zone 1
Acceleration Coefficient, SD1	0.199
Seismic Soil Profile Type	Class C

CONTINUOUS REINFORCED CONCRETE SLAB
3 SPANS: 30'-0", 30'-0", & 30'-0"
SKEW: 45° RT, CLEAR ROADWAY = 28'-0"
W COUNTY ROAD 100 S OVER McHARGUE DITCH
JACKSON COUNTY

RECOMMENDED FOR APPROVAL: _____ xx/xx/24
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TJH
CHECKED: JMM CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	FILE
AS NOTED	36-00197
VERTICAL SCALE	DESIGNATION
AS NOTED	1703018
SURVEY BOOK	SHEET
	8 of 15
CONTRACT	PROJECT
B-40891	1703018

Appendix C

Early Coordination

October 3, 2022

Sample Early Coordination Letter

Recipient list attached

Re: Early Coordination
Designation Number (Des. No.) 1703018
Bridge Project
Jackson County Bridge No. 197 (NBI #3600132)
County Road 100 South over McHargue Ditch, 0.01 mile East of CR 500 W
Brownstown Township, Jackson County, Indiana

Dear Agency:

Jackson County, with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT), proposes to proceed with a bridge project in Jackson County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding possible environmental effects associated with this project. **Please use the above designation number and description in your reply**. We will incorporate your comments into the environmental report for this project in accordance with the National Environmental Policy Act. Your cooperation in this endeavor is appreciated.

The project is located on CR 100 South over McHargue Ditch, approximately 0.01 mile east of CR 500 W in Jackson County. Specifically, the project is located in Sections 18 and 19, Township 5 North, Range 4 East as illustrated on the Medora, Indiana 7.5-minute United States Geological Survey (USGS) topographic quadrangle.

Jackson County Bridge No. 197 is a single-span bolted Warren pony truss metal bridge constructed in 1920. The bridge length is 64.7 feet long and 17.8 feet wide, with a load rating of ten tons. Immediately west of the bridge is the intersection of CR 500 West (W) and CR 100 S, which is controlled by a stop sign on CR 100 S. The structure is eligible for the National Register of Historic Places (NRHP), but it is classified as a "Non-Select" bridge in the 2010 *Indiana Historic Bridges Inventory* List. Non-Select bridges can be demolished or removed and relocated to a new site as part of the Indiana Historic Bridges Programmatic Evaluation Process.

The need for this project is due to the advanced deterioration of Jackson County Bridge 197. The primary purpose of this project is to provide a structurally sufficient bridge that meets current design standards for load capacity and roadway geometry.

CR 500 W is classified as a Local Rural road. The existing cross-section consists of one 9ft. wide travel lane in each direction, with no usable shoulders. No guardrails, curbs or sidewalks are provided. Land use in the vicinity of the project consists of cultivated agricultural fields.

The need for this project is due to the deteriorated condition of the existing structure. The purpose of this project is to provide a structurally sound bridge to provide continued access across Rider Ditch via East CR 300 South.

It is anticipated that new, additional permanent right-of-way will be necessary to complete this project; however, the exact amounts are not yet known. The amount of additional permanent and temporary right-of-way will be defined as the design process advances.

Metric Environmental, LLC will perform waters and wetlands determinations and a biological assessment to identify any ecological resources that may be present. This project qualifies for the application of the USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat and project information will be submitted through the USFW's Information for Planning and Consultation (IPaC) separately.

This project will require full Section 106 with Section 4(f) analysis and Bridge Marketing. Metric will prepare the required Consulting Parties Early Coordination Letter, Phase Ia Archaeology, Historic Property Report, Section 4(f) Evaluation and Alternatives Analysis, and Finding of Effect as required and submit documentation to the Indiana Department of Transportation Cultural Resources Office and the Indiana Department of Natural Resources (IDNR) Division of Historic Preservation and Archaeology (DHPA) State Historic Preservation Officer (SHPO) for review and concurrence. The bridge will be advertised in two primary newspapers of general circulation and signs will be posted at the project site to alert the public that the bridge is available for relocation and re-use. The advertisement must be posted 6 months prior to the public hearing that will be conducted for the project. If after the public hearing, no interested parties have come forth, the bridge can be demolished.

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, please contact Elayna Stoner, Project Manager, Metric Environmental, at 317.315.3322, elaynas@MetricEnv.com, or 6958 Hillsdale Court, Indianapolis, Indiana 46250 or Mr. Jeff Matern, JSE Engineering, at 317.254.9686 or JMatern@jsengr.com or Thank you in advance for your input.

Sincerely,
Elayna Stoner

Elayna Stoner
Metric Environmental, LLC

Mr. Jeff Matern, JSE, Inc.

Graphics Provided with this Letter are Located in Appendix B of this Document

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

Eric J. Holcomb, Governor
Joe McGuinness, Commissioner

The following agencies received Early Coordination Letters:

Federal Highway Administration
Seymour District
patrick.carpenter@dot.gov

United States Department of Housing and Urban Development
Chicago Regional Office
erik.r.sandstedt@hud.gov

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

United States Army Corps of Engineers
Louisville District, Indianapolis Regulatory Office
RegulatoryApplicationsLRL@usace.army.mil

U.S. Fish and Wildlife Service
Bloomington Indiana Field Office
robin_mcwilliams@fws.gov

Forest Supervisor
Hoosier National Forest
kevin.amick@usda.gov

Indiana Geological and Water Survey
https://igws.indiana.edu/eAssessment

Indiana Department of Natural Resources
Division of Fish and Wildlife
environmentalreview@dnr.in.gov

Indiana Department of Environmental Management
Groundwater Section
ATurnbow@idem.IN.gov

INDOT Seymour District
DDye@indot.in.gov

INDOT Office of Aviation
tlewandowski@indot.in.gov

Natural Resources Conservation Service
john.allen@usda.gov

Jackson County Surveyor
dblann@jacksoncounty.in.gov

Jackson County Highway Department
jault@jacksoncounty.in.gov

Jackson County Emergency Management
ema@jackson.in.gov

Jackson County Commissioners
drew@drewmarkel.com
auditor@jacksoncounty.in.gov
auditor@jacksoncounty.in.gov

Jackson County Floodplain Administrator
Cbarnette@jacksoncounty.in.gov

Medora Community School Corporation
medora.k12.in.us

THIS IS NOT A PERMIT

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

DNR #: ER-25047 **Request Received:** October 3, 2022

Requestor:
Metric Environmental
Elayna Stoner
6971 Hillsdale Court
Indianapolis, IN 46250

Project: CR 100 South bridge (#197, NBI #3600132) replacement over McHargue Ditch (existing bridge to be relocated elsewhere), 0.01 mile east of CR 500 West; Des #1703018

County/Site info: Jackson

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

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

Regulatory Assessment: This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1. Please submit a copy of this letter with the permit application.

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) Wildlife Passage:
The photos submitted show, or strongly suggest, that there is currently no riprap on the banks under the bridge allowing unimpaired wildlife passage. The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions.

Maintaining or improving wildlife movement under roads is a priority concern for the Division of Fish & Wildlife for the ecological health of wildlife populations in terms of movement and dispersal, habitat connectivity, and to avoid unnecessary wildlife mortality on roads. Facilitating wildlife passage ability under roads means less wildlife crossing traffic lanes and consequently reduced driving hazards. We encourage improving fish and wildlife passage conditions, when possible.

There are a number of techniques and materials for incorporating wildlife passage into the design of a crossing structure. Coordination with a Regional Environmental Biologist to address wildlife passage issues before submitting a permit application is encouraged to avoid delays in the permitting process. The following links are good resources to consider in the design of stream crossing structures to maintain fish and wildlife passage: https://www.fs.usda.gov/ccrc/tool/fishxing-fish-passage-learning-systems, https://www.fs.usda.gov/wildlifecrossings/library/index.php, https://www.fhwa.dot.gov/clas/ctip/wildlife_crossing_structures/, https://www.fhwa.dot.gov/engineering/hydraulics/pubs/11008/hif11008.pdf.

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

2) Bank Stabilization:
Limit the use of riprap on the channel banks, if needed, to toe protection extending up to the ordinary high water mark (OHWM). Do not place riprap in the bed of the channel (unless sumped across the bed to avoid creating a fish passage obstruction) and use alternative erosion protection materials whenever possible. From the OHWM to the top of the banks, heavy duty erosion control blankets or turf reinforcement mats or a similar bioengineering method should be used and these materials should be seeded with native plants to allow a natural, vegetated stream bank to develop.

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: https://efotg.sc.egov.usda.gov/references/public/IA/Chapter-16_Streambank_and_Shoreline_Protection.pdf.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:
1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Southern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits 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 excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.
5. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
6. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
7. Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway. Any incidental fallen material or debris in the waterway must be removed within 24 hours using best management practices, particularly lifting material out of the waterway and not dragging it across the streambed whenever possible.
8. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all

THIS IS NOT A PERMIT

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

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

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

Christie L. Stanifer **Date:** November 2, 2022

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

United States Department of the Interior

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

In Reply Refer To: 10/11/2024 16:53:09 UTC
Project code: 2022-0056622
Project Name: Des. 1703018, Bridge Project, CR 100 S over McHargue Ditch, Jackson County, Indiana

Subject: Concurrence verification letter for the 'Des. 1703018, Bridge Project, CR 100 S over McHargue Ditch, Jackson County, Indiana' 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 dated October 11, 2024 to verify that the **Des. 1703018, Bridge Project, CR 100 S over McHargue Ditch, Jackson County, Indiana** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

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

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

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

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

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

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

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

PROJECT DESCRIPTION

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

NAME

Des. 1703018, Bridge Project, CR 100 S over McHargue Ditch, Jackson County, Indiana

DESCRIPTION

The Indiana Department of Transportation (INDOT) and Jackson County Highway Department, with funding from Federal Highway Administration (FHWA), intends to proceed with a bridge replacement project on County Road (CR) 100 S over McHargue Ditch, Jackson County, Indiana (Des 1703018).

The proposed project is located along CR 100 S over McHargue Ditch, located approximately 0.01 mile east of CR 500 W, Jackson County, Indiana. Land use in the vicinity of the project consists of cultivated agricultural fields. The existing structure (36-00197; NBI #3600132) is a single-span steel pony truss bridge with a wooden deck that was constructed in 1920. The bridge measures 64.7 feet long and 17.8 feet wide (single-lane bridge), with a load rating of 10 tons. Immediately west of the bridge is the intersection of CR 500 W and CR 100 S, which is controlled by a stop sign on CR 100 S. Due to bridge and intersection geometry and bridge load capacity, it is recommended that the current structure be replaced. In addition,a road realignment of CR 500 W and installation of a west bridge approach are proposed in order to improve of the turning radiuses and intersection. The proposed project involves replacing the existing structure with a continuous reinforced slab bridge. The stream channel will be relocated to the east of the existing channel. Revetment riprap will be installed around the proposed structure as scour protection. No new, permanent lighting is anticipated. Temporary lighting may be necessary during construction. It is anticipated that approximately 4.0 acres of additional permanent Right-of-Way (ROW) will be needed. No temporary ROW is anticipated to be necessary. Maintenance of traffic will require full closure of CR 100 S at the bridge, with a full detour route being established using local roads.

Based on consultation with INDOT Seymour District, a March 10, 2022, review of the U.S. Fish and Wildlife Service database did not indicate the presence of endangered bat species within 0.5 mile of the project area. There is suitable summer habitat located within the project area. No tree impacts are anticipated for project construction. A Metric Environmental biologist completed an inspection of the structure on September 26, 2024. No evidence of use by bats was observed. No mitigation is anticipated.

Project construction is anticipated to begin in September 2025 and be completed by September 2026.

DETERMINATION KEY RESULT

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

QUALIFICATION INTERVIEW

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

   [1] See Indiana bat species profile

   Automatically answered
   Yes

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

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

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

   A) Federal Highway Administration (FHWA)

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

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

   No

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

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

   No

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

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

   No

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

   No

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

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

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

   Yes

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

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

   No

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

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

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

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

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

    No

11. 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

12. 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

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

    No

14. Does the project include slash pile burning?

    No

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

    Yes

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

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

    Yes

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

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

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

    Yes

    SUBMITTED DOCUMENTS

    - *19-0010_1703018_Bridge Inspection Form_09262024_signed.pdf https://ipac.ecosphere.fws.gov/project/7UNYUL7FSJG57LW25ZOIB5HRFQ/projectDocuments/150491943*

18. 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

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

    No

20. 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

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

    Yes

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

    Yes

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

    No

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

    No

25. 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

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

    No

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

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

28. 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

29. **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

30. **Lighting AMM 1**
    Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

    Yes

PROJECT QUESTIONNAIRE

1. Please describe the proposed bridge work:

   The proposed project involves replacing the existing structure with a continuous reinforced slab bridge. The stream channel will be relocated to the east of the existing channel. Revetment riprap will be installed around the proposed structure as scour protection.

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

   Project construction is anticipated to begin in September 2025 and be completed by September 2026.

3. Please enter the date of the bridge assessment:

   September 26, 2024

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

   Yes

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

   No

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

LIGHTING AMM 1

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

GENERAL AMM 1

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

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

This key was last updated in IPaC on April 28, 2022. Keys are subject to periodic revision.

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

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

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation
Name: Erin Carleton
Address: 185 Agrico Ln
City: Seymour
State: IN
Zip: 47274
Email ecarleton@indot.in.gov
Phone: 8125243988

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Transportation

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

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)

United States Department of the Interior

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

In Reply Refer To: 10/11/2024 12:11:45 UTC
Project Code: 2022-0056622
Project Name: Des. 1703018, Bridge Project, CR 100 S over McHargue Ditch, Jackson County, Indiana

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

To Whom It May Concern:

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

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

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

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/

s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

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

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

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

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

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

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

migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

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

Attachment(s):

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

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2022-0056622

Project Name: Des. 1703018, Bridge Project, CR 100 S over McHargue Ditch, Jackson County, Indiana

Project Type: Bridge - Replacement

Project Description: The Indiana Department of Transportation (INDOT) and Jackson County Highway Department, with funding from Federal Highway Administration (FHWA), intends to proceed with a bridge replacement project on County Road (CR) 100 S over McHargue Ditch, Jackson County, Indiana (Des 1703018).

The proposed project is located along CR 100 S over McHargue Ditch, located approximately 0.01 mile east of CR 500 W, Jackson County, Indiana. Land use in the vicinity of the project consists of cultivated agricultural fields. The existing structure (36-00197; NBI #3600132) is a single-span steel pony truss bridge with a wooden deck that was constructed in 1920. The bridge measures 64.7 feet long and 17.8 feet wide (single-lane bridge), with a load rating of 10 tons. Immediately west of the bridge is the intersection of CR 500 W and CR 100 S, which is controlled by a stop sign on CR 100 S. Due to bridge and intersection geometry and bridge load capacity, it is recommended that the current structure be replaced. In addition,a road realignment of CR 500 W and installation of a west bridge approach are proposed in order to improve of the turning radiuses and intersection. The proposed project involves replacing the existing structure with a continuous reinforced slab bridge. The stream channel will be relocated to the east of the existing channel. Revetment riprap will be installed around the proposed structure as scour protection. No new, permanent lighting is anticipated. Temporary lighting may be necessary during construction. It is anticipated that approximately 4.0 acres of additional permanent Right-of-Way (ROW) will be needed. No temporary ROW is anticipated to be necessary. Maintenance of traffic will require full closure of CR 100 S at the bridge, with a full detour route being established using local roads.

Based on consultation with INDOT Seymour District, a March 10, 2022, review of the U.S. Fish and Wildlife Service database did not indicate the presence of endangered bat species within 0.5 mile of the project area. There is suitable summer habitat located within the project area. No tree impacts are anticipated for project construction. A Metric Environmental biologist completed an inspection of the structure on September 26, 2024. No evidence of use by bats was observed. No mitigation is anticipated.

Project construction is anticipated to begin in September 2025 and be completed by September 2026.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.861986849999994,-86.131093750496,14z

Counties: Jackson County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

MAMMALS

NAME	STATUS
Gray Bat *Myotis grisescens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

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

INSECTS

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

CRITICAL HABITATS

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

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

BALD & GOLDEN EAGLES

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

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

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

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

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

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

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

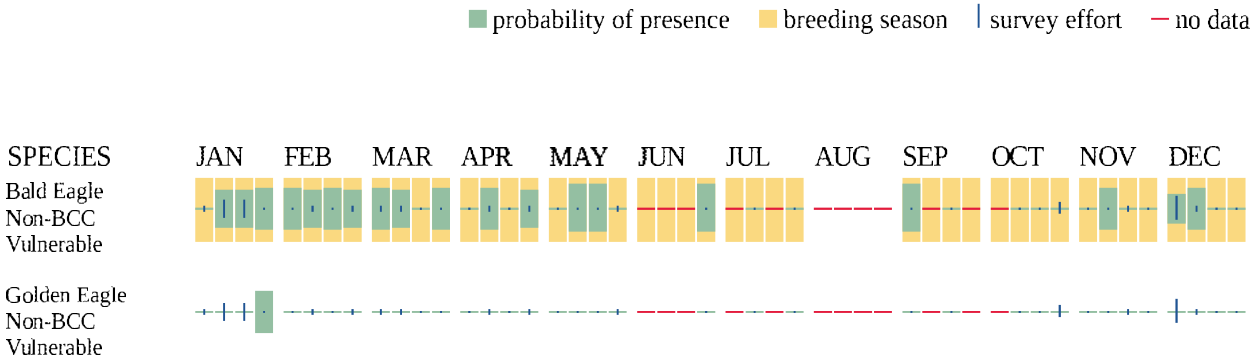
Probability of Presence (■)

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

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

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

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



Additional information can be found using the following links:

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

MIGRATORY BIRDS

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

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

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

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE

SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Field Sparrow *Spizella pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9446	Breeds Mar 1 to Aug 15
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

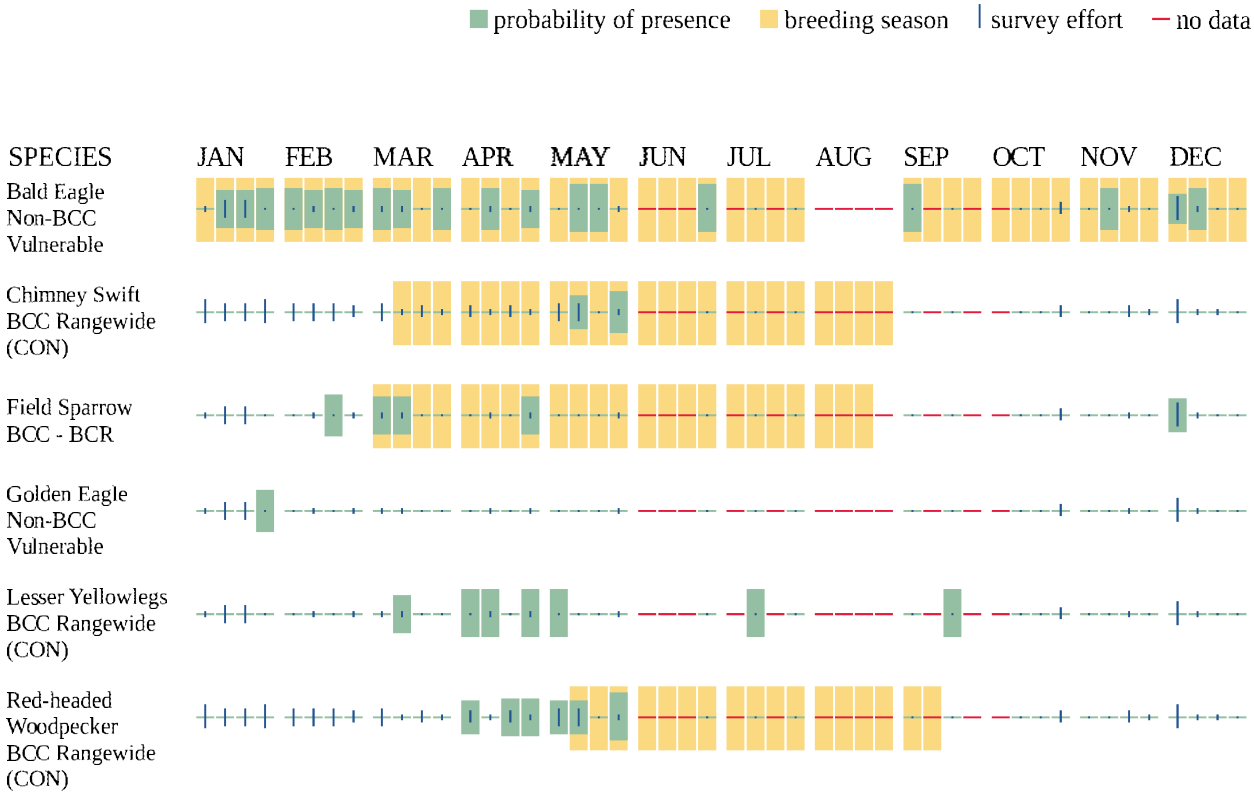
Probability of Presence (■)

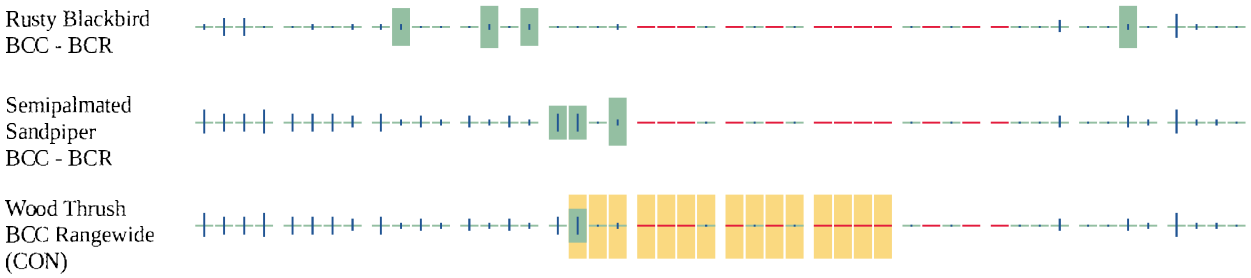
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

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

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

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





Additional information can be found using the following links:

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

WETLANDS

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

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

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

RIVERINE

- R2UBHx

IPAC USER CONTACT INFORMATION

Agency: Metric Environmental
Name: Jason Damm
Address: 6958 Hillsdale Court
City: Indianapolis
State: IN
Zip: 46250
Email jasond@metricenv.com
Phone: 3176052392

LEAD AGENCY CONTACT INFORMATION

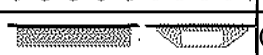
Lead Agency: Department of Transportation

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
26 September 2024	1703018	CR 100 S	Jackson
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
3600132	38.86203, -86.13127		64.7 feet

Structure Type (check one)

Bridge Construction Style

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

Culvert Type

○ Box	
○ Pipe/Round	○
○ Other:	

Other Structure

Structure Material (check all that apply)

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

Culvert Material

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

Creosote Evidence

○ Yes	◉ No
○ Unknown	

Notes:

Crossings Traversed (check all that apply)

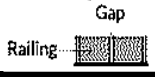
☒ Bare ground	☐ Open vegetation
☒ Rip-rap	☐ Closed vegetation
☒ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

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

Areas Assessed (check all that apply)

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

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Concrete surfaces (open roosting on concrete)	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Spaces between concrete end walls and the bridge deck	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Crack between concrete railings on top of the bridge deck 	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Vertical surfaces on concrete I-beams	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Spaces between walls, ceiling joists	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Weep holes, scupper drains, and inlets/pipes	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ All guiderails	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ All expansion joints	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Seth Snyder

Signature: Seth Snyder

Organization and Project Information

Organization Name: Metric Environmental, LLC.

First Name: Joshua

Last Name: Netherton

Phone: (765) 810-3867

Email: joshuan@metricenv.com

Address Line 1: 6958 Hillsdale Court

City: Indianapolis

State: IN

Zip: 46250

Customer Id: 19-0010

Destination Id: 1703018

Project Title: Jackson County Bridge No. 197 Bridge Project

Project Description: (Des. 1703018) Jackson County Bridge No. 197 Bridge Project, County Road 100 South over McHargue Ditch, 0.01 mile East of CR 500 W, Brownstown Township, Jackson County, Indiana

Environmental Assessment Report

Geological Hazards:

1. 1% Annual Chance Flood Hazard
2. High liquefaction potential

Mineral Resources:

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

Disclaimer:

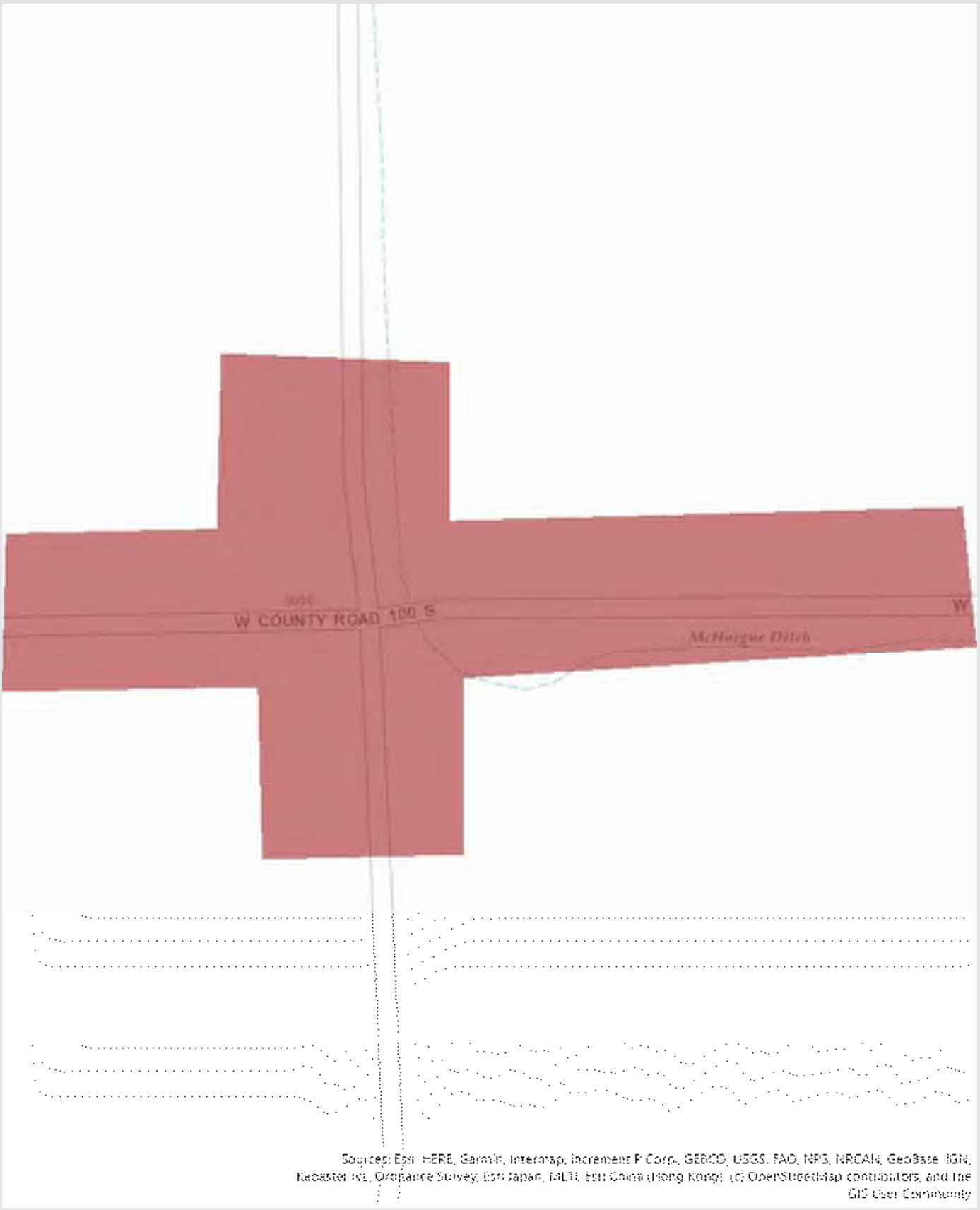
This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties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

This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: (812) 855-7428



From: Lewandowski, Tyler
To: Elayna Stoner
Subject: RE: Des. No. 1703018 _ Jackson County Bridge No. 197 _ Jackson County _ Early Coordination
Date: Friday, October 25, 2024 8:09:13 AM
Attachments: image002.png

Good morning Elayna,

After review, no tall structure permit is required for the project if all equipment being used is under 200 feet in height. Please let our office know if you have any further questions.

Thank you,

Tyler Lewandowski
Project Manager
INDOT Office of Aviation
(317) 495-4875
tlewandowski@indot.in.gov
www.aviation.indot.in.gov

From: Elayna Stoner <elaynas@metricenv.com>
Sent: Thursday, October 24, 2024 11:00 AM
To: Lewandowski, Tyler <TLewandowski@indot.IN.gov>
Subject: Des. No. 1703018 _ Jackson County Bridge No. 197 _ Jackson County _ Early Coordination

Hi Tyler, hope you're doing well today.

Please see the attached early coordination letter for a bridge project in Jackson County.

Let me know if you have questions or need more info.

Thanks!

Elayna Stoner
Project Manager
NEPA Compliance

From:	McWilliams, Robin
To:	Elayna Stoner
Subject:	Re: [EXTERNAL] Des. No. 1703018 -Jackson County Bridge No. 197 _ ECL
Date:	Tuesday, October 4, 2022 2:07:56 PM
Attachments:	image001.png

Dear Elayna,

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

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

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

Wetland and stream impacts may require permits from the U.S. Army Corps of Engineers, the Indiana Department of Environmental Management's Water Quality Certification program, and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with agency mitigation guidelines.

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

We appreciate the opportunity to comment at this early stage of project planning. If you have any questions about our recommendations, please contact me at robin_mcwilliams@fws.gov or you may call 812-334-4261 x. 207.

Sincerely,
Robin McWilliams Munson

Standard Recommendations:

1. Do not clear trees or understory vegetation outside the construction zone boundaries.

(**This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.)**

2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.
6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High-Water Mark during this time unless the machinery is within the caissons or on the cofferdams.
7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing

Robin McWilliams Munson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, IN 47403
812-334-4261

Mon-Tues 8-3:30p
Wed-Thurs 8:30-3p Telework

From: Elayna Stoner <elaynas@metricenv.com>
Sent: Monday, October 3, 2022 4:55 PM
To: DNR Environmental Review <environmentalreview@dnr.IN.gov>; erica.tait@dot.gov <erica.tait@dot.gov>; MWRO Compliance, NPS <MWRO_Compliance@nps.gov>; Erik.r.sandstedt@hud.gov <Erik.r.sandstedt@hud.gov>; kamick@fs.fed.us <kamick@fs.fed.us>; Courtade, Julian <JCourtade@indot.IN.gov>; RegulatoryApplicationsLRL@usace.army.mil <RegulatoryApplicationsLRL@usace.army.mil>

United States Department of Agriculture

Farm Production and Conservation

Natural Resources Conservation Service

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

November 4, 2024

Elayna Stoner
Metric Environmental
6958 Hillsdale Court
Indianapolis, Indiana 46250
elaynas@metricenv.com

Dear Elayna Stoner:

The proposed Bridge #197 Project located on County Road (CR) 100 South over McHargue Ditch, 0.01-mile East of CR 500 West. Brownstown Township, in Jackson County Indiana. (Des No 1703018) as referred to in your letter received on October 24, 2024, will not cause a conversion of prime farmland.

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

Sincerely,

JOHN ALLEN

Digitally signed by JOHN ALLEN
Date: 2024.11.04 13:42:18 -05'00'

JOHN ALLEN
State Soil Scientist

From:	Elayna Stoner
To:	Elayna Stoner
Subject:	Des. No. 1703018 -Jackson County Bridge No. 197 _ Gray bat Follow Up Coordination
Date:	Wednesday, February 5, 2025 4:06:20 PM

From: McWilliams, Robin <robin_mcwilliams@fws.gov>
Sent: Wednesday, February 5, 2025 3:31 PM
To: Elayna Stoner <elaynas@metricenv.com>
Subject: Re: [EXTERNAL] Des. No. 1703018 -Jackson County Bridge No. 197 _ Gray bat Follow Up Coordination

INDOT/FHWA are asked to make determinations on all species not covered by a key and request our concurrence.
If a NE determination is made, there is no need to get concurrence from us.

If you answered "yes" to the question "Have you made a NE determination for all other species indicated on the species list" as part of the IPaC coordination, this is sufficient and no additional coordination is necessary regarding the Gray bat.

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

Appendix D

Section 106 of the NHPA

FEDERAL HIGHWAY ADMINISTRATION'S
SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties) AND
SECTION 106 FINDINGS AND DETERMINATIONS
AREA OF POTENTIAL EFFECTS
ELIGIBILITY DETERMINATIONS
EFFECT FINDING
JACKSON COUNTY BRIDGE NO. 197 (NBI NO. 3600132) REPLACEMENT PROJECT
BROWNSTOWN TOWNSHIP, JACKSON COUNTY, INDIANA
DES. NO.: 1703018

AREA OF POTENTIAL EFFECTS
(Pursuant to 36 CFR Section 800.4(a)(1))

The Area of Potential Effects (APE) encompasses a 0.25-mile radius from Jackson County Bridge No. 197. The APE for archaeology is represented by the project area, which consists of all proposed and existing right of way that was archaeologically investigated. A map of the APE can be found in Appendix A.

ELIGIBILITY DETERMINATIONS
(Pursuant to 36 CFR 800.4(c)(2))

Jackson County Bridge No. 197 was previously determined eligible for inclusion in the National Register of Historic Places (NRHP) by the Indiana Historic Bridges Inventory under Criterion C because it represents an early or distinctive phase in bridge construction, design, or engineering, and it retains historic integrity necessary to convey its engineering significance. This bridge is also categorized as a "Non-Select" bridge by the Indiana Historic Bridges Inventory.

There are no other properties listed in, or eligible for listing in, the NRHP within the APE of this project.

EFFECT FINDING

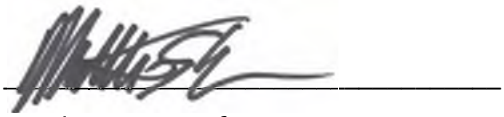
Per the terms of the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), the Federal Highway Administration—Indiana Division (FHWA) will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the Historic Bridges PA (Stipulation III). Jackson County Bridge No. 197 has been classified as a "Non-Select" bridge by the Indiana Historic Bridges Inventory and, thus, the procedures outlined in Stipulation III.B of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the bridge.

Therefore, the finding for this project only applies to other resources located within the APE and not Jackson County Bridge No. 197. This document will satisfy the Section 106 responsibilities for other resources located in the APE. Regarding other resources located in the project area, the Indiana Department of Transportation (INDOT), acting on FHWA's behalf, has determined a "No historic properties affected" finding is appropriate for this undertaking.

INDOT respectfully requests the SHPO provide written concurrence with the Section 106 determination of effect.

SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties)

Jackson County Bridge No. 197 - This resource is used for transportation purposes. Jackson County Bridge No. 197 will be evaluated through the *Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges*.



Matthew S. Coon, for FHWA
Manager
INDOT Cultural Resources Office

April 3, 2024

Approved Date

FEDERAL HIGHWAY ADMINISTRATION
DOCUMENTATION OF SECTION 106 FINDING OF
NO HISTORIC PROPERTIES AFFECTED
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR SECTION 800.11[d]
JACKSON COUNTY BRIDGE NO. 197 (NBI NO. 3600132) REPLACEMENT PROJECT
BROWNSTOWN TOWNSHIP, JACKSON COUNTY, INDIANA
DES. NO.: 1703018

1. DESCRIPTION OF THE UNDERTAKING

Jackson County, with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT), proposes to proceed with the replacement of Jackson County Bridge No. 197 (NBI No. 3600132) carrying County Road (CR) 100 South (S) over McHargue Ditch in Brownstown Township, Jackson County, Indiana. The project would extend approximately 607 feet east of CR 500 West (W) along CR 100 S (including Jackson County Bridge No. 197), 401 feet west of CR 500 W, and approximately 410 feet north and south of the intersection on CR 500 W. The project can be found on the Medora, Indiana 7.5-minute series United States Geological Survey (USGS) Topographic Quadrangle map in Sections 18 and 19, Township 5 North, Range 4 East. See Appendix A for maps of the project location.

Jackson County Bridge No. 197 is a single-span bolted Warren pony truss metal bridge constructed in 1920. The bridge length is 64.7 feet long and 17.8 feet wide, with a load rating of ten tons. Immediately west of the bridge is the intersection of CR 500 West (W) and CR 100 S, which is controlled by a stop sign on CR 100 S. The structure is eligible for the National Register of Historic Places (NRHP), but it is classified as a "Non-Select" bridge in the 2010 Indiana Historic Bridges Inventory.

The purpose of this project is to provide a structure and intersection that fully satisfy the geometric, structural, and hydraulic needs of Jackson County and the local agricultural community by addressing the following:

- Improve turn radii at the intersection
- Correct the stop sign visibility issues with the truss obstruction
- Increase bridge width
- Increase structural capacity
- Improve the waterway adequacy through the bridge by a means that prevents future buildup of sediment at the east abutment.

The need for this project is due to the inadequacies of the existing bridge, which include the following:

- Current load capacity does not meet the design standard of 15 ton
- The waterway adequacy rating is 3 out of 9 due to the 90 degree bend of the ditch at the downstream face of the bridge, which results in large sediment buildup at the east abutment face causing frequent flooding at the intersection
- The structure and the adjacent intersection are not geometrically compliant due to the structure's clear roadway width, which is too narrow for bi-directional traffic and agricultural vehicle access, as well as to the inadequate intersection sight distance that is caused by the truss, which obstructs the view of CR 100S.

The proposed preferred alternative involves removal and replacement of the existing bridge for potential relocation and reuse, with construction of a new bridge on the existing alignment and channel realignment

of the ditch. The previous distribution letter to consulting parties for the Historic Bridge Alternatives Analysis (HBAA) stated the project will require 6.0 acres or less of new permanent right-of-way; however, the project has been changed to acquire 8.0 acres of new permanent right-of-way. The letting date is 2025.

The Area of Potential Effects (APE) includes all locations where the project may result in disturbance of the ground; all locations from which elements of the project may be visible or audible; all locations where activity may result in changes in traffic patterns, land use, or public access; and all areas where there may be direct or indirect effects due to elements of the project. The APE for archaeology is represented by the project area which consists of all proposed or existing right of way that was archaeologically investigated. For above-ground structures the APE was defined as encompassing a 0.25-mile radius from the Jackson County Bridge No. 197. Aerial maps of the APE are located in Appendix A and project site photographs are located in Appendix B.

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

The State Historic Preservation Office (SHPO) is automatically invited to participate in the Section 106 process as a consulting party. The following other individuals and organizations were invited by letter or email dated January 26, 2021 (Appendix E: pgs. 27-34).

Indiana Landmarks – Southern Regional Office
Jackson County Highway Superintendent
Jackson County History Center
Jackson County Historian
History and Library Museum
Jackson County Commissioners – Drew Markel, Bob Gillaspy, Matt Reedy
Dr. Jim Cooper
Historic Spans Task Force
Historic Bridge Foundation
HistoricBridges.org
Hoosier Historic Bridges
Eastern Shawnee Tribe of Oklahoma
Miami Tribe of Oklahoma
Peoria Tribe of Indians Oklahoma
Pokagon Band of Potawatomi
Shawnee Tribe
Delaware Nation of Oklahoma

SHPO responded by letter dated February 10, 2021 (Appendix E: pgs. 35-36). In its letter, SHPO indicated they were not aware of any other parties who should be invited to participate in the Section 106 consultation for this project and that they are looking forward to reviewing the proposed APE and the above-ground and archaeological survey reports.

The Miami Tribe of Oklahoma responded by letter dated March 9, 2021, accepting consulting party status and offered no objections to the project, but requested immediate consultation if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of the project (Appendix E: pg. 37).

No other replies were received in regard to the early coordination letter.

Efforts to identify historic properties in the APE included a check of data available online at the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBC Map), a review of the *Jackson County Interim Report* (1988), historical/architectural and archaeological fieldwork, and communication with consulting parties. Sources of information examined included NRHP listings, Indiana Register of Historic Sites and Structures (IRHSS) listings, the Indiana Historic Bridge Inventory, archaeological site maps, cultural resources management reports, and cemetery records.

There is one NRHP-eligible resource situated within the APE: Jackson County Bridge No. 197, which was determined eligible for the NRHP per the 2010 Indiana Historic Bridges Inventory. The bridge is eligible under Criterion C for its representation of an early or distinctive phase in bridge construction, design, or engineering, and it retains historic integrity necessary to convey its engineering significance (see Appendix A for an aerial map identifying the bridge in the project area). The classification of bridges into "Select" or "Non-Select," as part of the Historic Bridges PA, also resulted in the determination of Jackson County Bridge No. 197 as a "Non-Select" bridge because it is not considered an excellent example of its type and/or it is not suitable for preservation. There are no other resources listed, or eligible for listing, in the NRHP nor in the Indiana Register of Historic Sites and Structures within the proposed APE of this project.

No previously inventoried archaeological sites are located within the project area.

The results of field surveys were reported in a Historic Property Short Report (HPSR) by Karen Garrard under the supervision of Candace Hudziak (Garrard and Hudziak, 3/29/22) and a Phase Ia archaeological reconnaissance survey report by Megan Copenhaver and Christopher Stevenson under the supervision of Samuel Snell (Snell, 4/27/22). The principal investigators for these reports meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61. The HPSR identified one property listed in the NRHP and recommended no other properties as eligible for listing in the NRHP: Jackson County Bridge No. 197. The archaeology report found no sites and recommended the project be allowed to proceed as planned.

A copy of the HPSR management summary and conclusion are included in Appendix C and the Phase Ia archaeological reconnaissance survey report results and recommendations are included in Appendix D.

A letter distributed on May 2, 2022 notified consulting parties that a HPSR and a Phase Ia archaeological reconnaissance survey report (Tribes only) were available for review and comment via INDOT's Section 106 document posting website IN SCOPE http://erms12c.indot.in.gov/Section106Documents/ (Appendix E: pgs. 38-42). The full HPSR document may also be downloaded from IN SCOPE (the Des. No. is the most efficient search term, once in IN SCOPE).

On May 3, 2022, the Miami Tribe of Oklahoma acknowledged receipt of the HPSR and Phase Ia archaeological reconnaissance survey report materials (Appendix E: pg. 43). They offered no objection to the undertaking but requested to be immediately notified and consulted if human remains or Native American cultural items are discovered during any phase of the proposed project.

On May 3, 2022, the Peoria Tribe of Indians of Oklahoma acknowledged receipt of the HPSR and Phase Ia archaeological reconnaissance survey report materials and accepted the consulting party invitation (Appendix E: pg. 44). They offered no objection to the undertaking but requested to be immediately notified and consulted if human remains or Native American cultural items are discovered during any phase of the proposed project.

On May 23, 2022, the Eastern Shawnee Tribe of Oklahoma acknowledged receipt of the HPSR and Phase Ia archaeological reconnaissance survey report materials and accepted the consulting party invitation (Appendix E: pg. 45). They proposed the project would have no adverse effect upon known sites of interest to the Eastern Shawnee Tribe. If archaeological sites or objects are discovered during the project, they requested all ground disturbing activity to stop until the Tribe and appropriate state agencies are consulted.

By letter dated May 31, 2022, the SHPO provided comments regarding the HPSR and the Phase Ia archaeological reconnaissance survey report (Appendix E, pgs. 46-47). The SHPO concurred that the APE proposed in the HPSR appears to be of adequate size to encompass the effects of the undertaking. The SHPO also agreed that the Jackson County Bridge No. 197 is eligible for listing in the NRHP and categorized as a "Non-Select" bridge per the *Indiana Historic Bridge Inventory.* The SHPO also concurred with the archaeology report's recommendation that no further archaeological work is necessary for this project.

Per the procedures outlined in Stipulation III.B of the Historic Bridges PA, a Historic Bridge Alternatives Analysis (HBAA) was prepared by Janssen and Spaans Engineering (see Appendix G). The HBAA evaluated five alternatives: do nothing, rehabilitation of the bridge, bypassing the bridge, bridge replacement in-place on existing alignment, and bridge replacement with channel realignment. The bridge replacement with channel realignment alternative met the project's purpose and need, and it was determined to be the most prudent and feasible option.

The HBAA was distributed to consulting parties for review on January 11, 2024 (see Appendix E: pgs. 48-53 for the preferred alternative's summary page). The full HBAA document may also be downloaded from IN SCOPE (the Des. No. is the most efficient search term, once in IN SCOPE).

In a letter dated February 9, 2024, the SHPO provided comments regarding the HBAA (Appendix E: pgs. 54-56). The SHPO concurred with the HBAA's recommendations that Alternatives A, B-1, B-2, C-1, and C-2 are not prudent alternatives. Additionally, the SHPO stated they understood that Alternatives D and E would remove the existing bridge substructure, but Alternative D would not meet the purpose and need of the project. The SHPO agreed that Alternative E is the preferred alternative because it is prudent and feasible and allows the relocation and preservation of the bridge at another location. They stated their understanding that the Jackson County Fairgrounds expressed interest in taking ownership of the bridge and if the preferred alternative selected includes transferring ownership, that INDOT shall execute an agreement between the INDOT, Jackson County Highway Department, the Jackson County Fair Board (Fairgrounds), and the Indiana SHPO.

On March 12, 2024, the Eastern Shawnee Tribe of Oklahoma acknowledged receipt of the HBAA (Appendix E: pg. 57). They proposed the project would have no adverse effect upon known sites of interest to the Eastern Shawnee Tribe. If archaeological sites or objects are discovered during the project, they requested all ground disturbing activity to stop until the Tribe and appropriate state agencies are consulted.

Per the terms of the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), the FHWA-Indiana Division will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the Historic Bridges PA (Stipulation III). Because Jackson County No. 197 is a "Non-Select" bridge, the procedures outlined in Stipulation III.B. of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the project. (A copy of the Historic Bridges PA can be downloaded here: http://www.in.gov/indot/2530.htm).

Jackson County Bridge No. 197 is being marketed for rehabilitation and reuse, or for the salvage of

elements of the bridge by an interested party, in accordance with the Historic Bridges PA. An advertisement was placed in the Indianapolis Star on May 19, 2021, both in the newspaper's print and online edition, as well as in the Seymour Tribune newspaper on May 14, 2021, on the INDOT Historic Bridges Marketing Program website on May 19, 2021, and signs advertising the bridge for reuse were placed at both bridge approaches on January 4, 2021. The INDOT-CRO also notified Indiana Landmarks via email of the advertisement on the INDOT Historic Bridges Marketing Program website on May 19, 2021. The marketing period will end when the public hearing comment period ends (see Appendix F for bridge marketing documentation).

In response to these efforts the Jackson County Fair Board has expressed a commitment to acquire ownership of Jackson County Bridge No. 197 and relocate it to the Jackson County Fairgrounds (the agreement between the two parties was included as an appendix to the HBAA, which can be downloaded from IN SCOPE). The County Fairgrounds have expressed their intention to use the bridge for American with Disabilities Act-compliant pedestrian access to and from the grounds. No other comments have been received from the public.

Pursuant to the Historic Bridge PA, the SHPO may request that Jackson County Bridge No. 197 be documented according to the "Indiana DNR – Division of Historic Preservation and Archaeology Minimum Architectural Documentation Standards." If the SHPO requests photo documentation, digital, color photographs, a photo log that corresponds to the photographs, a photo key, and an overview thumbnail sheet will be compiled for SHPO review and approval. Any additional drawings or historic bridge plans will also be provided for SHPO review and approval. Upon SHPO approval, this documentation will be provided to a public or not-for-profit organization that is willing to accept a copy of this documentation and make it available to the public.

Per Stipulation III of the Historic Bridges PA, the project sponsor will hold a public hearing for the project prior to completion of National Environmental Policy Act (NEPA) studies and all consulting parties will be notified of the public hearing.

3. BASIS FOR FINDING

No consulting parties offered an objection to the proposed APEs and NRHP eligibility recommendations of both the project historian and archaeologist. Thus, since no historic properties are present within the APE, a finding of "No Historic Properties Affected" has been made for this undertaking.

INDOT's Finding, made on behalf of the FHWA, and supporting 800.11[d] documentation is hereby provided to the SHPO for a final 30-day comment period. Views of the public are being concurrently sought through publication of the Finding in the Seymour *Tribune* newspaper. This document will be revised, if necessary, if public comment warrants it.

APPENDICES

A. Project Location Maps and APE
B. Project Site Photographs and Key Maps
C. Historic Property Short Report Management Summary and Conclusions
D. Archaeology Short Report Results and Recommendations
E. Consulting Parties' List and Correspondence
F. Bridge Marketing Documentation
G. Historic Bridge Alternatives Analysis Title Page and Preliminary Preferred Alternative

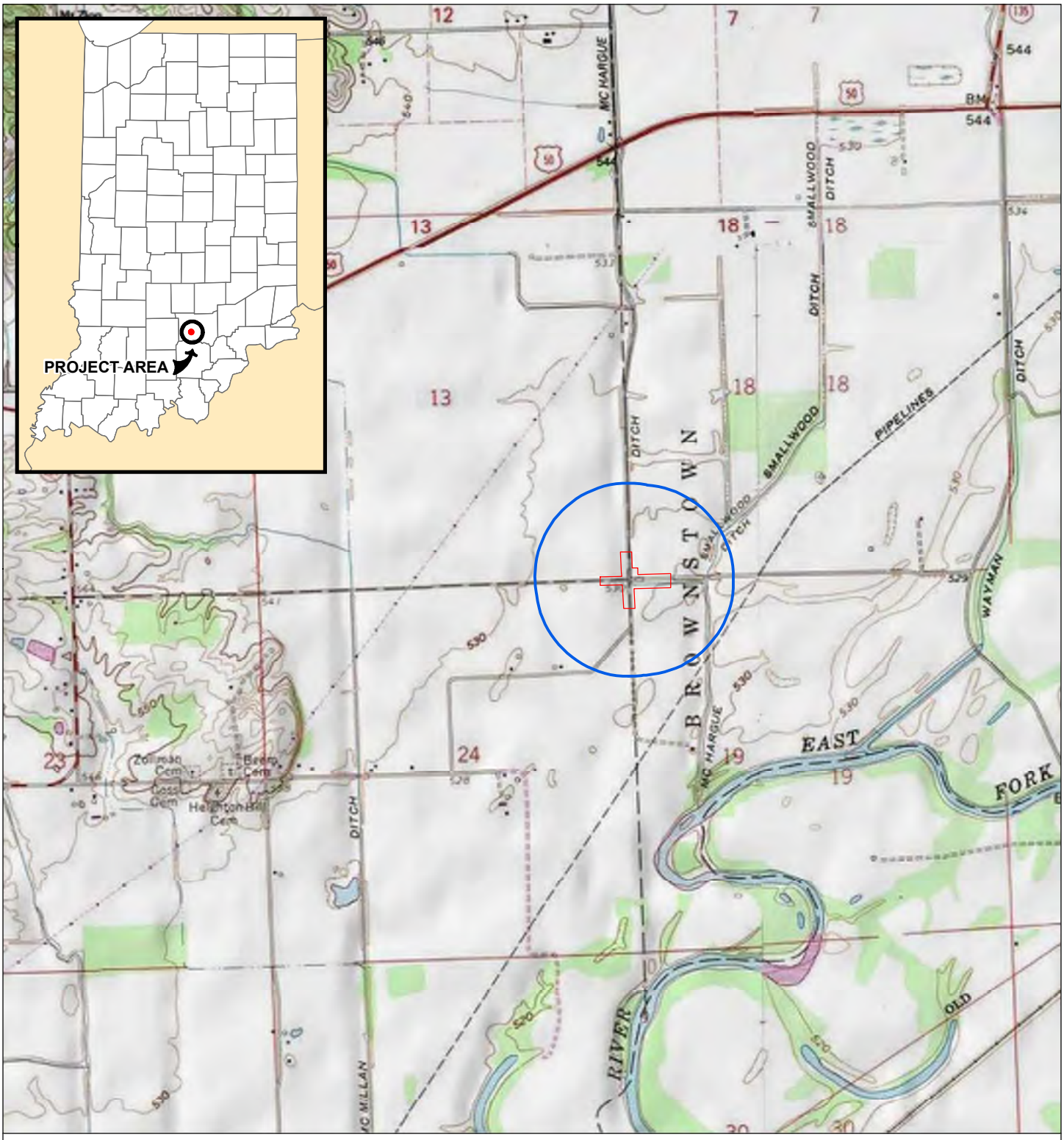


Figure 1. Project area and APE on a portion of the 1992 Medora, IN, 7.5 Minute Quadrangle Jackson County Bridge 197 over McHargue Ditch Bridge Project
Brownstown Township, Jackson County, Indiana
Des. No. 1703018
Metric Project No. 19-0010
Map Date: 10/20/2021

All Locations Approximate
1992 Basemap

N

Feet
0 1,000 2,000
1 inch = 2,000 feet

METRIC ENVIRONMENTAL

Proposed National Register Boundary

Figure 2. Proposed National Register boundary on an aerial photograph
Jackson County Bridge 197 over McHargue Ditch Project
Brownstown Township, Jackson County, Indiana
Des. No. 1703018
Metric Project No. 19-0010
Map Date: 6/3/2022

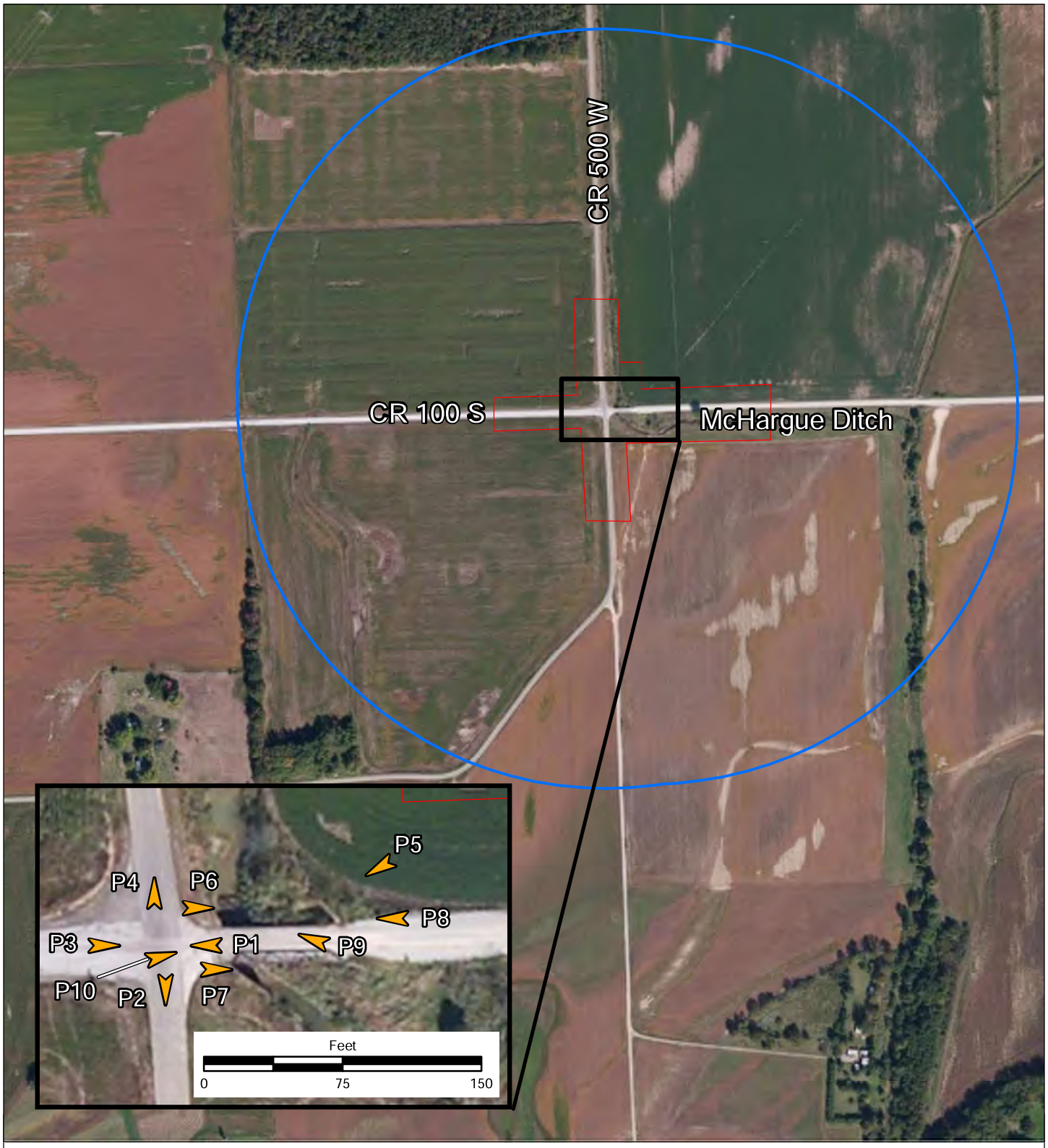
All Locations Approximate
2013 Basemap
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 inch = 50 feet

N

Feet
0 50 100

METRIC ENVIRONMENTAL



Project Area
APE
Photograph Location

Figure 1. Project Area on an aerial photograph
Jackson County Bridge 197 over McHargue Ditch Bridge Project
Brownstown Township, Jackson County, Indiana
Des. No. 1703018
Metric Project No. 19-0010
Map Date: 10/20/2021

All Locations Approximate
2013 Basemap

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

N

1 inch = 500 feet

Feet
0
250
500

METRIC ENVIRONMENTAL

PHOTOGRAPHS OF THE AREA OF POTENTIAL EFFECTS

Photo 1. View from the intersection of CR 500 W and CR 100 S, facing west.

Photo 2. View from the intersection of CR 500 W and CR 100 S, facing south.

Photo 3. View from the intersection of CR 500 W and CR 100 S and showing Jackson County Bridge No. 197, facing east.

Photo 4. View from the intersection of CR 500 W and CR 100 S, facing north.

Photo 5. Jackson County Bridge No. 197, facing southwest.

Photo 6. Jackson County Bridge No. 197, facing east.

Photo 7. Jackson County Bridge No. 197 and McHargue Ditch, facing east.

Photo 8. View showing Jackson County Bridge No. 197 and CR 100 S, facing west.

Photo 9. Detail of Jackson County Bridge No. 197, facing northwest.

Photo 10. View overlooking Jackson County Bridge No. 197, facing northeast.

HISTORIC PROPERTY SHORT REPORT

JACKSON COUNTY BRIDGE NO. 197 (NBI NO. 3600132)
CARRYING CR 100 SOUTH OVER MCHARGUE DITCH PROJECT,
BROWNSTOWN TOWNSHIP, JACKSON COUNTY, INDIANA
DES. NO. 1703018/DHPA NO. 26954

PREPARED FOR:

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April 27, 2022

MANAGEMENT SUMMARY

This report documents the identification and evaluation efforts for properties included in the proposed Area of Potential Effects (APE) for the Jackson County Bridge No. 197 (NBI No. 3600132) carrying County Road 100 South over McHargue Ditch project in Brownstown Township, Jackson County, Indiana. Above-ground resources located within the proposed APE were identified and evaluated in accordance with Section 106, National Historic Preservation Act (NHPA) of 1966, as amended, and the regulations implementing Section 106 (36 CFR Part 800).

As a result of the NHPA, as amended, and CFR Part 800, federal agencies are required to take into account the impact of federal undertakings upon historic properties in the area of the undertaking. Historic properties include buildings, structures, sites, objects, and/or districts that are eligible for or listed in the National Register of Historic Places (NRHP). As this project is receiving funding from the Federal Highway Administration (FHWA), it is subject to a Section 106 review.

The APE contains no properties listed in the NRHP.

The APE contains Jackson County Bridge No. 197, which was determined eligible for the NRHP per the Indiana Historic Bridge Inventory. The classification of bridges into “Select” or “Non-Select” as part of the “Programmatic Agreement Regarding Management and Preservation of Indiana’s Historic Bridges” (Historic Bridges PA) also resulted in the determination that Jackson County Bridge No. 197 is a “Non-Select” bridge because it was not considered an excellent example and/or it is not suitable for preservation. Because Jackson County Bridge 197 is a “Non-Select” bridge, the FHWA will satisfy its Section 106 responsibilities following the procedures outlined in Stipulation III.B of the Historic Bridges PA. Per Stipulation III.B., a Historic Bridge Alternatives Analysis will be prepared for the project.

CONCLUSIONS

The APE contains no properties listed in the NRHP.

As a result of identification and evaluation efforts for this project, one property, known as Jackson County Bridge No. 197 carrying County Road 100 South over McHargue Ditch, was determined eligible for the NRHP per the Indiana Historic Bridge Inventory.

The classification of bridges into “Select” or “Non-Select” as part of the Historic Bridges PA also resulted in the determination that Jackson County Bridge No. 197 is a “Non-Select” bridge because it was not considered an excellent example and/or it is not suitable for preservation. Because Jackson County Bridge 197 is a “Non-Select” bridge, the FHWA will satisfy its Section 106 responsibilities following the procedures outlined in Stipulation III.B of the Historic Bridges PA. Per Stipulation III.B., a Historic Bridge Alternatives Analysis will be prepared for the project.

ARCHAEOLOGICAL SHORT REPORT

PHASE IA ARCHAEOLOGICAL SURVEY FOR THE JACKSON COUNTY BRIDGE NO.197 (NBI NO. 3600132) CARRYING CR 100 SOUTH OVER MCHARGUE DITCH PROJECT, 0.01 MILE EAST OF CR 500W, BROWNSTOWN TOWNSHIP, JACKSON COUNTY, INDIANA
(DES NO. 1703018/DHPA NO. 26954)

PREPARED FOR:

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Samuel P. Snell

Samuel P. Snell, MS, RPA
Archaeological Principal Investigator
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April 27, 2022

INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R2 / 11-20)

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

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

Name(s) of author(s)	Date *(month, day, year)*
Megan Copenhaver and Chris Stevenson	April 27, 2022

Title of project
Phase Ia Archaeological Survey for the Jackson County Bridge No. 197 (NBI No. 3600132) Carrying CR 100 South over McHargue Ditch Project, 0.01 Mile East of CR 500W, Brownstown Township, Jackson County, Indiana (Des No. 1703018/DHPA No. 26954)

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

Name(s) of author(s) of previous report
NA

Title of previous report
NA

Date of previous report *(month, day, year)*	DHPA number
NA	NA

PROJECT OVERVIEW

Description of project
The project entails the replacement of existing Jackson County Bridge No. 197 (NBI No. 3600132), which carries County Road (CR) 100 South (S) over McHargue Ditch in Brownstown Township, Jackson County, Indiana (Figure 1). The purpose of this project is to provide geometric and safety improvements to the intersection of CR 500 West (W) and CR 100 S in conjunction with providing a structurally sufficient and scour resistant bridge crossing at McHargue Ditch located adjacent to the intersection. The need for this project is due to a desire to improve serviceability for the agricultural equipment and trucks that frequently use these roads and navigate this intersection. Roadway features identified as substandard at this location include intersection radii for turning movements, uneven vertical grades along CR 500 W in approach to this intersection, and sight distance and roadside hazard issues associated within proximity of the existing bridge.

The intersection with CR 500 W will also be improved as part of the project.The project extends approximately 185 meters (m) (607 feet [ft]) east of CR 500 W along CR 100 S (including Jackson County Bridge No. 197), 122.2 m (401 ft) west of CR 500 W, and approximately 125.0 m (410 ft) north and south of the intersection on CR 500 W.

The project encompasses 2.7 hectares (ha) (6.6 acres [ac]), which also corresponds to the Phase Ia survey area.

INDOT designation number(s)	Project number	DHPA number	DHPA plan number
1703018	19-0010	26954	

Prepared for: *(Company / Institution / Agency)*
Janssen & Spaans Engineering, Inc.

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Name of principal investigator
Samuel P. Snell, MS, RPA

Name of company / institution
Metric Environmental, LLC

Address *(number and street, city, state, and ZIP code)*
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Telephone number	E-mail address
(317) 912-3499	sams@metricenv.com

Signature of principal investigator *(Required)*	Date *(month, day, year)*

PROJECT LOCATION

County	USGS 7.5′ series topographic quadrangle	Civil township
Jackson	Medora	Brownstown

Legal Location

(11.8-17.7 in) below ground surface with similar soil profiles to those in Transect 1. Three STPs were cored to a depth of 80-100 cm (31.5-39.3 in) below ground surface. No cultural materials nor evidence of buried horizons was encountered within Area 4.

RECOMMENDATIONS

Records check *(Check all that apply.)*

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

Phase Ia archaeological reconnaissance *(Check all that apply.)*

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

Other recommendations / commitments

No Phase Ic archaeological subsurface testing is recommended because soil coring and augering did not show any evidence of potential buried cultural surfaces. In addition, the poorly drained, hydric nature of the alluvial soils within the survey area points to a low probability of archeological sites in such a setting.

In the unlikely event that archaeological deposits or human remains are encountered during the construction phase of the project, all work must cease and archaeologists from the DHPA and the INDOT-Cultural Resourcs Office must be notified.

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

REQUIRED ATTACHMENTS

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

Other attachments

References cited *(See short report instructions for required references to be consulted.)*

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