# Categorical Exclusion **Appendix D** Section 106 of the National Historic Preservation Act (NHPA)

### **US 40 over Sallust Branch of Mill Creek**

Putnam County, Indiana INDOT Des. No.: 1601094 DHPA No.: 22271



## <sup>05/21/2020</sup> Section 106, 800.11(d) Documentation

Prepared for:

The Federal Highway Administration and Crawfordsville District, Indiana Department of Transportation Prepared by:

Kyle J. Boot KBoot@RQAW.com



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### FEDERAL HIGHWAY ADMINISTRATION'S SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties) AND SECTION 106 FINDINGS AND DETERMINATIONS AREA OF POTENTIAL EFFECT ELIGIBILITY DETERMINATIONS EFFECT FINDING US 40 over Sallust Branch of Mill Creek DES. NO.: 1601094 DHPA NO.: 22271

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

Pursuant to 36 CFR 800.16(d), the Area of Potential Effects (APE) was drawn as an approximately 0.25 mile (1,320 foot) buffer from the US 40 crossing over Sallust Branch. The APE narrows to the south and the northwest where vegetation along streams limits views. (See Appendix A: Maps.)

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

There is one resource eligible for listing in the National Register of Historic Places (NRHP):

US 40 over Sallust Branch; Bridge No.: 040-067-01838; and National Bridge Inventory (NBI) No.: 013740, is a 30-feet single-span reinforced concrete stringer/multi beam structure constructed in 1921. Additions were built on the structure in 1938. The bridge was determined eligible for listing in the NRHP as part of the Indiana Department of Transportation (INDOT) Indiana Historic Bridge Inventory under Criterion A as it is a "Crossing built to serve Main Market No. 3 and represents ISHC's early development to the state highway system and pre-World War II widening to serve as a U.S. Highway." The period of significance is 1921-1938, the date of construction and its widening.

### **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). The **US 40 over Sallust Branch (Bridge No.: 040-067-01838; and NBI No.: 013740)** has been classified as a "Select" bridge by the INDOT 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 to **US 40 over Sallust Branch (Bridge No.: 040-067-01838; and NBI No.: 013740)**. This document will satisfy the Section 106 responsibilities for other resources located in the APE. Regarding other resources located in the project area, INDOT, acting on FHWA's behalf, has determined a "No historic properties affected" finding is appropriate for this undertaking.

INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of "No historic properties affected" for this undertaking.

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

This undertaking will not convert property from any Section 4(f) historic property to a transportation use; the INDOT, acting on FHWA's behalf, has determined the appropriate Section 106 finding is "No Historic Properties Affected"; therefore, no Section 4(f) evaluation is required.

Anuradha V. Kumar

Anuradha V. Kumar, for FHWA Manager INDOT Cultural Resources

06/03/2020

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 800.4(d)(1) US 40 over Sallust Branch of Mill Creek DES. NO.: 1601094 DHPA NO.: 22271

### **1. DESCRIPTION OF THE UNDERTAKING**

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to rehabilitate the US 40 over Sallust Branch of Mill Creek bridge (Bridge No. 040-67-01838C, NBI No. 013740) in Jefferson Township, Putnam County, Indiana (INDOT Des. Number: 1601094). The project is located approximately 0.5 mile west of SR 75 on the boarder of the Coatesville and Eminence Quadrangles, Township 14 North, Range 2 West and section 30 (see Appendix A: Project Area Maps).

Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the affects of their undertakings on historic properties; the Federal involvement is funding from the FHWA.

The existing structure is a single-span reinforced concrete cast-in-place structure constructed in 1921. Additions were built on the structure in 1938. The bridge was determined eligible for the National Register of Historic Places (NRHP), per the INDOT Statewide Historic Bridge Inventory. The inventory also designated the structure as a "Select" bridge, meaning that it is a good candidate for preservation. The procedures outlined in Stipulation III.A of the Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA) have been followed. Per the Historic Bridges PA, a Purpose and Need statement and Alternatives Analysis were developed.

#### Purpose and Need

Per the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019) and the Historic Bridge Alternatives Analysis Addendum, the principal need for the project is due to the deteriorated condition of the existing structure. If deterioration is allowed to continue on this structure, it will eventually lead to failure and not perpetuate a crossing on US 40 over Sallust Branch of Mill Creek. The purpose of the proposed project is to continue providing a structurally sufficient and hydraulically adequate structure that perpetuates vehicular traffic crossing at this location.

#### **Preliminary Preferred Alternative**

This project includes the rehabilitation of the US 40 over Sallust Branch of Mill Creek (Bridge No. 040-67-01838C, NBI No. 013740). The preferred alternative focuses on repair, preservation, and maintenance. The preferred alternative proposes to patch and fiber-wrap the deteriorated beams, patch the remaining substructure (abutments and wing walls), patch to retain the existing railing, and place rip rap along the banks. In order to access the substructure for repairs and placing rip rap, a temporary haul road will be in the northeast quadrant of the bridge and a temporary cofferdam and pump around will be used. Please see 60% Plans in Appendix G. All activities are anticipated to take place within the existing right-of-way; therefore, no additional permanent or temporary right-of-way will be required.

#### **Area of Potential Effects**

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 is an irregular polygon. Along US 40, it is approximately 0.25 mile from the US 40 crossing over Sallust Branch. The APE narrows to the south and northwest where vegetation along streams limits views (see Appendix A: Project Area Maps).

#### 2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

The National Register of Historic Places (NRHP) and the Indiana Register of Historic Sites and Structures (State Register) were checked using the State Historical Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries (IHBBC) Map. No resources are listed on the NRHP or State Register within the APE. The *Indiana Historic Sites and Structures Inventory* (IHSSI) Putnam County Interim Report (1982) data was examined. The Interim Report identified no properties within the APE. The cemetery registry was also consulted using SHAARD and IHBBC Map. The Heavin-Lee Cemetery (Cemetery Records CR-67-87, IHSSI # 109-428-06055) was identified near, but outside of the south boundary of the APE.

Early coordination for this project was initiated on February 5, 2018. The agencies/individuals/tribes listed below were sent an email with an early coordination letter inviting them to become Section 106 consulting parties. All consulting parties were invited to view the early coordination letter on IN SCOPE (INDOT's online portal for public viewing of Section 106 documents at <a href="http://erms.indot.in.gov/Section106">http://erms.indot.in.gov/Section106</a> Documents/). In addition, a hard copy of the early coordination letter was mailed to the Indiana State Historic Preservation Office (SHPO). The organizations identified in bold responded and agreed to be consulting parties. (See Appendix C: Consulting Parties List and Appendix D: Consulting Parties Correspondence).

- 1. Indiana State Historic Preservation Officer (SHPO)
- 2. Indiana Landmarks, Western Regional Office
- 3. James Cooper, Bridge Historian
- 4. Indiana Historic Spans Task Force
- 5. Main Street Greencastle, Inc.
- 6. Heritage Preservation Society of Putnam County
- 7. Indiana National Road Association
- 8. Putnam County Historian
- 9. Putnam County Museum
- 10. West Central Indiana Economic Development District, Inc.
- 11. Putnam County Commissioner
- 12. Putnam County Highway Supervisor
- 13. Miami Tribe of Oklahoma
- 14. Peoria Tribe of Indians of Oklahoma
- 15. Eastern Shawnee Tribe of Oklahoma
- 16. Pokagon Band of Potawatomi Indians
- 17. Forest County Potawatomi Community

The Miami Tribe of Oklahoma agreed to be a consulting party and offered no objection to the project at that time in a letter dated February 6, 2018. Specifically, Diane Hunter, who is the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma stated, "The Miami Tribe offers no objection to the above-mentioned project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. If any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archeological evidence is discovered during any phase of this project, the Miami Tribes requests immediate consultation with the entity of jurisdiction for the location of discovery."

In an email dated March 6, 2018, Michael Flowers of Indiana National Road Association accepted to be a consulting party and stated, "the bridge mentioned in the report, constructed in 1921 and identified as a select bridge, is a historic resource on the Historic National Road which has been designated state and national scenic byway as well as an All-American road."

In a phone call on March 5, 2018, Mary Kennedy, INDOT-CRO Historic Bridge Specialist, spoke with Mark Dollase of Indiana Landmarks, Central Regional Office regarding historic bridges in general. During the call, Indiana Landmarks indicated a wish to participate in Section 106 consultation as a consulting party for this project.

In a letter dated April 4, 2018, the SHPO staff indicated that they received the early coordination letter on March 9, 2018, and recommend no other consulting parties. The SHPO staff also commented on the name "Sallust Branch" stating that it "sounds as though this stream is considered a tributary to a more prominent stream" and "might the full name be Sallust Branch of Mill Creek?" At this time the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology (INDNR-DHPA) provided notification of the commencement of the dual review to interested persons and members of the Indiana Historic Preservation Review Board. (See Appendix D: Consulting Parties Correspondence.)

A Historic Property Short Report (HPSR) (Boot, 4/24/2018) was completed for this project. See Appendix E for the HPSR summary and the full HPSR can be downloaded from IN SCOPE. On April 17, 2018, the Qualified Professional (QP) staff at RQAW Corporation performed a site inspection of the APE. The QP architectural historian walked through the project area within the APE and photographed the project area. (See Appendix B: General Photographs.) As a result of identification and evaluation efforts for this project, other than the undertaking, historian Boot found two resources recommended not eligible for inclusion in the NRHP within the APE that will be at least 50 years of age at the time of the project's proposed letting date, which is anticipated to occur in 2021. (Note: US 40 over Sallust Branch bridge that was previously determined as eligible for inclusion in the NRHP in the Indiana Statewide Historic Bridge Inventory – falls under the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA) for purposes of Section 106 review.) On May 8, 2019, a hard copy of a coordination letter and HPSR were mailed to the Indiana SHPO while other consulting parties were informed by email that the coordination letter and HPSR could be viewed electronically by accessing IN SCOPE (see Appendix D: Consulting Parties Correspondence). With the coordination letter, the project name was changed from US 40 over Sallust Branch to US 40 over Sallust Branch of Mill Creek in response to the SHPO comment in the letter dated April 4, 2018.

In a letter dated June 7, 2018, the SHPO concurred with the HPSR stating, "we agree with the HPSR that the US 40 bridge over Sallust Branch remains eligible for inclusion in the NRHP and that it is the only above-ground property within the APE that is historic." The SHPO staff commented "we acknowledge that the *Indiana Historic Bridge Inventory* evaluated the [bridge] as being NRHP-eligible only under Criterion A" but "we think the type of bridge and its visual characteristics contribute something to its significance." The SHPO staff goes on to elaborate on this topic in their letter located in Appendix D: Consulting Parties Correspondence.

In a letter dated June 19, 2018, INDOT responded to the SHPO's comments regarding significant features. INDOT continued to welcome comments in regard to significant features of the bridge under Criterion A that should be preserved by the project, but no other parties offered comments in this regard to date. In addition, a brief summary of the bridge's current condition and recommended scope of the project at that time were conveyed to consulting parties. This included a Core Report, completed by Earth Exploration Inc. on May 11, 2018 (Olson, May 11, 2018). The letter and Core Report were mailed to the Indiana SHPO while other consulting parties were informed by email that the coordination letter and Core Report could be viewed electronically by accessing IN SCOPE (see Appendix D: Consulting Parties Correspondence).

In a letter dated July 18, 2018, the SHPO responded to the coordination letter and Core Report stating, "it appears to us, from the concrete core sampling and testing report, that the beams are generally in better

condition than the deck and the east abutment." The SHPO staff commented "it would be helpful if someone could provide, in the next correspondence, definitions of "superstructure" and "substructure," as "bridge engineers use those terms" and "we have the impression from the scope of work proposed in INDOT's June 19 [, 2018,] letter, that the superstructure here might include only the deck and railing and that substructure might include the reinforced concrete beams, as well as the abutments, wingwalls, and footings." In addition the SHPO staff asked "could a heavier than usual steel reinforced mechanism be installed in a new, poured concrete deck that would reduce some of the forces on the 1921 and 1938 reinforced concrete beams, so that more of the beams could be repaired and retained while also improving the load-bearing capacity of the rehabilitated bridge as a whole?" (See Appendix D: Consulting Parties Correspondence.)

A draft Historic Bridge Alternative Analysis (HBAA) for US 40 over Sallust Branch of Mill Creek (Bridge No. 040-067-01838, NBI No. 013740) was completed by RQAW on July 9, 2019 (Dohrenwend & Boot, 7/19/2018). The draft HBAA along with a coordination letter addressing the comments presented by the SHPO staff in their letter dated July 18, 2018, was transmitted to consulting parties on July 25, 2019. Please see Appendix G for the draft HBAA summary. The full draft HBAA can be downloaded from IN SCOPE. On July 25, 2019, a hard copy of a coordination letter and draft HBAA were mailed to the Indiana SHPO while other consulting parties were informed by email that the coordination letter and draft HBAA could be viewed electronically by accessing IN SCOPE (see Appendix D: Consulting Parties Correspondence and Appendix G: Historic Bridge Alternatives Analysis Summary). The preliminary preferred alternative identified in the draft HBAA consisted of rehabilitating the structure while not meeting the *Secretary of Interior's Standards for Rehabilitation*. This alternative would remove the asphalt paving surface, patch the concrete deck, install a bridge deck overlay, patch and fiber-wrap deteriorated beams, patch abutments, and replace the railing with a TL-4 (Test Level 4) INDOT FC railing.

In a letter dated August 20, 2019, the SHPO responded to the consulting party letter dated July 18, 2019, and the draft HBAA stating appreciation for responses to their comments on "the distinction between the superstructure and substructure of a bridge" and "the reinforced replacement deck [carrying] some of the vehicular load so that the reinforced concrete beams would not have to be replaced", along with pleasure "that the beams and abutments can be rehabilitated on this Select Bridge." In addition, the SHPO staff questioned "would the fiber-wrapping of the beams allow their original shape to remain apparent" and "would a replacement railing that has design features similar to those of the existing railing but is reinforced and probably taller or thicker than the existing railing be acceptable from a crash testing perspective." For more details please see Appendix D: Consulting Parties Correspondence.

An Archaeology Short Report (ASR) was completed by Cultural Resource Analysts, Inc. (CRA) on October 17, 2019 (Kelley, 10/17/2019). The archaeological reconnaissance identified no archaeological sites within in the project area and recommended the project be allowed to proceed as planned. The tribes (listed above) were invited to review the report via IN SCOPE on October 22, 2019, while a hard copy was sent to the SHPO (see Appendix D: Consulting Parties Correspondence and Appendix E: Historic Property Short Report and Archaeology Report Summaries). In a letter dated November 21, 2019, the SHPO concurred with the archaeology review stating, "we have not identified any currently known archaeological resources listed in or eligible for inclusion in the NRHP within the proposed project area; and we concur with the opinion of the archaeologist" and "that no further archaeological investigations appear necessary at the proposed project area." (See Appendix D: Consulting Parties Correspondence.)

Per the Historic Bridges PA, Attachment B, a hard copy of the 30 percent plan set, completed by RQAW on July 26, 2019, was sent to the SHPO on October 22, 2019, with a coordination letter addressing their August 20, 2019 comments. The coordination letter presented photos of a similar fibber wrap to the one to be used on the deteriorating beams of US 40 over Sallust Branch. In a letter dated November 22, 2019, the SHPO responded to the 30 percent plans stating, "we have no other questions about the plans at the 30% stage of development". In response to the coordination letter the SHPO staff "would prefer that [the fiber wrap] be of a color closer to that of the concrete on this bridge" and "would appreciate it if an

effort were made here to tint the fiber wrap or obtain it in a hue or shade that is closer to the hue and shade of the existing concrete."

In response to the SHPO staff's letter dated November 22, 2019, INDOT will try to match the color of the fiber wrap and patching material to the hue and tint of the existing concrete so that the repairs are as inconspicuous as possible. A special provision will be included in the contract regarding the color of the fiber wrap and concrete patching.

In conclusion of the 106 consultation, the INDOT has reduced the current scope of the project and identified a revised preferred alternative focused on repair, preservation, and maintenance. Thus, the previously identified preferred alternative in the draft HBAA (Dohrenwend and Boot, 7/9/2019) is no longer the preferred alternative due to further opportunities to minimize current impacts to the historic bridge. An Addendum to the draft HBAA has been prepared and being distributed to consulting parties concurrently with this Section 106 effects finding documentation. Please see a summary of the draft HBAA Addendum in Appendix F.

Per the Historic Bridges PA, Attachment B, copies of the 60 percent plans are being sent to the SHPO concurrently with this Section 106 effects finding documentation for review and comment. The final design plans will be sent to the SHPO for review and comment when they become available.

Finally, INDOT will consult with the SHPO to determine if any photo documentation of the existing bridge is required, per Attachment B of the Historic Bridges PA. Any requirements for documentation will be included in the Categorical Exclusion document and carried forward to the Project Commitments Database.

#### 3. BASIS FOR FINDING

Based in identification efforts, a finding of "No Historic Properties Affected" is appropriate because there are no historic properties present within the area of potential effect other than the US 40 over Sallust Branch (Bridge No. 040-067-01838, NBI No. 013740). Per the terms of the Historic Bridges PA, 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) and therefore, the finding for this project only applies to other resources located within the APE and not the bridge.

A public notice of the FHWA finding of "No Historic Properties Affected" will be published in the local Newspaper. A 30-day comment period will be given. This document will be revised, if necessary, after the public notice to reflect any comments received.

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.

INDOT, acting on behalf of the FHWA, has issued a finding of "No Historic Properties Affected."

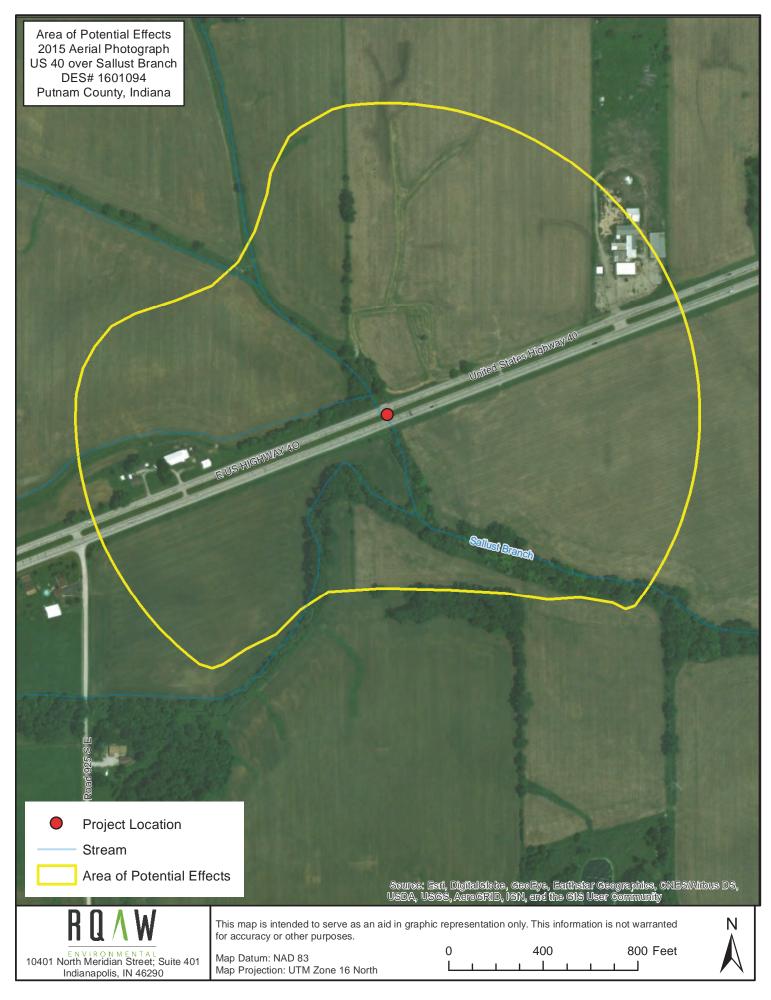
### APPENDIX

APPENDIX A: Project Area Maps APPENDIX B: General Photographs APPENDIX C: Consulting Parties List APPENDIX D: Consulting Parties Correspondence APPENDIX E: Historic Property Short Report & Archaeology Report Summaries APPENDIX F: Historic Bridge Alternatives Analysis and Addendum Summaries APPENDIX G: 60 Percent Plans

# Appendix A:

# Project Area Maps

Some maps omitted to avoid duplication. See graphics in Appendix B of this CE document.



# Appendix B:

# General Photographs

Photographs omitted to avoid duplication. See graphics in Appendix B of this CE document.

# Appendix C:

# **Consulting Parties List**

### LIST OF INDIVIDUALS/AGENCIES/ORGANIZATIONS INVITED TO BE SECTION 106 CONSULTING PARTIES

Position	Agency 1	Agency 2	Address 1	Address 2	City	State	Zip	Email
Manager of Cultural Resources Section	Indiana Department of Transportation	Office of Environmental Services	100 N. Senate Ave.	Room N642	Indianapolis	IN	46204	
State Historic Preservation Officer	Division of Historic Preservation & Archaeology	Indiana Department of Natural Resources	402 W. Washington St.	Room W274	Indianapolis	IN	46204	
Tommy Kleckner	Indiana Landmarks	Western Regional Office	669 Ohio Street		Terre Haute	IN	47807	tkleckner@indianalandmarks.org
James Cooper			629 E. Seminary St.		Greencastle	IN	46135	jlcooper@ccrtc.com
Paul Brandenburg	Indiana Historic Spans Task Force		5868 Croton Circle		Indianapolis	IN	46254	indianabridges@sbcglobal.net
Lisa Gibson	Main Street Greencastle, Inc.		2 South Jackson Street		Greencastle	IN	46135	mainstreetgc@gmail.com
Mike Murphy, President	Heritage Preservation Society of Putnam County		PO Box 163		Greencastle	IN	46135	
Michael Flowers	Indiana National Road Association		PO Box 284		Cambridge City	IN	47327	mflowers@indianalandmarks.org
Larry Tippin	Putnam County Historian		10968 N. 650 E.		Roachdale	IN	46172	ltippin@tds.net
Lisa Mock	Putnam County Museum		1105 North Jackson Street		Greencastle	IN	46135	info@putnamcountymuseum.org
Ron Hinsenkamp	West Centreal Indiana Economic Development District, Inc.		1718 Wabash Ave.		Terre Haute	IN	47808	mpo@westcentralin.com
Rick Woodall	Putnam County Commissioner		307 Greenwood Ave.		Greencastle	IN	46135	putnamco.auditor@gmail.com
Michael Ricketts	Putnam County Highway Supervisor		1624 W. CR 225 S.		Greencastle	IN	46135	mike@pchwydept.com
Diane Hunter	Miami Tribe of Oklahoma		P.O. Box 1326		Miami	ок	74355	dhunter@miamination.com
	Peoria Tribe of Indians of Oklahoma		P.O. Box 1527	118. S. Eight Tribes Trail	Miami	ок	74355	
	Eastern Shawnee Tribe of Oklahoma		P.O. Box 350		Seneca	МО	64865	
	Pokagon Band of Potawatomi Indians		P.O. Box 180	58620 Sink Road	Dowagiac	мі	49047	
	Forest County Potawatomi Community							

Note: Federal Highway Administration (FHWA), INDOT Cultural Resources Office (INDOT-CRO), and the State Historic Preservation Officer (SHPO) are automatically consulting parties. Consulting parties that responded are in**bold** and highlighted.

# Appendix D:

# Consulting parties Correspondence



## **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 234-5168

Eric Holcomb, Governor Joe McGuinness, Commissioner

February 5, 2018

This letter was sent to the listed parties.

RE: Dual Review Project US 40 over Sallust Branch, Des. No.: 1601094 Putnam County, Indiana

Dear Consulting Party (see attached list),

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch, 0.5 mile west of SR 75, Putnam County, Indiana (Des. No.: 1601094). RQAW is under contract with INDOT to advance the environmental documentation for the referenced project.

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

The proposed undertaking is on US 40, 0.5 mile west of SR 75 in Putnam County, Indiana. It is within Jefferson Township, Coatsville and the Eminence USGS Topographic Quadrangles, in Section 30, Township 14 N, Range 2 W.

The existing structure (Bridge No. 040-067-01838/NBI No. 013740) is a single-span reinforced concrete stringer bridge that was constructed in 1921. At that time, the bridge consisted of the existing westbound lanes only. It was widened in 1938 to include the existing eastbound lanes. Bridge No. 040-067-01838 has been classified as a National Register of Historic Places (National Register)-eligible and "Select" bridge by the INDOT Historic Bridge Inventory.

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties, which are those properties that are listed in or eligible for listing in the National Register. 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). (A copy of the Historic Bridges PA can be downloaded here: http://www.in.gov/indot/2530.htm).



The purpose of the proposed project is to provide a structurally sufficient and hydraulically adequate structure that perpetuates vehicular traffic crossing at this location, while improving the safety features of the area. The principal need for the project is determined based on the deteriorated condition of the existing structure.

Per Stipulation III.A.1. of the Historic Bridges PA, a Purpose & Need statement (P&N) and alternatives analysis will be discussed with consulting parties. More details concerning the structure's condition, the proposed scope of work, and potential alternatives will be forthcoming. It is assumed that the project will involve reacquiring the existing right-of-way and/or purchasing additional right-of-way. Land use in the project area is a mix of agricultural land, residential properties, and a forested riparian buffer along Sallust Branch.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic and archaeological properties. In accordance with 36 CFR 800.2 (c), you are hereby requested to be a consulting party to participate in the Section 106 process. Entities that have been invited to participate in the Section 106 consultation process for this project are identified in the attached list. Per 36 CFR 800.3(f), we hereby request that the Indiana State Historic Preservation Officer (SHPO) notify this office if the SHPO staff is aware of any other parties that may be entitled to be consulting parties or should be contacted as potential consulting parties for the project.

The Section 106 process involves 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. For more information regarding the protection of historic resources, please see the Advisory Council on Historic Preservation's guide: *Protecting Historic Properties: A Citizen's Guide to Section 106 Review* available online at <u>http://www.achp.gov/citizensguide.pdf</u>.

Please note that per the permanent rule issued by the Indiana Department of Natural Resources effective August 14, 2013 (312 IAC 20-4-11.5), INDOT is requesting that this project be subjected to "dual review"; that is, reviewed by the Division of Historic Preservation and Archaeology simultaneously under 54 U.S.C. 306108 (Section 106) and IC 14-21-1-18 (Indiana Preservation and Archaeology Law dealing with alterations of historic sites and structures requiring a Certificate of Approval). Pursuant to Section 11.5(f) of this rule, at the conclusion of the review process we anticipate that the Division Director would issue a letter of clearance exempting this project from obtaining a Certificate of Approval under IC 14-21-1-18. Enclosed with this letter is a detailed list of the consulting parties, including contact information including email addresses, for processing the dual review submission.

The Area of Potential Effects (APE) is the area in which the proposed project may cause alterations in the character or use of historic resources. At this time, no cultural resource investigations have occurred; however, the results of cultural resource identification and evaluation efforts, both above-ground and archaeological, will be forthcoming. Consulting parties will receive notification when these reports are completed.

Please review the information and comment within thirty (30) calendar days of receipt. If you indicate that you do not desire to be a consulting party, or if you do not respond, you will not be included on the list of consulting parties for this project. If we do not receive your response in the time allotted, the project will proceed consistent with the proposed design and you will not receive further information about the project unless the design changes.

For questions concerning specific project details, you may contact Jackie Dohrenwend of RQAW at 317-815-7200 or jdohrenwend@rqaw.com or Kyle Boot of RQAW at 317-815-7200 or kboot@rqaw.com. All future responses regarding the proposed project should be forwarded to RQAW at the following address:



Kyle Boot Architectural Historian RQAW 10401 N. Meridian Street, Suite 401 Indianapolis, IN, 46290 kboot@rqaw.com.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office Environmental Services

Enclosures: Omitted to avoid duplication.

Consulting Party Invitation List Overall Project Area Map USGS Topographic Map Aerial Photograph Map

Distribution List:

Indiana State Historic Preservation Officer (SHPO) Indiana Landmarks, Western Regional Office James Cooper, Bridge Historian Indiana Historic Spans Task Force Main Street Greencastle, Inc. Heritage Preservation Society of Putnam County Indiana National Road Association Putnam County Historian Putnam County Museum West Central Indiana Economic Development District, Inc. Putnam County Commissioner Putnam County Highway Supervisor Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Eastern Shawnee Tribe of Oklahoma Pokagon Band of Potawatomi Indians Forest County Potawatomi Community



### Kyle J. Boot

From:	Kyle J. Boot
Sent:	Monday, February 5, 2018 10:18 AM
То:	tkleckner@indianalandmarks.org; 'jlcooper@ccrtc.com'; 'indianabridges@sbcglobal.net'; mainstreetgreencastle@airhop.com; mflowers@indianalandmarks.org; ltippin@tds.net; info@putnamcountymuseum.org; mpo@westcentralin.com; putnamco.auditor@gmail.com; mike@pchwydept.com
Cc:	Kennedy, Mary; 'Kumar, Anuradha (akumar@indot.IN.gov)'; Miller, Shaun (INDOT); 'Michelle.allen@dot.gov'; 'Robert.Dirks@dot.gov'; 'Joseph Dabkowski (jdabkowski@RQAW.com)'; Jackie Dohrenwend; Randall Brooks
Subject:	FHWA Project: Des. No. 1601094; Historic Bridge Project Carrying US 40 over Sallust Branch, Putnam County, Indiana
Attachments:	US40overSallust_DES1601094_ECLtr_2018-02-05.pdf

### Des. No.: 1601094

### Project Description: Historic Bridge Project carrying US 40 over Sallust Branch Location: US 40, 0.5 mile west of SR 75, Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch, 0.5 mile west of SR 75 in Putnam County, Indiana, Des. No.: 1601094.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The following agencies/individuals are being invited to become consulting parties:

Indiana State Historic Preservation Officer (SHPO) Indiana Landmarks, Western Regional Office James Cooper, Bridge Historian Indiana Historic Spans Task Force Main Street Greencastle, Inc. Heritage Preservation Society of Putnam County Indiana National Road Association Putnam County Historian Putnam County Museum West Central Indiana Economic Development District, Inc. Putnam County Commissioner Putnam County Highway Supervisor Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Eastern Shawnee Tribe of Oklahoma Pokagon Band of Potawatomi Indians Forest County Potawatomi Community

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

Please review the letter attached to this email and in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with your comments on any historic resource impacts incurred as a result of this project so that an environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. If we do not receive a response from an invited consulting party in the time allotted, the project will proceed consistent with the proposed design. Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.

Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input, Kyle Boot



### Kyle Boot | Architectural Historian 10401 N .M eridian St., Ste. 401 Indianapolis, N 46290



0:317.815.7200

2

### Kyle J. Boot

From:	Kennedy, Mary <mkennedy@indot.in.gov></mkennedy@indot.in.gov>
Sent:	Monday, February 5, 2018 10:26 AM
То:	dhunter@miamination.com; lpappenfort@peoriatribe.com; Brett Barnes;
	jason.wesaw@pokagonband-nsn.gov; Allison.Daniels@fcpotawatomi-nsn.gov
Cc:	Miller, Shaun (INDOT); Kyle J. Boot; 'Michelle Allen'; Branigin, Susan
Subject:	FHWA Project: Des. No. 1601094; Historic Bridge Project Carrying US 40 over Sallust Branch, Putnam
	County, Indiana
Attachments:	US40overSallust_DES1601094_ECLtr_2018-02-05.pdf

### Des. No.: 1601094 Project Description: Historic Bridge Project carrying US 40 over Sallust Branch Location: US 40, 0.5 mile west of SR 75, Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch, 0.5 mile west of SR 75 in Putnam County, Indiana, Des. No.: 1601094.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The following agencies/individuals are being invited to become consulting parties:

Indiana State Historic Preservation Officer (SHPO) Indiana Landmarks, Western Regional Office James Cooper, Bridge Historian Indiana Historic Spans Task Force Main Street Greencastle, Inc. Heritage Preservation Society of Putnam County Indiana National Road Association Putnam County Historian Putnam County Museum West Central Indiana Economic Development District, Inc. Putnam County Commissioner Putnam County Highway Supervisor Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Eastern Shawnee Tribe of Oklahoma Pokagon Band of Potawatomi Indians Forest County Potawatomi Community

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

Please review the letter attached to this email and in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with your comments on any historic resource impacts incurred as a result of this project so that an environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. If we do not receive a response from an invited consulting party in the time allotted, the project will proceed consistent with the proposed design. Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.

Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input,

Mary E. Kennedy Historic Bridge Specialist Cultural Resources Office Environmental Services 100 N. Senate Ave., Room N642 Indianapolis, IN 46204 Office: (317) 232-5215 Email: <u>mkennedy@indot.in.gov</u>



2



## Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 • P.O. Box 1326, Miami, OK 74355 Ph: (918) 541-1300 • Fax: (918) 542-7260 www.miamination.com



February 6, 2018

Shaun Miller Archaeological Team Lead Cultural Resources Office Indiana DOT 575 North Pennsylvania Street Indianapolis, IN 46204

Re: Des. No. 1601094; Historic Bridge Project Carrying US 40 over Sallust Branch, Putnam County, Indiana – Comments of the Miami Tribe of Oklahoma

Dear Mr. Miller:

Aya, kikwehsitoole – I show you respect. My name is Diane Hunter, and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

The Miami Tribe offers no objection to the above-mentioned project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, as this site is within the aboriginal homelands of the Miami Tribe, 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. In such a case, please contact me at 918-541-8966 or by email at <u>dhunter@miamination.com</u> to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Stunter

Diane Hunter Tribal Historic Preservation Officer

### Kyle J. Boot

From: Sent: To: Subject:	Michael Flowers <mflowers@indianalandmarks.org> Tuesday, March 6, 2018 2:13 PM Kyle J. Boot RE: FHWA Project: Des. No. 1601094; Historic Bridge Project Carrying US 40 over Sallust Branch, Putnam County, Indiana</mflowers@indianalandmarks.org>
Follow Up Flag:	Flag for follow up
Flag Status:	Flagged

### Dear Mr. Boot,

Thank you for sending this e-mail. I apologize for the slight delay in my response but the Indiana National Road Association wishes to be a consulting party and receive future correspondence as this project progresses. The bridge mentioned in the report, constructed in 1921 and identified as a select bridge, is a historic resource on the Historic National Road which has been designated state and national scenic byway as well as an All-American road. The mission of the Indiana National Road Association is to preserve, protect, and promote historic assets along the historic National Road in Indiana therefore we are interested in the findings and projects concerning bridges on the historic route. Thank you again for the letter and e-mail, please let me know if there are any questions.

Sincerely,

### Michael Flowers | Executive Director

\_\_\_\_\_

Indiana National Road Association P.O. Box 284 Cambridge City, IN 47327 Ph: 317-822-7939 E: <u>mflowers@indianalandmarks.org</u> http://www.indiananationalroad.org

Preserving, Protecting, and Promoting Indiana's Historic National Road!

From: Kyle J. Boot [mailto:KBoot@RQAW.com]

Sent: Monday, February 05, 2018 10:18 AM

**To:** Tommy Kleckner; Jim Cooper; Paul Brandenburg; mainstreetgreencastle@airhop.com; Michael Flowers; ltippin@tds.net; info@putnamcountymuseum.org; mpo@westcentralin.com; putnamco.auditor@gmail.com; mike@pchwydept.com

**Cc:** Kennedy, Mary; 'Kumar, Anuradha (akumar@indot.IN.gov)'; Miller, Shaun (INDOT); Michelle Allen; 'Robert.Dirks@dot.gov'; Joseph Dabkowski; Jackie Dohrenwend; Randall Brooks

**Subject:** FHWA Project: Des. No. 1601094; Historic Bridge Project Carrying US 40 over Sallust Branch, Putnam County, Indiana

Des. No.: 1601094

Project Description: Historic Bridge Project carrying US 40 over Sallust Branch Location: US 40, 0.5 mile west of SR 75, Putnam County, Indiana



Indianapolis, IN - Corporate 10401 N. Meridian St., Ste. 401 Indianapolis, IN 46290 317.815.7200

### TELEPHONE RECORD

Date of Call:	3/6/2018	Phone Number:	317-232-5215
Order Number:	N/A	Conversation With:	Mary Kennedy, INDOT – CRO Historic Bridges
Submitted By:	Kyle Boot	Company Name:	RQAW
Copies To:	File	Project:	US 40 over Sallust Branch, Des 1601094

Subject: US 40 over Sallust Branch Consulting Party

**Remarks:** Mary Kennedy indicated that she spoke with Mark Dollase of Indiana Landmarks, Central Regional Office on 3/5/2018; and that Indiana Landmarks wishes to participate in Section 106 consultation as a consulting party for this project.

### INDIANAPOLIS VINCENNES LA PORTE

### WWW.RQAW.COM



Eric Holcomb, Governor Cameron F. Clark, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739 Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov • www.IN.gov/dnr/historic



April 4, 2018

Kyle Boot Architectural Historian RQAW Environmental 10401 North Meridian Street, Suite 401 Indianapolis, Indiana 46290

> Federal Agency: Indiana Department of Transportation ("INDOT"), on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Early coordination letter and proposal for dual review of a bridge project on US 40 over Sallust Branch (Bridge No. 040-067-01838; NBI. No. 013740), 0.5 mile west of SR 75, in Putnam County (Des. No. 1601094; DHPA No. 21543)

Dear Mr. Boot:

The Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology ("INDNR-DHPA"), which also serves as the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO"), is in receipt of INDOT's early coordination letter, with enclosures, dated February 5, 2018, transmitting your proposal for a dual review, pursuant to 312 Indiana Administrative Code ("IAC") 20-4-11.5, of the aforementioned project in Jefferson Township of Putnam County, Indiana. We received this submission on March 9.

The Indiana SHPO/INDNR-DHPA will review the information submitted under Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), implementing regulations at 36 C.F.R. Part 800, the Indiana Historic Bridges Programmatic Agreement, and the Indiana Minor Projects Programmatic Agreement, as well as Indiana Code 14-21-1-18 and 312 IAC 20-4. By copy of this letter, INDNR-DHPA is providing notification of the commencement of the dual review to interested persons and members of the Indiana Historic Preservation Review Board ("Review Board"). Notice of the commencement will also be posted on the division's website (www.in.gov/dnr/historic/7440.htm).

We are not aware of any parties who would be entitled to become consulting parties for the purposes of the review of this project under Section 106, beyond those whom you already have invited. However, for the purposes of Indiana Code 14-21-1-18 and 312 IAC 20-4, we have added the members of the Review Board and a few additional, potentially interested parties to the list of parties we intend to copy with our comment letters.

As INDOT's February 5 letter indicates, the US 40 bridge over Sallust Branch has been identified as eligible for inclusion in the National Register of Historic Places ("NRHP") and as a Select Bridge in the *Indiana Historic Bridge Inventory*. This reinforced concrete girder bridge is considered significant under NRHP Criterion A, because it was built (in 1921) to serve Main Market No. 3 and because it represents the former Indiana State Highway Commission's early development of the state highway system and pre-World War II (1938) widening to serve as a US highway, according to the *Indiana Historic Bridge Inventory*.

The name "Sallust Branch" sounds as though this stream is considered a tributary to a more prominent stream. Might the full name be Sallust Branch of Mill Creek?

We look forward to receiving a proposed area of potential effects and a historic property report or short report, as called for in Part II, Chapters 5 and 6, of INDOT's *Cultural Resources Manual* and an archaeological report or short report, as called for in Chapter 7 of the *Cultural Resources Manual*.

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www.DNR.IN.gov An Equal Opportunity Employer Kyle Boot April 4, 2018 Page 2

For the benefit of those recipients of a copy of this letter who are not Section 106 consulting parties, please be aware that a copy of INDOT's February 5 letter can be found online at http://erms.indot.in.gov/Section 106Documents/. From there, search by this project's designation number: 1601094.

If you have questions regarding our dual review of the aforementioned project, please contact DHPA. Questions about archaeological issues should be directed to Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. Questions about historic buildings or structures pertaining to this review should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

Anyone receiving an e-mailed copy of this letter who does *not* wish to receive future copies of our correspondence about this bridge project is asked to reply to jcarr@dnr.in.gov and wtharp1@dnr.in.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on US 40 over Sallust Branch in Putnam County (Des. No. 1601094), please refer to DHPA No. 22271.

Very truly yours,

had W. Shik

Mitchell K. Zoll Deputy State Historic Preservation Officer Director, Division of Historic Preservation and Archaeology

MKZ:JLC:jlc

Robert Dirks, PE, FHWA emc: Michelle Allen, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Shirley Clark, INDOT Board of Commissioners of Putnam County, c/o Lorie Hallett, County Auditor Michael Ricketts, Putnam County Highway Supervisor Miami Tribe of Oklahoma Michael Flowers, Indiana National Road Association Tommy Kleckner, Indiana Landmarks, Western Regional Office Paul Brandenburg, Historic Spans Task Force James L. Cooper, Ph.D., Professor Emeritus of History, DePauw University Jim Corridan, Review Board J. Scott Keller, Review Board Daniel Kloc, AIA, Review Board Jason Larrison, AIA, Review Board Beth McCord, Review Board Joshua Palmer, AIA, Review Board April Sievert, PhD, Review Board Cameron Clark, Director, INDNR, and Indiana SHPO Christopher Smith, Deputy Director, INDNR Mitchell Zoll, Director, INDNR-DHPA, and Deputy Indiana SHPO Chad Slider, Assistant Director, INDNR-DHPA Wade T. Tharp, INDNR-DHPA John Carr, INDNR-DHPA



## **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 234-5168

Eric Holcomb, Governor Joe McGuinness, Commissioner

May 8, 2018

This letter was sent to the listed parties.

RE: Dual Review Project US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740 Des. No.: 1601094, DHPA No.: 22271 Putnam County, Indiana

Dear Consulting Party (see attached list),

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, 0.5 mile west of SR 75, Putnam County, Indiana (Des. No.: 1601094, DHPA No. 22271). RQAW is under contract with INDOT to advance the environmental documentation for the referenced project. The proposed undertaking is on US 40, 0.5 mile west of SR 75 in Putnam County, Indiana. It is within Jefferson Township, Coatsville and the Eminence USGS Topographic Quadrangles, in Section 30, Township 14 N, Range 2 W. It is assumed that the project will involve reacquiring the existing right-of-way and/or purchasing additional right-of-way. Land use in the project area is a mix of agricultural land, residential properties, and a forested riparian buffer along Sallust Branch.

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic and archaeological properties. In accordance with 36 CFR 800.2 (c), you were requested (in an early coordination letter dated February 5, 2018) and accepted to be a consulting party to participate in the Section 106 process. 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). (A copy of the Historic Bridges PA can be downloaded here: http://www.in.gov/indot/2530.htm). Bridge No. 040-067-01838 is a Select bridge.

The Area of Potential Effects (APE) is the area in which the proposed project may cause alterations in the character or use of historic resources. The APE contains no resources listed in the National Register of Historic Places (NRHP). A historian who meets the Secretary of the Interior's Professional Qualification Standards identified and evaluated above-ground resources within the APE for potential eligibility for the NRHP. As a result of the historic property identification and evaluation efforts, Bridge No. 040-067-01838/NBI No. 013740 is recommended as eligible for listing in the NRHP.

The Historic Property Report is available for review in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN *www.in.gov/dot/* 

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SCOPE). You are invited to review the HPR and respond with comments on any historic resource impacts incurred as a result of this project so that an environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If you prefer a hard copy of this material, please respond to this email with your request within seven (7) days.

Per Stipulation III.A.1. of the Historic Bridges PA, a Purpose & Need statement (P&N) and alternatives analysis will be discussed with consulting parties. More details concerning the structure's condition, the proposed scope of work, and potential alternatives will be forthcoming. Core samples are being analyzed to aid in the above analysis. Bridge No. 040-067-01838 is unique for being recommended eligible for the NRHP under Criterion A only for its historical significance and not for engineering significance. We would especially appreciate at this time any comments you have regarding the characteristics, features, or elements of Bridge No. 040-067-01838 that relate to its significance under Criterion A that you think should try to be preserved through this project.

Please review the information and comment within thirty (30) calendar days of receipt. For questions concerning specific project details, you may contact Jackie Dohrenwend of RQAW at 317-588-1798 or jdohrenwend@rqaw.com or Kyle Boot of RQAW at 317-410-0845 or kboot@rqaw.com. All future responses regarding the proposed project should be forwarded to RQAW at the following address:

Kyle Boot Architectural Historian RQAW 10401 N. Meridian Street, Suite 401 Indianapolis, IN, 46290 kboot@rqaw.com.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office Environmental Services

Enclosures: Historic Property Short Report (or available on IN SCOPE)

Distribution List:

Indiana State Historic Preservation Officer (SHPO) Indiana Landmarks, Western Regional Office Indiana National Road Association Miami Tribe of Oklahoma



### Kyle J. Boot

From:	Kyle J. Boot
Sent:	Tuesday, May 8, 2018 8:24 AM
То:	'tkleckner@indianalandmarks.org'; 'Michael Flowers'
Cc:	'Kennedy, Mary'; 'Kumar, Anuradha (akumar@indot.IN.gov)'; 'Branigin, Susan'; 'Richard Gilyeat
	(RGilyeat@indot.IN.gov)'; Joseph Dabkowski; Jackie Dohrenwend; 'Miller, Shaun (INDOT)'
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch Historic Bridge in Putnam County,
	Indiana
Attachments:	US40overSallust_DES1601094_HPRSubmission_2018-05-08.pdf

### Des. No.: 1601094 Project Description: Historic Bridge Project carrying US 40 over Sallust Branch Location: US 40, 0.5 mile west of SR 75, Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch, 0.5 mile west of SR 75 in Putnam County, Indiana, Des. No.: 1601094.

As part of Section 106 of the National Historic Preservation Act, a Historic Property Report has been prepared and is ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input, Kyle Boot



 Kyle Boot | Architectural Historian

 10401 N.Merdian St., Ste.401

 Indianapolis, N 46290

 0:317 588 1798

 C:317 410 0845

 WW IGAW COM

### Kyle J. Boot

From:	Kennedy, Mary <mkennedy@indot.in.gov></mkennedy@indot.in.gov>
Sent:	Wednesday, May 9, 2018 11:33 AM
То:	Diane Hunter
Cc:	Miller, Shaun (INDOT); Allen, Michelle (FHWA); Branigin, Susan; Kyle J. Boot
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch, Putnam County, Indiana-HPR
Attachments:	US40overSallust_DES1601094_HPRSubmission_2018-05-08.pdf

### Des. No.: 1601094 Project Description: Historic Bridge Project carrying US 40 over Sallust Branch Location: US 40, 0.5 mile west of SR 75, Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch, 0.5 mile west of SR 75 in Putnam County, Indiana, Des. No.: 1601094.

As part of Section 106 of the National Historic Preservation Act, a Historic Property Report has been prepared and is ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input,

Mary E. Kennedy Historic Bridge Specialist Cultural Resources Office Environmental Services 100 N. Senate Ave., Room N642 Indianapolis, IN 46204 Office: (317) 232-5215 Email: mkennedy@indot.in.gov





Indiana Department of Natural Resources Eric Holcomb, Governor Cameron F. Clark, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739 Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dmr.IN.gov • www.IN.gov/dnr/historic



June 7, 2018

Kyle Boot Architectural Historian RQAW 10401 North Meridian Street, Suite 401 Indianapolis, Indiana 46290

> Federal Agency: Indiana Department of Transportation ("INDOT"), on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Historic property short report ("HPSR"; Boot, 4/24/2018) for a bridge project on US 40 over Sallust Branch of Mill Creek (Bridge No. 040-067-01838; NBI. No. 013740), 0.5 mile west of SR 75, in Putnam County, Indiana (Des. No. 1601094; DHPA No. 21543)

Dear Mr. Boot:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108); implementing regulations at 36 C.F.R. Part 800; the "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges" ("Indiana Historic Bridges PA"); and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation Officer Regarding that Implementation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding that Implementation of the Federal Aid Highway Program In the State of Indiana" ("Indiana Minor Projects PA"); and also pursuant to Indiana Code 14-21-1-18 and 312 Indiana Administrative Code ("IAC") 20-4, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed the report enclosed with INDOT's May 8, 2018, letter, which we received on May 11.

The area of potential effects ("APE") proposed in the HPSR appears to be of appropriate size for this project.

As the HPSR indicates, the US 40 bridge over Sallust Branch has been identified as eligible for inclusion in the National Register of Historic Places ("NRHP") and as a Select Bridge in the *Indiana Historic Bridge Inventory*. This reinforced concrete girder bridge is considered significant under NRHP Criterion A, because it was built (in 1921) to serve Main Market No. 3 and because it represents the former Indiana State Highway Commission's early development of the state highway system and pre-World War II (1938) widening to serve as a US highway, according to the *Indiana Historic Bridge Inventory*.

We agree with the HPSR that the US 40 bridge over Sallust Branch remains eligible for inclusion in the NRHP and that it is the only above-ground property within the APE that is historic.

We acknowledge that the *Indiana Historic Bridge Inventory* evaluated the US 40 bridge over Sallust Branch as being NRHP-eligible only under Criterion A and not under Criterion C. Even so, we think the type of bridge and its visual characteristics contribute something to its significance. In other words, the type and appearance of the bridge are reflective of the technology that was available and the planning that went into its original construction in 1921 and its widening in 1938. Consequently, we think that the bridge's being of the reinforced concrete girder type is significant, as well as its paneled concrete railings. Its length also is important, because that apparently did not change in 1938. The width, of course, was increased greatly in 1938. As an aside, we wonder whether this would be considered one bridge or two, if not for the side-by-side decks—separated only by about one inch—which rest on widened but ostensibly common abutments and if not for the railings, which stand only at the overall, outer north and south edges. Even in

The DNR mission: Protect, enhance, preserve and wisely use natural, cultural and recreational resources for the benefit of Indiana's citizens through professional leadership, management and education. www.DNR.IN.gov An Equal Opportunity Employer Kyle Boot June 7, 2018 Page 2

regard to the abutments, it appears there may be a narrow gap between the two halves of the abutment (see photograph 4 in Appendix B of the HPSR). We also think that the bush-hammered, paneled, concrete railings are reflective of the 1938 widening.

For the benefit of those recipients of a copy of this letter who are not Section 106 consulting parties, please be aware that the documents discussed here can be found online in IN SCOPE at http://erms.indot.in.gov/Section 106Documents/. From there, search by this project's designation number: 1601094.

If you have questions regarding our dual review of the aforementioned project, please contact DHPA. Questions about archaeological issues should be directed to Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. Questions about historic buildings or structures pertaining to this review should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

Anyone receiving an e-mailed copy of this letter who does *not* wish to receive future copies of our correspondence about this bridge project is asked to reply to jcarr@dnr.in.gov and wtharp1@dnr.in.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on US 40 over Sallust Branch in Putnam County (Des. No. 1601094), please continue to refer to DHPA No. 22271.

Very truly yours,

1 W. Ahih

Christopher A. Smith Deputy Director Indiana Department of Natural Resources

CAS:JLC:jlc

ernc: Robert Dirks, PE, FHWA Michelle Allen, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Shirley Clark, INDOT Kyle Boot, RQAW Jackie Dohrenwend, ROAW Board of Commissioners of Putnam County, c/o Lorie Hallett, County Auditor Michael Ricketts, Putnam County Highway Supervisor Miami Tribe of Oklahoma Michael Flowers, Indiana National Road Association Tommy Kleckner, Indiana Landmarks, Western Regional Office Paul Brandenburg, Historic Spans Task Force James L. Cooper, Ph.D., Professor Emeritus of History, DePauw University J. Scott Keller, Review Board Daniel Kloc, AIA, Review Board Jason Larrison, AIA, Review Board Beth McCord, Review Board Joshua Palmer, AIA, Review Board April Sievert, PhD, Review Board Christopher Smith, Deputy Director, INDNR Chad Slider, Assistant Director, INDNR-DHPA Wade T. Tharp, INDNR-DHPA John Carr, INDNR-DHPA



## **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 234-5168

Eric Holcomb, Governor Joe McGuinness, Commissioner

June 19, 2018

This letter was sent to the listed parties.

RE: Dual Review Project US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740 Des. No.: 1601094, DHPA No.: 22271 Putnam County, Indiana

Dear Consulting Party (see attached list),

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, 0.5 mile west of SR 75, Putnam County, Indiana (Des. No.: 1601094, DHPA No. 22271). RQAW is under contract with INDOT to advance the environmental documentation for the referenced project. The proposed undertaking is within Jefferson Township, Coatesville and the Eminence USGS Topographic Quadrangles, in Section 30, Township 14 N, Range 2 W. It is assumed that the project will involve reacquiring the existing right-of-way and/or purchasing additional right-of-way. Land use in the project area is a mix of agricultural land, residential properties, and a forested riparian buffer along Sallust Branch.

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic and archaeological properties. In accordance with 36 CFR 800.2 (c), you were requested (in an early coordination letter dated February 5, 2018) and accepted to be a consulting party to participate in the Section 106 process. 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). (A copy of the Historic Bridges PA can be downloaded here: http://www.in.gov/indot/2530.htm). Bridge No. 040-067-01838 is a Select bridge.

Bridge No. 040-067-01838 is unique for being recommended eligible for the NRHP under Criterion A only for its historical significance and not for engineering significance. We would especially appreciate at this time any comments you have regarding the characteristics, features, or elements of Bridge No. 040-067-01838 that relate to its significance under Criterion A that you think should try to be preserved through this project. The State Historic Preservation Officer (SHPO) staff indicated in a letter dated June 7, 2018 that "the type and appearance of the bridge are reflective of the technology that was available and the planning that went into the construction in 1921 and its widening in 1938. Consequently, we think that the bridge's being of the reinforced concrete girder type is significant, as well as its paneled concrete railings." No other parties offered comments about the significant features of the bridge, but we continue to welcome comments in this regard.



The purpose of the proposed project is to provide a structurally sufficient and hydraulically adequate structure that perpetuates vehicular traffic crossing at this location, while improving the safety features of the area. The principal need for the project is determined based on the deteriorated condition of the existing structure. Bridge No. 040-067-01838's existing overall conditions are generally poor to fair. The deck is in fair condition. It contains an asphalt overlay with transverse cracks in all lanes and longitudinal hairline cracking to the underside with efflorescence between beam lines. Additionally, the railing is a sub-standard bridge railing. The superstructure is in poor condition. The concrete beams exhibit deterioration with several beams having advanced deterioration with efflorescence, cracks, rust stains and spalling with exposed reinforcing. The substructure is in fair condition. Deterioration includes medium and wide cracks with efflorescence and rust stains. Spalling is also typical throughout but spalls are small and few.

Concrete core sampling and testing was completed in February through April 2018 at 12 locations (four bridge beams, two deck locations, and six abutment locations) to better understand the bridge's existing conditions. Please see the concrete sampling and testing report enclosed with this letter. Some cores were not fully recovered possibly indicating fractures. Of the cores tested, compressive strengths generally ranged from 4,370 to 6,990 pounds per square inch (psi) and averaged 5,560 psi. A core in the east abutment, EA-3, however had a compressive strength of only 2,490 psi and its aggregate was generally larger within this core possibly indicating older concrete. Additionally, three of the 12 cores exhibited chloride contents that exceeded the INDOT Design Manual threshold percent chloride by weight for indicating a potential for corrosion to occur in the reinforcement.

Based on the bridge's existing condition and cores analysis, the recommended scope of the project at this time is a superstructure replacement with partial substructure replacement or heavy patching anticipated in the areas of lower compressive strength. Per Stipulation III.A.1. of the Historic Bridges PA, a Purpose & Need statement (P&N) and alternatives analysis is being drafted and will be discussed with consulting parties. An onsite meeting to view the existing structure's conditions and discuss alternatives will be held if requested by a consulting party. Meanwhile, thoughts and recommendations on possible alternatives to rehabilitate the bridge are welcomed from consulting parties.

This letter and the cores concrete sampling and testing report are available for review in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review the cores sampling report and respond with comments. We welcome your opinions and other input to be considered in the preparation of the environmental document. If you prefer a hard copy of this material, please respond to this email with your request within seven (7) days.

Please review the information and comment within thirty (30) calendar days of receipt. Please contact INDOT CRO as soon as possible if you would like to request an onsite meeting for this project. For questions concerning specific project details, you may contact Jackie Dohrenwend of RQAW at 317-588-1754 or jdohrenwend@rqaw.com or Kyle Boot of RQAW at 317-410-0845 or kboot@rqaw.com. All future responses regarding the proposed project should be forwarded to RQAW at the following address:

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, IN, 46038 kboot@rqaw.com.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.



Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office Environmental Services

**Enclosures:** 

Concrete Sampling and Testing Report (or available on IN SCOPE)

**Distribution List:** 

Indiana State Historic Preservation Officer (SHPO) Indiana Landmarks, Western Regional Office Indiana National Road Association Miami Tribe of Oklahoma



#### Kyle J. Boot

From:	Kyle J. Boot		
Sent:	Tuesday, June 19, 2018 4:10 PM		
То:	'tkleckner@indianalandmarks.org'; 'Michael Flowers'		
Cc:	'Kennedy, Mary'; 'Kumar, Anuradha (akumar@indot.IN.gov)'; 'Branigin, Susan'; 'Richard Gilyeat (RGilyeat@indot.IN.gov)'; Joseph Dabkowski; Jackie Dohrenwend; 'Miller, Shaun (INDOT)'; 'Asfahan Khan (akhan@indot.IN.gov)'		
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch Historic Bridge in Putnam County, Indiana		
Attachments:	US40overSallust_DES1601094_ExistingConditionsAI_2018-06-19.pdf; US40overSallust_DES1601094 _CoreReport_2018-05-11.pdf		

#### Des. No.: 1601094 Project Description: Historic Bridge Project carrying US 40 over Sallust Branch Location: US 40, 0.5 mile west of SR 75, Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch, 0.5 mile west of SR 75 in Putnam County, Indiana, Des. No.: 1601094.

As part of Section 106 of the National Historic Preservation Act, additional information regarding the structure's existing condition is ready for review and comment by consulting parties.

Please review the attached documentation also located in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input, Kyle Boot



#### Kyle Boot | Architectural Historian

8770 North St., Ste.110 Fishers, N 46038 0:317 588 1798 C:317 410 0845 www.rgaw.com

1

#### Kyle J. Boot

From:	Kennedy, Mary <mkennedy@indot.in.gov></mkennedy@indot.in.gov>		
Sent:	Wednesday, June 20, 2018 3:44 PM		
То:	Diane Hunter		
Cc:	Miller, Shaun (INDOT); Allen, Michelle (FHWA); Kyle J. Boot; Branigin, Susan		
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch, Putnam County, IN-Existing Conditions		
Attachments:	US40overSallust_DES1601094_ExistingConditionsAl_2018-06-19.pdf; US40overSallust_DES1601094 _CoreReport_2018-05-11.pdf		

#### Des. No.: 1601094 Project Description: Historic Bridge Project carrying US 40 over Sallust Branch Location: US 40, 0.5 mile west of SR 75, Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch, 0.5 mile west of SR 75 in Putnam County, Indiana, Des. No.: 1601094.

As part of Section 106 of the National Historic Preservation Act, additional information regarding the structure's existing condition is ready for review and comment by consulting parties.

Please review the attached documentation also located in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input,

Mary E. Kennedy Historic Bridge Specialist Cultural Resources Office Environmental Services 100 N. Senate Ave., Room N642-ES Indianapolis, IN 46204 Office: (317) 232-5215 Email: mkennedy@indot.in.gov





Eric Holcomb, Governor Cameron F. Clark, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739 Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov • www.IN.gov/dnr/historic



July 18, 2018

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, Indiana 46038

> Federal Agency: Indiana Department of Transportation ("INDOT"), on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Request for comments on the bridge's significant features, report on concrete core sampling and testing (Olson, 5/11/2018), and proposed scope of work for the bridge on US 40 over Sallust Branch of Mill Creek (Bridge No. 040-067-01838; NBI. No. 013740), 0.5 mile west of SR 75, in Jefferson Township of Putnam County, Indiana (Des. No. 1601094; DHPA No. 21543)

Dear Mr. Boot:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108); implementing regulations at 36 C.F.R. Part 800; the "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges" ("Indiana Historic Bridges PA"); and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding that Implementation of the Federal Aid Highway Program In the State of Indiana" ("Indiana Minor Projects PA"); and also pursuant to Indiana Code 14-21-1-18 and 312 Indiana Administrative Code ("IAC") 20-4, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed INDOT's June 19, 2018, letter and the concrete core sampling and testing report, which we received on June 25.

We have not identified any additional, significant features of this historic, Select Bridge, beyond those we discussed in our June 7, 2018, letter. We also encourage federal Section 106 consulting parties and state law, dual review interested persons to share, at their earliest opportunity, with you, INDOT, and our office their thoughts on significant features of this bridge.

It appears to us, from the concrete core sampling and testing report (Olson, 5/11/2018), that the beams are generally in better condition than the deck and the east abutment.

It would be helpful if someone could provide, in the next correspondence, definitions of "superstructure" and "substructure," as bridge engineers use those terms. We realize that those terms may have somewhat different applications, depending on the type of bridge being discussed. In general, we had thought that the superstructure is any part of the bridge lying above the piers or abutments, including the deck, railings, and the beams, girders, arches, or chords, as applicable. Conversely, we had thought that the substructure includes only piers, abutments, wing walls, and any footings supporting them. We have the impression from the scope of work proposed in INDOT's June 19 letter, however, that the superstructure here might include only the deck and railings and that substructure might include the reinforced concrete beams, as well as the abutments, wingwalls, and footings.

Could a heavier than usual steel reinforcement mechanism be installed in a new, poured concrete deck that would reduce some of the forces on the 1921 and 1938 reinforced concrete beams, so that more of the beams could be repaired and retained while also improving the load-bearing capacity of the rehabilitated bridge as a whole? Our thought is that if the replacement concrete deck could serve, in effect, as a heavily reinforced slab, then the beams might not have to bear as much of the weight of vehicles crossing the

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bridge. We realize that concrete bridge decks, like roadways, typically would incorporate some steel reinforcement, but we wonder whether it would be beneficial for this bridge if the steel reinforcement mechanism used here would be more robust than would be typical of most bridge decks.

For the benefit of those recipients of a copy of this letter who are not Section 106 consulting parties, please be aware that the documents discussed here can be found online in IN SCOPE at http://erms.indot.in.gov/Section 106Documents/. From there, search by this project's designation number: 1601094.

If you have questions regarding our dual review of the aforementioned project, please contact DHPA. Questions about archaeological issues should be directed to Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. Questions about historic buildings or structures pertaining to this review should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

Anyone receiving an e-mailed copy of this letter who does *not* wish to receive future copies of our correspondence about this bridge project is asked to reply to jcarr@dnr.in.gov and wtharp1@dnr.in.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on US 40 over Sallust Branch in Putnam County (Des. No. 1601094), please continue to refer to DHPA No. 22271.

Very truly yours,

and W. Shides

Christopher A. Smith Deputy Director Indiana Department of Natural Resources

CAS:JLC:jlc

emc: Robert Dirks, PE, FHWA Michelle Allen, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Shirley Clark, INDOT Kyle Boot, ROAW Jackie Dohrenwend, PE, RQAW Board of Commissioners of Putnam County, c/o Lorie Hallett, County Auditor Michael Ricketts, Putnam County Highway Supervisor Miami Tribe of Oklahoma Michael Flowers, Indiana National Road Association Tommy Kleckner, Indiana Landmarks, Western Regional Office Paul Brandenburg, Historic Spans Task Force James L. Cooper, Ph.D., Professor Emeritus of History, DePauw University J. Scott Keller, Indiana Historic Preservation Review Board Daniel Kloc, AIA, Indiana Historic Preservation Review Board Jason Larrison, AIA, Indiana Historic Preservation Review Board Beth McCord, Indiana Historic Preservation Review Board Joshua Palmer, AIA, Indiana Historic Preservation Review Board April Sievert, PhD, Indiana Historic Preservation Review Board Christopher Smith, Deputy Director, INDNR, and Chairman, Indiana Historic Preservation Review Board Chad Slider, Assistant Director, INDNR-DHPA

Wade T. Tharp, INDNR-DHPA John Carr, INDNR-DHPA



# **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 234-5168

Eric Holcomb, Governor Joe McGuinness, Commissioner

July 23, 2019

This letter was sent to the listed parties.

RE: Dual Review Project US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740 Des. No.: 1601094, DHPA No.: 22271 Putnam County, Indiana

Dear Consulting Party (see attached list),

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No.: 1601094, DHPA No. 22271. RQAW is under contract with INDOT to advance the environmental documentation for the referenced project. The proposed undertaking is on US 40 over Sallust Branch of Mill Creek in Putnam, Indiana. It is within Jefferson Township, Coatesville and the Eminence USGS Topographic Quadrangles, in Section 30, Township 14 N, Range 2 W.

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic and archaeological properties. In accordance with 36 CFR 800.2 (c), you were requested (in an early coordination letter dated February 5, 2018) and accepted to be a consulting party to participate in the Section 106 process. Entities that have accepted consulting party status are identified in the attached list.

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). (A copy of the Historic Bridges PA can be downloaded here: http://www.in.gov/indot/2530.htm). Bridge No. 040-067-01838 is a Select bridge.

The purpose of the proposed project is to provide a structurally sufficient and hydraulically adequate structure that perpetuates vehicular traffic crossing at this location, while improving the safety features of the area. Please see the previous Cores Analysis and the Historic Bridge Alternatives Analysis (enclosed) for more information on the bridge's existing conditions, project's Purpose & Need (P&N) statement, and the scope of the recommended alternative.

This letter is part of the Section 106 review process for this project. In addition to the early coordination letter a letter distributed May 8, 2018 notified consulting parties that a Historic Property Report was available for review and comment, and a letter distributed on June 19, 2018 notified consulting parties that a Cores Analysis report was available for review and comment.



In a letter dated July 18, 2018, the Indiana State Historic Preservation Officer (SHPO) staff responded to the letter distributing the Cores Analysis and requested definitions for the terms: "superstructure" and "substructure". The superstructure is typically structural elements of the bridge above the abutments and piers. In the case of this bridge, the superstructure is the reinforced concrete t-beams which are monolithically poured with the concrete deck. The substructure is the typically the structural elements of the bridge that the superstructure rests on (i.e. piers, abutments, and foundations). In this case, the substructure includes the abutments. There are no piers because it is a single-span structure. Please see Section III of the Historic Bridge Alternatives Analysis for more information. No other parties offered comments about the results of the Cores Analysis, but we continue to welcome comments in this regard.

Additionally, in their letter dated July 18, 2019, the SHPO staff recommended a method to preserve the 1921 and 1938 beams as much as possible. Based on the SHPO staff's comments, INDOT's guidance, and further consideration of the Cores Analysis results, the recommended alternative has changed since the consulting party letter dated June 19, 2018. The recommended alternative is now geared towards preventative maintenance and preservation of the deck, superstructure, and substructure with replacing the railing. Please see the Historic Bridge Alternatives Analysis for more details on this alternative.

This letter and the Historic Bridge Alternatives Analysis are available for review in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review the Historic Bridge Alternatives Analysis and respond with comments. We welcome your related opinions and other input to be considered in the preparation of the environmental document. If you prefer a hard copy of this material, please respond to this email with your request within seven (7) days. An onsite meeting to view the existing structure's conditions and discuss the Historic Bridge Alternatives Analysis may be held if requested by a consulting party.

Please review the information and comment within thirty (30) calendar days of receipt.

For questions concerning specific project details, you may contact Jackie Dohrenwend of RQAW at 317-588-1754 or jdohrenwend@rqaw.com or Kyle Boot of RQAW at 317-410-0845 or kboot@rqaw.com. All future responses regarding the proposed project should be forwarded to RQAW at the following address:

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, IN, 46038 kboot@rqaw.com.

Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Sincerely,



Anuradha V. Kumar, Manager Cultural Resources Office Environmental Services

#### **Enclosures:**

Historic Bridge Alternatives Analysis (or available on IN SCOPE)

Distribution List:

Indiana State Historic Preservation Officer (SHPO) Indiana Landmarks, Western Regional Office Indiana National Road Association Miami Tribe of Oklahoma



#### Kyle J. Boot

From:	Kyle J. Boot	
Sent:	Tuesday, July 23, 2019 11:36 AM	
То:	'Carr, John (JCarr@dnr.IN.gov)'; tkleckner@indianalandmarks.org; Michael Flowers	
Cc:	Kennedy, Mary; 'Joseph Dabkowski'; Jackie Dohrenwend; Aaron Lawson; Branigin, Susan; Mcmullen,	
	Kenneth B; 'Richard Gilyeat'	
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch of Mill Creek, Putnam County, Indiana	
Attachments:	US40overSallust_DES1601094_HBAASubmission_2019-07-23.pdf	

#### Des. No.: 1601094 Project Description: US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740, Dual Review Project Location: Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No. 1601094, DHPA No. 22271. The Section 106 Early Coordination Letter for this project was originally distributed on February 5, 2018.

As part of Section 106 of the National Historic Preservation Act and the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), a Historic Bridge Alternatives Analysis has been prepared and is ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input, Kyle Boot



Kyle Boot Architectural Historian 8770 North St., Ste. 110 Fishers, IN 46038 O: 317.588.1762 www.rgaw.com

Best Places to Work in Indiana, 2018 & 2019 Indy Star's Top Workplaces, 2019



1

#### Kyle J. Boot

From:	Kennedy, Mary <mkennedy@indot.in.gov></mkennedy@indot.in.gov>		
Sent:	Tuesday, July 23, 2019 11:41 AM		
То:	Diane Hunter		
Cc:	michelle.allen@dot.gov; Miller, Shaun (INDOT); Kyle J. Boot; Branigin, Susan		
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch of Mill Creek, Putnam Co, Ind HBAA		
Attachments:	image007.emz; US40overSallust_DES1601094_HBAASubmission_2019-07-23 (003).pdf		

#### Des. No.: 1601094 Project Description: US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740, Dual Review Project Location: Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No. 1601094, DHPA No. 22271. The Section 106 Early Coordination Letter for this project was originally distributed on February 5, 2018.

As part of Section 106 of the National Historic Preservation Act and the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), a Historic Bridge Alternatives Analysis has been prepared and is ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input,

#### Mary E. Kennedy

Historic Bridge Specialist 100 N. Senate Ave., Room N642-ES Indianapolis, IN 46204 Office: (317) 232-5215 Email: <u>mkennedy@indot.in.gov</u>



\*\* Historic Property Report (HPR) guidelines can be found here

\*Design Memorandum 18-02 regarding the procedures for Historic Bridge Alternatives Analysis Documents can be found here: <u>http://www.in.gov/dot/div/contracts/standards/memos/2018/18-02%20ta%20Historic%20Bridge.pdf</u>

\*For the latest updates from INDOT's Cultural Resources Office, subscribe to the Environmental Services listserv: <u>https://www.in.gov/indot/3217.htm</u>



Eric Holcomb, Governor Cameron F. Clark, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739 Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr,IN.gov • www.IN.gov/dnr/historic



August 20, 2019

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, Indiana 46038

> Federal Agency: Indiana Department of Transportation ("INDOT"), on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Historic bridge alternatives analysis (Dohrenwend and Boot, 7/9/2019) for the the bridge on US 40 over Sallust Branch of Mill Creek (Bridge No. 040-067-01838; NBI. No. 013740), 0.5 mile west of SR 75, in Jefferson Township of Putnam County, Indiana (Des. No. 1601094; DHPA No. 22271)

Dear Mr. Boot:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108); implementing regulations at 36 C.F.R. Part 800; the "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges" ("Indiana Historic Bridges PA"); and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation of Historic Preservation and the Indiana State Historic Preservation Officer Regarding that Implementation of the Federal Aid Highway Program In the State of Indiana" ("Indiana Minor Projects PA"); and also pursuant to Indiana Code 14-21-1-18 and 312 Indiana Administrative Code ("IAC") 20-4, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed INDOT's June 23, 2019, letter and the concrete core sampling and testing report, which we received on July 24.

We appreciate the response to our question in our July 18, 2018, comment letter about the distinction between the superstructure and the substructure of a bridge and that the superstructure of this bridge includes the monolithically poured concrete beams and deck.

We also appreciate INDOT's and RQAW's having taken into consideration the suggestion in our July 18, 2018, letter that the reinforced concrete replacement deck carry some of the vehicular load so that the reinforced concrete beams would not have to be replaced. Although it sounds as though the bridge 1 ½-inch deck overlay would not be reinforced concrete, the removal of the asphalt paving surface, combined with patching of the existing concrete deck and the deck overlay would make patching and fiber-wrapping of the concrete beams a workable solution.

We are pleased that the beams and abutments can be rehabilitated on this Select Bridge. We had not realized, prior to reading INDOT's July 23 letter, that the concrete T-beams were monolithically poured along with the concrete deck. We know from experience in another bridge project that replacement of individual beams in such a case is not feasible.

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RQAW's historic bridge alternatives analysis ("HBAA") indicates there are 19 beams, and we see the existing 19 beams in the existing and proposed section drawings in Appendix D of the HBAA. Given that beams 3, 4, 5, 6, and 7 are from the original 1921 structure, it is interesting that only one of them, Beam 3, has suffered significant section loss. That means that the other seven beams that have suffered significant section loss are among the 14 dating from the 1938 widening.

Would the fiber-wrapping of the beams allow their original shape to remain apparent? How thick would the fiber wrap be?

The cross-section drawing in Appendix D of the proposed, TL-4 FC replacement railing suggests it would be somewhat like a Jersey barrier, without either openings or decorative details. Although the deck and beams would be preserved under the preferred alternative, the character of the railings would be lost entirely,

We can understand that the existing, 1938 paneled railings no longer meet crash testing requirements. However, when the HBAA said that "custom designed historic appearance railing does not meet current INDOT design requirements and very likely would not receive a design exception," was the HBAA referring to a railing that would be identical to the existing railing? Would a replacement railing that has design features similar to those of the existing railing but is reinforced and probably taller or thicker than the existing railing be acceptable from a crash testing perspective? If so, then would such a railing allow the project cost remain within 40% of the replacement cost?

We ask, because as we indicated in our June 7, 2018, letter, not only the structural type and the length of the bridge, but also the paneled concrete railings, are significant features. It appears that, other than the deck, the only parts of the bridge that motorists can see while passing by are the railings. A paneled, simulated bush-hammered replacement railing of the kind we have in mind has been used previously in Indiana, most notably on the northbound and southbound US 31 bridges over the Big Blue River in Johnson County (Des. Nos. 0401161 and 0401162). US 31 south of Indianapolis serves as an alternative route to I-65, just as US 40 serves as an alternative route to I-70.

If you have questions regarding our dual review of the aforementioned project, please contact DHPA. Questions about archaeological issues should be directed to Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. Questions about historic buildings or structures pertaining to this review should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

For the benefit of those recipients of a copy of this letter who are not Section 106 consulting parties, please be aware that the documents discussed here can be found online in IN SCOPE at http://erms.indot.in.gov/Section 106Documents/. From there, search by this project's designation number: 1601094.

Anyone receiving an e-mailed copy of this letter who does *not* wish to receive future copies of our correspondence about this bridge project is asked to reply to jcarr@dnr.in.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on US 40 over Sallust Branch of Mill Creek in Putnam County (Des. No. 1601094), please continue to refer to DHPA No. 22271.

Very truly yours,

Charl W. Shin

Beth K. McCord Deputy State Historic Preservation Officer

BKM:JLC:jlc

cc: Board of Commissioners of Putnam County, c/o County Auditor Lorie Hallett Kyle Boot August 20, 2018 Page 3

emc: Robert Dirks, P.E., FHWA Michelle Allen, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Shirley Clark, INDOT Kyle Boot, RQAW Jackie Dohrenwend, P.E., RQAW Board of Commissioners of Putnam County, c/o Lorie Hallett, County Auditor Michael Ricketts, Putnam County Highway Supervisor Miami Tribe of Oklahoma Michael Flowers, Indiana National Road Association Tommy Kleckner, Indiana Landmarks, Western Regional Office Paul Brandenburg, Historic Spans Task Force James L. Cooper, Ph.D., Professor Emeritus of History, DePauw University J. Scott Keller, Indiana Historic Preservation Review Board Anne Shaw Kingery, Indiana Historic Preservation Review Board Daniel Kloc, AIA, Indiana Historic Preservation Review Board Jason Larrison, AIA, Indiana Historic Preservation Review Board Chandler Lighty, Indiana Historic Preservation Review Board Joshua Palmer, AIA, Indiana Historic Preservation Review Board April Sievert, PhD, Indiana Historic Preservation Review Board Christopher Smith, Deputy Director, INDNR, and Chairman, Indiana Historic Preservation Review Board Beth McCord, Deputy SHPO and Director, INDNR-DHPA Chad Slider, Assistant Director, INDNR-DHPA

Des. Number 1601094

Wade T. Tharp, INDNR-DHPA John Carr, INDNR-DHPA

D-47



# **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 234-5168

Eric Holcomb, Governor Joe McGuinness, Commissioner

October 22, 2019

This letter was sent to the listed parties.

RE: Dual Review Project US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740 Des. No.: 1601094, DHPA No.: 22271 Putnam County, Indiana

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No.: 1601094, DHPA No. 22271.

This letter is part of the Section 106 review process for this project. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic and archaeological properties. We are requesting comments from you regarding the possible effects of this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

A Section 106 early coordination letter was distributed on May 8, 2018. In addition, a letter distributed on June 19, 2018 notified consulting parties that a historic property report and core analysis report was available for review and comment. Finally, a letter distributed on July 23, 2019, notified consulting parties that a Historic Bridge Alternatives Analysis was available for review and comment.

The proposed undertaking is on US 40 over Sallust Branch of Mill Creek in Putnam, Indiana. It is within Jefferson Township, Coatesville and the Eminence USGS Topographic Quadrangles, in Section 30, Township 14 N, Range 2 W.

The purpose of the proposed project is to provide a structurally sufficient and hydraulically adequate structure that perpetuates vehicular traffic crossing at this location, while improving the safety features of the area. Please see the previously distributed cores analysis and the Historic Bridge Alternatives Analysis for more information on the bridge's existing conditions, project's Purpose & Need (P&N) statement, and the scope of the recommended alternative.

RQAW is under contract with INDOT to advance the environmental documentation for the referenced project. Cultural Resources Analysis (CRA) has been subcontracted to complete the archaeology portions of the Section 106 documentation for the project.



In accordance with 36 CFR 800.2 (c), you were invited to become a consulting party as part of the Section 106 process, or you are hereby invited to become a consulting party as part of the Section 106 process. Entities that have previously accepted consulting party status--as well as additional entities that are currently being invited to become consulting parties--are identified in the attached list.

The Section 106 process involves efforts to identify historic properties potentially affected by the undertaking, to assess the undertaking's effects and to seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. For more information regarding the protection of historic resources, please see the Advisory Council on Historic Preservation's guide: *Protecting Historic Properties: A Citizen's Guide to Section 106 Review* available online at <a href="https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf">https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf</a>.

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 Bridge No. 040-067-01838 is a "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).

Please note that, per the permanent rule issued by the Indiana Department of Natural Resources effective August 14, 2013 (312 IAC 20-4-11.5), INDOT is requesting that this project be subjected to "dual review"; that is, reviewed by the Division of Historic Preservation and Archaeology simultaneously under 54 U.S.C. 306108 (Section 106) and IC 14-21-1-18 (Indiana Preservation and Archaeology Law dealing with alterations of historic sites and structures requiring a Certificate of Approval). Pursuant to Section 11.5(f) of this rule, at the conclusion of the review process we anticipate that the Division Director would issue a letter of clearance exempting this project from obtaining a Certificate of Approval under IC 14-21-1-18.

The Area of Potential Effects (APE) is the area in which the proposed project may cause alterations in the character or use of historic resources. The APE contains one resource (Bridge No. 040-067-01838) listed in the National Register of Historic Places (NRHP).

A historian who meets the Secretary of the Interior's Professional Qualification Standards identified and evaluated above-ground resources within the APE for potential eligibility for the NRHP. As a result of the historic property identification and evaluation efforts, no above-ground resources are recommended as eligible for listing in the NRHP.

With regard to archaeological resources, an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards identified no sites within the project area and no further work is recommended.

Per the Historic Bridges PA, Attachment B, this letter conveys the 30% plans for the Indiana State Historic Preservation Officer's (SHPO) review and comment. It also provides an update on the status of the Section 106 process and responds to the Indiana SHPO staff letter, dated August 20, 2019, following their receipt of the Historic Bridge Alternatives Analysis (RQAW 7/9/2019).







Figure 1: Carbon fiber wrap material. (source: https://afzir.com/en/products/carbon-wrap-ucw/)

Figure 2: Fiber-wrapped beam example. (source: https://www.structuremag.org/?p=8643)

Please note that the 30% plans are preliminary (prior to the Indiana SHPO staff's letter dated August 20, 2019); and the project designers are already looking into revisions based on the SHPO staff's comments and questions in that letter. The SHPO asked specific questions about fiber wrapping the beams. The fiber material is thin carbon fiber fabric that is wrapped around only the deteriorated portions of the beam. This will allow the original shape of the beam to remain apparent. Please see Figures 1 and 2 for examples of this carbon fiber material. Regarding visibility of the fiber wrap's contrasting appearance to the original concrete beam material, most of the fiber wrapping will occur on the interior beams and will not be readily visible when looking at the bridge from the roadway or even up and down stream.

With regard to the bridge railing, we thank the Indiana SHPO staff for directing our attention to the US 31 bridges over the Big Blue River in Johnson County (Des. Nos. 0401161 and 0401162) which used a paneled, simulated bush-hammered replacement railing. We have informed our project designers of this example and they are currently pursuing a Level One Design Exception for this type of sub-standard (non-crash tested) railing. If a design exception is achieved, a similar paneled, simulated bush-hammered replacement railing will be utilized and indicated in subsequent plan review submissions. INDOT will collect any comments that you have and incorporate into the 60% plan submittal. Subsequent plan submittals will increase in detail, and further clarify the scope of work.

This letter, the 30% plans, and archaeology report (tribes only) are available for review in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review the plans and respond with comments. We welcome your related opinions and other input to be considered in the preparation of the environmental document. If a consulting party prefers a hard copy of this material, please respond to this letter with your request within seven (7) days. Please review the information and comment within thirty (30) calendar days of receipt.



For questions concerning specific project details, you may contact Kyle Boot of RQAW at 317-588-1762 or kboot@rqaw.com. All future responses regarding the proposed project should be forwarded to RQAW at the following address:

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, IN, 46038 kboot@rqaw.com.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office Environmental Services

Enclosures:

Archaeology Report 30% Plans

Distribution List:

Indiana State Historic Preservation Officer (SHPO), jcarr@dnr.IN.gov; wtharp1@dnr.IN.gov Indiana Landmarks, Western Regional Office, tkleckner@indianalandmarks.org Indiana National Road Association, mflowers@indianalandmarks.org Miami Tribe of Oklahoma, dhunter@miamination.com



#### Kyle J. Boot

From:	Kyle J. Boot
Sent:	Tuesday, October 22, 2019 2:26 PM
То:	'Carr, John (JCarr@dnr.IN.gov)'; 'Tharp, Wade (WTharp1@dnr.IN.gov)';
	tkleckner@indianalandmarks.org; Michael Flowers
Cc:	'Slider, Chad (DNR (CSlider@dnr.IN.gov)'; Kennedy, Mary; 'Coon, Matthew (mcoon@indot.IN.gov)';
	Shaun Miller (smiller@indot.IN.gov); 'Kumar, Anuradha (akumar@indot.IN.gov)'; Branigin, Susan;
	'Joseph Dabkowski'; Jackie Dohrenwend; Randall Brooks; Mcmullen, Kenneth B; Gilyeat, Richard;
	Jaime Byerly
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch of Mill Creek, Putnam County, Indiana
Attachments:	US40overSallust_DES1601094_30%PlansLtr_2019-10-22.pdf; US40overSallust_DES1601094_30%Plans_
	2019-10-01.pdf

### Des. No.: 1601094 Project Description: US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740, Dual Review Project

Location: Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No. 1601094, DHPA No. 22271. The Section 106 Early Coordination Letter for this project was originally distributed on February 5, 2018.

As part of Section 106 of the National Historic Preservation Act, the 30% plans and an Archaeology Report have been prepared and are ready for review and comment by consulting parties.

Please review this documentation located in IN SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Thank you in advance for your input, Kyle Boot



Architectural Historian 8770 North St., Ste. 110 Fishers, N 46038 0:3175881762



#### Kyle J. Boot

From:	Kennedy, Mary <mkennedy@indot.in.gov></mkennedy@indot.in.gov>	
Sent:	Tuesday, October 22, 2019 2:54 PM	
То:	Diane Hunter	
Cc:	Kyle J. Boot; Coon, Matthew; Miller, Shaun (INDOT); Allen, Michelle (FHWA)	
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch of Mill Creek, Putnam Co, Ind- archaeology report & 30% plans	
Attachments:	US40overSallust_DES1601094_30%PlansLtr_2019-10-22.pdf	

Des. No.: 1601094 Project Description: US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740, Dual Review Project Location: Putnam County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration, proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No. 1601094, DHPA No. 22271. The Section 106 Early Coordination Letter for this project was originally distributed on February 5, 2018.

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Please review this documentation located in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input,

#### Mary E. Kennedy

Historic Bridge Specialist 100 N. Senate Ave., Room N642-ES Indianapolis, IN 46204 Office: (317) 232-5215 Email: <u>mkennedy@indot.in.gov</u>



\*\*Updated guidance for historic bridge projects can be found in the links below: <u>Overview-Indiana Historic Bridges Program</u> <u>Historic Bridge Project Development Process</u> <u>Procedures for Public Hearings under the Historic Bridges PA</u>

\*For the latest updates from INDOT's Cultural Resources Office, subscribe to the Environmental Services listserv: <u>https://www.in.gov/indot/3217.htm</u>



Indiana Department of Natural Resources

Eric Holcomb, Governor Cameron F. Clark, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739 Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov • www.IN.gov/dnr/historic

November 21, 2019

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, Indiana 46038



Federal Agency: Indiana Department of Transportation ("INDOT"), on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Additional project information, 30% bridge rehabilitation plans, and Indiana archaeological short report (Kelley, 10/17/2019), for the bridge on US 40 over Sallust Branch of Mill Creek (Bridge No. 040-067-01838; NBI. No. 013740), 0.5 mile west of SR 75, in Jefferson Township of Putnam County, Indiana (Des. No. 1601094; DHPA No. 22271)

Dear Mr. Boot:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108); implementing regulations at 36 C.F.R. Part 800; the "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges"; and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation of Historic Preservation of Historic Preservation Officer, and the Federal Officer Regarding that Implementation of the Federal Aid Highway Program In the State of Indiana"; and also pursuant to Indiana Code 14-21-1-18 and 312 Indiana Administrative Code ("IAC") 20-4, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed INDOT's October 22, 2019, letter, with the aforementioned plans and report enclosed, which we received on October 24.

The representative photographs and verbal description of the fiber wrap that is proposed to be used on deteriorated beams. The carbon fiber wrap is a suitable treatment in this case and is certainly preferable to replacement of all of the beams, which otherwise would be necessary because they are integral with the deck and cannot be individually replaced.

INDOT's letter explained that "most of the fiber wrapping will occur on the interior beams and will not be visible when looking at the bridge from the roadway or even up and down stream." In the representative photographs, the carbon fiber wrap appears black. We understand that *most* of it would not be readily visible (except, perhaps, to the most inquisitive historic bridge enthusiasts), but we would prefer that it be of a color closer to that of the concrete on this bridge. We know from another situation where fiber wrap was used that matching the concrete color can be challenging, but we would appreciate it if an effort were made here to tint the fiber wrap or obtain it in a hue or shade that is closer to the hue and shade of the existing concrete, which, in this case, appears to be a light tan.

The DNR mission: Protect, enhance, preserve and wisely use natural, cultural and recreational resources for the benefit of Indiana's citizens through professional leadership, management and education.

www.DNR.IN.gov An Equal Opportunity Employer Kyle Boot November 21, 2019 Page 2

We thank you and the project designers for pursuing a Level One Design Exception that would allow the replacement railing to be paneled with simulated bush-hammering, in an effort to give the replacement railing a similar appearance to that of the existing, 1938 railing.

We have no other questions about the plans at the 30% stage of development.

Additionally, based on the submitted information and the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the NRHP within the proposed project area; and we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Kelley, 10/17/2019), that no further archaeological investigations appear necessary at the proposed project area.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and Indiana Code 14-21-1-29) requires that the discovery be reported to INDNR-DHPA within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and Indiana Code 14-21-1-29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. Part 800.

If you have questions regarding our dual review of the aforementioned project, please contact DHPA. Questions about archaeological issues should be directed to Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. Questions about historic buildings or structures pertaining to this review should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

For the benefit of those recipients of a copy of this letter who are not Section 106 consulting parties, please be aware that the documents discussed here can be found online in IN SCOPE at http://erms.indot.in.gov/Section 106Documents/. From there, search by this project's designation number: 1601094.

Anyone receiving an e-mailed copy of this letter who does not wish to receive future copies of our correspondence about this bridge project is asked to reply to jcarr@dnr.in.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on US 40 over Sallust Branch of Mill Creek in Putnam County (Des. No. 1601094), please continue to refer to DHPA No. 22271.

Very truly yours,

mil W. Alida

Beth K. McCord Deputy State Historic Preservation Officer

BKM:JLC:WTT:wtt

cc: Board of Commissioners of Putnam County, c/o County Auditor Lorie Hallett

emc: Robert Dirks, P.E., FHWA Michelle Allen, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Shirley Clark, INDOT Kyle Boot, RQAW Jackie Dohrenwend, P.E., RQAW Board of Commissioners of Putnam County, c/o Lorie Hallett, County Auditor Kyle Boot November 21, 2019 Page 3

> Michael Ricketts, Putnam County Highway Supervisor Miami Tribe of Oklahoma Michael Flowers, Indiana National Road Association Tommy Kleckner, Indiana Landmarks, Western Regional Office Paul Brandenburg, Historic Spans Task Force James L. Cooper, Ph.D., Professor Emeritus of History, DePauw University J. Scott Keller, Indiana Historic Preservation Review Board Anne Shaw Kingery, Indiana Historic Preservation Review Board Daniel Kloc, AIA, Indiana Historic Preservation Review Board Jason Larrison, AIA, Indiana Historic Preservation Review Board Chandler Lighty, Indiana Historic Preservation Review Board Joshua Palmer, AIA, Indiana Historic Preservation Review Board April Sievert, PhD, Indiana Historic Preservation Review Board Christopher Smith, Deputy Director, INDNR, and Chairman, Indiana Historic Preservation Review Board Beth McCord, Deputy SHPO and Director, INDNR-DHPA Chad Slider, Assistant Director, INDNR-DHPA

Wade T. Tharp, INDNR-DHPA John Carr, INDNR-DHPA

Appendix E:

# Historic Property Short Report & Archaeology Report Summaries

# US 40 over Sallust Branch

# Putnam County, Indiana

Des. No.: 1601094



# 4/24/2018

# **Historic Property Short Report**

### Prepared for:

The Federal Highway Administration and Crawfordsville District, Indiana Department of Transportation Prepared by:

1/2 3. Bos

Kyle J. Boot KBoot@RQAW.com



#### ENVIRONMENTAL

10401 North Meridian Street, Suite 401 Indianapolis, IN 46290 Phone: (317) 815-7200 Fax: (317) 815-7201 www.rqaw.com

# V. CONCLUSIONS

In summary, a literature review and field reconnaissance was conducted for the APE of the US 40 over Sallust Branch. There are no properties listed in the NRHP within the APE of this project. As a result of identification and evaluation efforts for this project, only one property in the project's APE is recommended eligible for listing in the NRHP, Bridge No. 040-067-01838.



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.

Author: Lisa J. Kelley				
	Date (month, a	day, year): October 17	, 2019	
Project Title: A Phase Ia Archaeological Survey for a Bridge Rehabilitation on U.S. 40 over Sallust Branch, Putnam County, Indiana (INDOT Des. No. 1601094) (CRA Contract Publication Series 19-686)				
PROJECT OVERVIEW				
Project Description:	that carries U.S. 40 over Sall rehabilitation will include re and installing a bridge deck beams will be patched and fi abutments also will be patch beams and substructure, a ha road is anticipated to be in th undisturbed soils. The remai	lust Branch in Putnam emoving the asphalt pa overlay. The bridge ra- iber-wrapped to preven ed with pneumatically aul road is needed to g- ne northeast quadrant of inder of the survey are	ving surface, patching the co iling also will be replaced. T at future deterioration. The s placed mortar. In order to w ain access below the bridge.	The oncrete deck, he structure ubstructure ork on the The haul sly ed right-of-
INDOT Designation Number/ Contract Number: 1601094 Project Number: CRA No. I19R016				
DHPA Number: N/A Approved DHPA Plan Number: N/A				
Prepared For: RQAW Corporation				
Contact Person: Ky	le Boot			
Address: 8770 Nort	th Street, Suite 110			
City: Fishers State: IN ZIP Code: 46038				
Telephone Number:   (317) 588-1762     Email Address:   KBoot@RQAW.com				
Principal Investigator: Andrew V. Martin				
Signature:				
Company/Institution: Cultural Resource Analysts, Inc.				
Address: 201 NW 4th Street, Suite 204				
City: Evansville		State: IN	ZIP Code: 47708	
Telephone Number:	(812) 253-3009	Email A	Address: amartin@crai-ky.c	om

#### Results

$\boxtimes$	Archaeological records check has determined that the project area does not have the potential to contain
	archaeological resources.

Archaeological records check has determined that the project area has the potential to contain archaeological resources.

Phase Ia reconnaissance has located no archaeological resources in the project area.

Phase Ia reconnaissance has identified landforms conducive to buried archaeological deposits.

Actual Area Surveyed	hectares:	00.8
----------------------	-----------	------

acres: 02.1

There were no archaeological sites found during the current investigation. In addition, there is little to no potential for deeply buried archaeological deposits in this setting. The shovel tests were excavated to 50 cm bgs and confirmed the poorly drained nature of these soils. The plow zone in these areas generally consisted of dark grayish brown (10YR 4/2) silty clay loam with common faint iron/manganese concentrations to between 25 and 35 cm bgs. Below the plow zone was a grayish brown (10YR 5/2) loam with yellowish brown (10YR 5/4) silt lenses and frequent iron/manganese oxide inclusions. Common, distinct redoximorphic features (e.g., iron/manganese inclusions) were observed near the ground surface within these soils, and no deep, well-drained soils were observed within the survey area.

#### Recommendation

- The archaeological records check has determined that the project area has the potential to contain archaeological resources and a Phase Ia archaeological reconnaissance is recommended.
- The archaeological records check has determined that the project area does not have the potential to contain archaeological resources and no further work is recommended before the project is allowed to proceed.
- The Phase Ia archaeological reconnaissance has located no archaeological sites within the project area and it is recommended that the project be allowed to proceed as planned.

Appendix F:

# Historic Bridge Alternatives Analysis and Addendum Summaries

RQAW TRANSPORTATION

Fishers, IN - Corporate 8770 North St., Ste. 110 Fishers, IN 46038 317.588.1798

# HISTORIC BRIDGE ALTERNATIVES ANALYSIS

BRIDGE NUMBER: 040-67-01838-B

**DESIGNATION NUMBER: 1601094** 

ROUTE IDENTIFICATION AND FEATURE CROSSED:

US 40 OVER SALLUST BRANCH OF MILL CREEK



COUNTY:PUTNAMNBI NUMBER:013740PROJECT LOCATION:0.50 MILES WEST OF SR 75PREPARED BY:Jackie Dohrenwend, PE and Kyle Boot, MSHP

#### RQAW CORPORATION

DATE: July 9, 2019

This bridge was evaluated by personnel from the Indiana Department of Transportation (INDOT) Bridge Design Unit, the District Office and the designer. The Draft Historic Bridge Alternatives Analysis has been reviewed by the INDOT Bridge Design Unit and Cultural Resources Office for thoroughness of the rehabilitation option and compliance with INDOT design policies. Concurrence by INDOT with the proposed Scope of Work does not constitute Final Approval of the Historic Bridge Alternatives Analysis. This draft HBAA may now be distributed to the historic consulting parties for review.

FISHERS VINCENNES LA PORTE

WWW.RQAW.COM

Des. Number 1601094

#### V. ALTERNATIVES

As described above, Section 4(f) and the INDOT Historic Bridge PA requires the methodical evaluation and analysis of alternatives and proof as to why each alternative is or is not feasible and prudent. Furthermore, it must document the justification for the decision to proceed with the preferred alternative. The term "feasible" means that the alternative can be built as a manner of sound engineering judgment. The term "prudent" means there are no unique problems or unusual factors involved with the alternative. Such factors include: cost, social, economic and environmental impacts, and/or community disruption.

Alternatives for this project were developed in accordance with INDOT's Historic Bridge PA PDP and include no build and rehabilitation for continued vehicular use. Each alternative will be evaluated against the stated purpose and need then further consideration given on its ability to balance feasibility, cost-effectiveness, and environmental impacts.

#### A. <u>No Build/Do Nothing</u>

This alternative is to do nothing and would require no federal funds to be expended and no action to be taken. This no build alternative is an avoidance alternative because the historic nature of the structure would be unaffected. This alternative would result in no environmental impacts, no impact to the historic bridge, and no alteration to traffic. Without improvements, US 40 over Sallust Branch of Mill Creek would continue to deteriorate and eventually result in failure leading to closure. The engineer's professional judgment is that the reduction in beam capacity would result in a load restriction within approximately two years. Full beam failure (bridge closure) is anticipated within the next 15-20 years. If the structure must be closed US 40 will lose all function over Sallust Branch of Mill Creek necessitating lengthy and costly detours to commuters as well as costly emergency repair/replacement. The detour length is approximately 15 miles.

This alternative requires no design or construction; as such this alternative is considered a feasible alternative. However, it would not sustain a safe and functional crossing at this location for any meaningful length of time given the bridge's eventual failure. Due to the concern for safety of the public this alternative does not meet the project's stated purpose and need and for this reason is not considered prudent.

#### B1. <u>Rehabilitation for Continued Vehicular Use Meeting Secretary of Interior's Standards for</u> <u>Rehabilitation - Bridge Rehabilitation with Railing Patching or Replacement with a Historic-</u> <u>Appearance Railing</u>

This alternative proposes to rehabilitate the structure while meeting the *Secretary of Interior's Standards for Rehabilitation*. The existing structure would be rehabilitated for vehicular use in a way that does not adversely affect the bridge's historic features. Such rehabilitation activities include: removing the asphalt paving surface, patching of the concrete deck and installing a bridge deck overlay. The structure's beams will also be patched and fiber-wrapped to prevent future deterioration and the existing bridge railing will be patched or replaced with a custom designed railing with historic appearance.<sup>2</sup> The substructure (abutments) will be patched with pneumatically placed mortar.

These repairs are geared towards preventative maintenance and preservation of the deck, superstructure, and substructure. The asphalt wearing surface on top of the deck would be removed and the deck would receive a bridge deck overlay. This would remove some dead load from the bridge and would preserve the life of the deck by 20 years. The unsound concrete on the superstructure and substructure would be removed and new concrete would be placed. These repairs can preserve the life of the remaining structure for 20 years<sup>3</sup>, which is less than the standard treatment approach value of 25 years identified in the Historic Bridge PA (Attachment

<sup>&</sup>lt;sup>2</sup> Note that a level 1 design exception is required to select a railing that would not meet current INDOT design requirements (i.e. retaining or replacing the existing railing in-kind). A design exception is very unlikely to be approved due to the high-volume and high-speeds of traffic on US 40 through this area. Furthermore, US 40 is an I-70 alternative route. Therefore, a standard INDOT crash tested (test level 4) railing would likely be required. Note that INDOT requires a test level 4 railing on all state, US, and interstate highways.

<sup>&</sup>lt;sup>3</sup> IDM section 412-5.04[01]

B, Number 5). However, RQAW's engineers believe that the rehabilitation with subsequent routine maintenance should preserve the life of the structure for 25 years. The rehabilitation would prevent the decrease of the structural capacity of the bridge and raise the superstructure condition rating up to a 6 (from a 4). It would also raise the deck condition rating up to a 6 (from a 5) and the substructure condition rating up to a 6 (from a 5). Based on the abutment concrete cores, most of the concrete in the deck, superstructure, and substructure have adequate compressive strength, meeting or exceeding the required compressive strength of 4,000 psi. By patching the inadequate areas of the superstructure and substructure with new concrete which meets the required compressive strength of 4,000 psi, it will increase the overall structural capacity of the bridge to an adequate level for the loads it was originally designed for (an H-20 truck). This will allow for the continued vehicular loading and use as a main US highway, which is a purpose of the project.

Rehabilitating the existing structure in this manor achieves the need of the project but fails to meet the purpose because patching the existing railing or replacing it with a custom designed historic appearance railing does not meet current INDOT design requirements and very likely would not receive a design exception. For this reason, this alternative is not considered prudent and therefore, a cost was not analyzed for this alternative and this alternative was not advanced.

#### B2. <u>Rehabilitation for Continued Vehicular Use NOT Meeting Secretary of Interior's</u> <u>Standards for Rehabilitation</u>

This alternative proposes to rehabilitate the structure for continued vehicular use while not meeting the *Secretary of Interior's Standards for Rehabilitation*. This alternative includes all the rehabilitation activities as specified in alternative B1 except the railing will be replaced with a standard, approved, TL-4 (Test Level 4) INDOT FC railing (Appendix D) instead of patching or replacing with a historic appearance railing.

This alternative is approximately \$1,190,300 which is around 36% of the replacement cost, which makes it a prudent alternative. This alternative addresses the purpose and need of the project by providing a structure to safely cross US 40 over Sallust Branch of Mill Creek for approximately 25 years, while meeting INDOT's current safety standards and requirements for a TL-4 railing. This alternative is both feasible and prudent to construct, therefore this is the preliminary preferred alternative.



Fishers, IN - Corporate 8770 North St., Ste. 110 Fishers, IN 46038 317.588.1798

# HISTORIC BRIDGE ALTERNATIVES ANALYSIS ADDENDUM

BRIDGE NUMBER: 040-67-01838-B DESIGNATION NUMBER: 1601094 ROUTE IDENTIFICATION AND FEATURE CROSSED: US 40 OVER SALLUST BRANCH OF MILL CREEK



COUNTY:	PUTNAM
NBI NUMBER:	013740
PROJECT LOCATION:	0.50 MILES WEST OF SR 75
PREPARED BY:	Kyle Boot, MSHP and Randall Brooks, PE

#### RQAW CORPORATION

DATE: April 21, 2020

FISHERS VINCENNES LA PORTE

WWW.RQAW.COM

# I. INTRODUCTION

Per the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019), the Indiana Department of Transportation (INDOT) has identified a need to improve the structural and operational condition of Bridge 040-67-1838-B, NBI: 013740 which carries traffic on US 40 over Sallust Branch of Mill Creek. As a result of Section 106 consultation with the Indiana State Historic Preservation Office (SHPO), the INDOT has reduced the current scope of the project and identified a new preferred alternative focused on repair, preservation, and maintenance. Thus, the previously identified preferred alternative in the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019) is no longer the preferred alternative due to further opportunities to minimize current impacts to the historic bridge. This addendum report documents the newly identified preferred alternative.

## II. EXISTING STRUCTURE DATA

No change to the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019).

## **III. EXISTING CONDITIONS**

No change to the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019).

### IV. PURPOSE AND NEED

#### A. <u>Need</u>

No change to the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019).

#### B. <u>Purpose</u>

The purpose of the project is to continue providing the public with a structure that perpetuates vehicular crossing on US 40 over Sallust Branch of Mill Creek at current safety standards and requirements for at least 25 years with a structurally sufficient structure (preserving the overall structural capacity for loads it was originally designed for (H-20 truck)) and achieves a:

- superstructure condition rating of 6 or greater out of 9, and
- substructure condition rating of 6 or greater out of 9, and
- structural evaluation rating of 6 or greater out of 9, and
- sufficiency rating of 81 or greater out of 100.

## V. ALTERNATIVES

As described in the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019), Section 4(f) and the INDOT Historic Bridge PA requires the methodical evaluation and analysis of alternatives and proof as to why each alternative is or is not feasible and prudent.

#### A. <u>No Build/Do Nothing</u>

No change to the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019).

B1. <u>Rehabilitation for Continued Vehicular Use Meeting Secretary of Interior's Standards for</u> <u>Rehabilitation - Bridge Maintenance Consisting of Patching and Fiber Wrapping the Beams and</u> <u>Patching the Abutments and Railings</u>

This alternative proposes to rehabilitate the structure while meeting the *Secretary of Interior's Standards for Rehabilitation*. The existing structure would be repaired, preserved, and maintained for vehicular use in a way that does not adversely affect the bridge's historic features. Such activities include the structure's beams being patched and fiber-wrapped to strengthen deteriorated beams and prevent future deterioration. The substructure (abutments) and railing will also be patched with pneumatically placed mortar.

These repairs are geared towards preventative maintenance of the superstructure and substructure, which makes it a feasible alternative. The unsound concrete on the superstructure (not including deck) and substructure would be removed, and new concrete would be placed. These repairs can preserve the life of the remaining structure for 20 years<sup>1</sup>, which is less than the standard treatment approach value of 25 years identified in the Historic Bridge Programmatic Agreement (Attachment B, Number 5). However, RQAW's engineers believe that the preventative maintenance and repairs with possible subsequent routine maintenance should preserve the life of the structure for 25 years.<sup>2</sup> The preventative maintenance and repairs would prevent the decrease of the structural capacity of the bridge and raise the superstructure condition rating up to a 6 (from a 4). It would also raise the substructure condition rating up to a 6 (from a 5). Based on the abutment concrete cores, most of the concrete in the deck, superstructure, and substructure have adequate compressive strength, meeting or exceeding the required compressive strength of 4,000 psi. By patching the inadequate areas of the superstructure and the substructure with new concrete which meets the required compressive strength of 4,000 psi, it will preserve the overall structural capacity of the bridge for the loads it was originally designed for (an H-20 truck). This will allow for the continued vehicular loading and use as a main US highway (and designated detour for Interstate 70), which is a purpose of the project.

This alternative is approximately \$553,150 which is around 16% of the replacement cost, which makes it a prudent alternative. Alternative B1 addresses the purpose and need of the project by

<sup>&</sup>lt;sup>1</sup> IDM section 412-5.04[01]

<sup>&</sup>lt;sup>2</sup> The proposed repairs and preservation efforts are anticipated to achieve the project's purpose for approximately 25 years. However, INDOT may find a need to schedule future repairs in advance of the expiration of the anticipated 25-year life of the currently proposed repair and preservation efforts; and may pursue another solution to provide a vehicular crossing on US 40 over Sallust Branch of Mill Creek before or after the next 25 years.

providing a structure to safely cross US 40 over Sallust Branch of Mill Creek for approximately 25 years, while meeting INDOT's current safety standards and requirements. This alternative is both feasible and prudent to construct, therefore this is the preferred alternative.

## VI. MINIMIZATION AND MITIGATION

The following summarizes the minimization and mitigation of unavoidable impacts to the historic bridge. Minimization means that impacts are reduced to the maximum extent possible. Mitigation refers to actions that compensate for impacts to the historic resource.

#### A. Minimization

It is understood that if Alternative B1 is the preliminary preferred alternative, it meets the *Secretary of the Interior's Standards for Rehabilitation* due to retaining historic elements. The repair and preventative maintenance activities will be minimal and limited to patching historic elements.

The previously identified preferred alternative, in the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019), additionally called for replacing the bridge pavement and replacing the railing with a standard, approved TL-4 (Test Level 4) INDOT FC railing. During Section 106 consultation and plan review, the following scope reduction items were implemented to minimize the current impacts to the historic bridge.

- The existing railing will be retained and repaired with pneumatically placed mortar instead of replacing the railing.
- The bridge deck and pavement will be retained without construction activities in order to prevent potential damage to the deck and beams. INDOT postulates that construction activities involved with a pavement overlay may damage the deck and beams, thus leading to their premature failure. INDOT concludes that maintaining and repairing the existing beams with fiber wrap and patching, and retaining the existing pavement will provide the most longevity of the historic structure while preserving the integrity of the bridge's historic features.

#### B. Bridge Marketing

This project is the preventative maintenance and repair of an existing bridge; therefore, no marketing will be required as part of the project development process.

#### C. Mitigation

No change to the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019).

## VII. PRELIMINARY PREFERRED ALTERNATIVE

Alternative B1 outlined in this Historic Bridge Alternatives Analysis Addendum is preliminarily the preferred alternative because it meets the purpose and need of the project by providing a structurally sufficient and hydraulically adequate structure that perpetuates a safe vehicular crossing on US 40 over Sallust Branch of Mill Creek. Alternative B1 is also both feasible and economically prudent. Please see the Alternatives Analysis Table on the following page.

# Appendix G:

# 60 Percent Plans

Plans omitted to avoid duplication. See plans in Appendix B of this CE document.

# State of Indiana Putnam County

# SS:

Personally appeared before the undersigned, who, being duly sworn, says that he is Publishers Representative of The Banner Graphic, a newspaper of general circulation, printed and published in the city of Greencastle, Indiana in the county aforesaid, and upon his oath further saith that the notice, of which the attached 16<sup>th</sup> day of June, 2020.

Diana Dick

Subscribed and sworn to before me, this <u>16<sup>th</sup></u> day of June, 2020. Catherine D. Lesko Notary Public

My Commission Expires: <u>October 19, 2023</u> <u>46 D</u>ollars and 63 Cents in full for publishing the above notice.

Date: June 5, 2020

Amount taxed: \$

CATHERINE D LESKO Seal Notary Public - State of Indiana Putnam County Commission Expires Oct 19, 2023

Public Notice Des. No. 1601094 Des. No. 1601094 The Indiana Department of Transportation (INDOT) is planning to undertake a bridge project, funded in part by the Federal High-way Administration (FHWA). The project is located on US 40 over Sallust Branch of Mill Greek in Putnam, Indiana, approximately 0.5 mile west of SR 75. Under the preferred alternative, the pro-posed project would involve rehabilitation of the Bridge No. 040-67-01836C, NBI No. 013740. The preferred alternative focuses on repair, preservation, and maintenance. It proposes to patch and fiber-wrap the dete-riorated beams, patch the remaining sub-structure (abutments and wing walls), patch to retain the existing railing, and place rip rap along the banks. In order to access the substructure for repairs and placing rip rap, a temporary haul road will be in the north-east quadrant of the bridge and a temporary cofferdam and pump around will be used. All activities are anticipated to take place within the existing right-of-way; therefore, no addi-tional permanent or temporary right-of-way will be required. The proposed action does not Impact prop-erties listed in or eligible for the National Register of Historic Places. The Indiana De-partment of Transportation (INDOT), on be-half of the FHWA, has issued a "No Historic Properties Affected" finding for the project due to the fact that no historic properties are present within the Area of Potential Effects (APE) of ther than the Bridge No.: 040-067-01338; and NBI No.: 013740. the pro-cedures outlined in Stipulation III.A of the Historic Bridges PA will be followed to fuffill FHWA's Saction 106 responsibilities for the bridge. Therefore, the finding for the Nation-al Historic Properties Affected" finding the effect of the proposed project on the historic ele-ments as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(A). Pursuant to 36 CFR 800.4(d)(1), the documentation specified in 36 CFR 800. 11(d) is available to the public. This docu-mentation can be viewed electronically by a

# Kyle J. Boot

From: Sent: To:	Kyle J. Boot Thursday, June 4, 2020 11:43 AM 'Carr, John (JCarr@dnr.IN.gov)'; 'Tharp, Wade (WTharp1@dnr.IN.gov)'; tkleckner@indianalandmarks.org; Michael Flowers; Carmanygeorge, Karstin M; mike@infinitimarketing.co; mmkenton@yahoo.com; susanvmurray5@gmail.com; cross2972@yahoo.com; Itippin@tds.net; Imock@putnamcountymuseum.org; rhinsenkamp@westcentralin.com; putnamco.auditor@gmail.com; mike@pchwydept.com; 'jlcooper@ccrtc.com'; 'indianabridges@sbcglobal.net'
Cc:	Kennedy, Mary; Gilyeat, Richard; Wheeler, Christopher; Klevitsky, Gregory; Randall Brooks; Rose McClimans; 'Joseph Dabkowski (jdabkowski@RQAW.com)'; Aaron Lawson; Jaime Byerly; Haylee Moscato; Madison Story; 'Kumar, Anuradha (akumar@indot.IN.gov)'
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch of Mill Creek, Putnam County, Indiana
Attachments:	US40overSallust_DES1601094_CPltr_2020-06-04.pdf

#### Des. No.: 1601094

Project Description: US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740, Dual Review Project

# Location: Putnam County, Indiana

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No. 1601094, DHPA No. 22271. The Section 106 Early Coordination Letter for this project was originally distributed on February 5, 2018.

As part of Section 106 of the National Historic Preservation Act and the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), a Historic Bridge Alternatives Analysis (HBAA) Addendum and the 60% plans have been prepared and are ready for review and comment by consulting parties.

INDOT, on behalf of FHWA has additionally signed a determination of "No Historic Properties Affected" for this Section 106 undertaking. In accordance with 36 CFR 800.4(d), you and the other consulting parties that responded to the early coordination letter are being provided the documentation for this finding.

You can view the HBAA Addendum, the 60% plans, and the determination of "No Historic Properties Affected" electronically by accessing INDOT's Section 106 document posting website IN SCOPE at <a href="http://erms.indot.in.gov/Section106Documents/">http://erms.indot.in.gov/Section106Documents/</a> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request as soon as you can.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal consulting parties may enter the process at any time and are encouraged to respond to this notification with any comments or concerns at their earliest convenience. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input, Kyle Boot

# Kyle J. Boot

From:	Kennedy, Mary <mkennedy@indot.in.gov></mkennedy@indot.in.gov>
Sent:	Thursday, June 4, 2020 12:08 PM
То:	thpo@estoo.net;            Diane Hunter; 'lpappenfort@peoriatribe.com';
	'Matthew.Bussler@pokagonband-nsn.gov'; tonya@shawnee-tribe.com; Michael
	LaRonge; Kitty Henderson; Nathan Holth; Tony Dillon
Cc:	Miller, Shaun (INDOT); Allen, Michelle (FHWA); Kyle J. Boot
Subject:	FHWA Project: Des. No. 1601094; US 40 over Sallust Branch of Mill Creek, Putnam Co., Ind NHPA finding, HBAA addendum, 60% plans
Attachments:	US40overSallust_DES1601094_CPltr_2020-06-04.pdf

# Des. No.: 1601094 Project Description: US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740, Dual Review Project Location: Putnam County, Indiana

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No. 1601094, DHPA No. 22271. The Section 106 Early Coordination Letter for this project was originally distributed on February 5, 2018.

As part of Section 106 of the National Historic Preservation Act and the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), a Historic Bridge Alternatives Analysis (HBAA) Addendum and the 60% plans have been prepared and are ready for review and comment by consulting parties.

INDOT, on behalf of FHWA has additionally signed a determination of "No Historic Properties Affected" for this Section 106 undertaking. In accordance with 36 CFR 800.4(d), you and the other consulting parties that responded to the early coordination letter are being provided the documentation for this finding.

You can view the HBAA Addendum, the 60% plans, and the determination of "No Historic Properties Affected" electronically by accessing INDOT's Section 106 document posting website IN SCOPE at <a href="http://erms.indot.in.gov/Section106Documents/">http://erms.indot.in.gov/Section106Documents/</a> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with any comments that you may have. If a hard copy of the materials is needed, please respond to this email with your request as soon as you can.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. Tribal consulting parties may enter the process at any time and are encouraged to respond to this notification with any comments or concerns at their earliest convenience. Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Thank you in advance for your input,

# Mary E. Kennedy

Historic Bridge Specialist 100 N. Senate Ave., Room N642-ES Indianapolis, IN 46204 Office: (317) 232-5215 Email: <u>mkennedy@indot.in.gov</u>





# **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 234-5168

Eric Holcomb, Governor Joe McGuinness, Commissioner

June 4, 2020

This letter was sent to the listed parties.

RE: Dual Review Project US 40 over Sallust Branch of Mill Creek, Bridge No. 040-067-01838/NBI No. 013740 Des. No.: 1601094, DHPA No.: 22271 Putnam County, Indiana

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a historic bridge project carrying US 40 over Sallust Branch of Mill Creek, Des. No.: 1601094, DHPA No. 22271.

This letter is part of the Section 106 review process for this project. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic and archaeological properties. We are requesting comments from you regarding the possible effects of this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

A Section 106 early coordination letter was distributed on May 8, 2018. In addition, a letter distributed on June 19, 2018 notified consulting parties that a historic property report and core analysis report was available for review and comment. A letter distributed on July 23, 2019, notified consulting parties that a Historic Bridge Alternatives Analysis was available for review and comment. A letter distributed for review and comment.

The proposed undertaking is on US 40 over Sallust Branch of Mill Creek in Putnam, Indiana. It is within Jefferson Township, Coatesville and the Eminence USGS Topographic Quadrangles, in Section 30, Township 14 N, Range 2 W.

The principal need for the project is due to the deteriorated condition of the existing structure. If deterioration is allowed to continue on this structure, it will eventually lead to failure and not perpetuate a crossing on US 40 over Sallust Branch of Mill Creek. The purpose of the proposed project is to provide a structurally sufficient and hydraulically adequate structure that perpetuates vehicular traffic crossing at this location. Please see the enclosed the Historic Bridge Alternatives Analysis Addendum for more information. As a result of Section 106 consultation with the Indiana State Historic Preservation Office (SHPO), the INDOT has reduced the current scope of the project and identified a new preferred alternative focused on repair, preservation, and maintenance. Thus, the previously identified preferred alternative in the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019) is no longer the preferred alternative due to further opportunities to minimize



current impacts to the historic bridge. The revised preferred alternative proposes to patch and fiber-wrap the deteriorated beams, patch the remaining substructure (abutments and wing walls), patch to retain the existing railing, and place rip rap along the banks. Please see the enclosed the Historic Bridge Alternatives Analysis Addendum for more information. In order to access the substructure for repairs and placing rip rap, a temporary haul road will be in the northeast quadrant of the bridge and a temporary cofferdam and pump around will be used. Please see 60% Plans enclosed for more information.

RQAW is under contract with INDOT to advance the environmental documentation for the referenced project. Cultural Resources Analysis (CRA) has been subcontracted to complete the archaeology portions of the Section 106 documentation for the project.

In accordance with 36 CFR 800.2 (c), you were invited to become a consulting party as part of the Section 106 process, or you are hereby invited to become a consulting party as part of the Section 106 process. Entities that have previously accepted consulting party status--as well as additional entities that are currently being invited to become consulting parties--are identified in the attached list. According to the early coordination letter dated May 8, 2008, if the project changes all previously invited consulting parties will be included in distribution of further information about the project. Due to the changes in the project scope since the previous correspondence, all previously invited consulting parties are included in this correspondence.

The Section 106 process involves efforts to identify historic properties potentially affected by the undertaking, to assess the undertaking's effects and to seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. For more information regarding the protection of historic resources, please see the Advisory Council on Historic Preservation's guide: *Protecting Historic Properties: A Citizen's Guide to Section 106 Review* available online at <a href="https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf">https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf</a>.

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 Bridge No. 040-067-01838 is a "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).

Please note that, per the permanent rule issued by the Indiana Department of Natural Resources effective August 14, 2013 (312 IAC 20-4-11.5), INDOT is requesting that this project be subjected to "dual review"; that is, reviewed by the Division of Historic Preservation and Archaeology simultaneously under 54 U.S.C. 306108 (Section 106) and IC 14-21-1-18 (Indiana Preservation and Archaeology Law dealing with alterations of historic sites and structures requiring a Certificate of Approval). Pursuant to Section 11.5(f) of this rule, at the conclusion of the review process we anticipate that the Division Director would issue a letter of clearance exempting this project from obtaining a Certificate of Approval under IC 14-21-1-18.

The Area of Potential Effects (APE) is the area in which the proposed project may cause alterations in the character or use of historic resources. The APE contains one resource (Bridge No. 040-067-01838) eligible for listing in the National Register of Historic Places (NRHP).

A historian who meets the Secretary of the Interior's Professional Qualification Standards identified and evaluated above-ground resources within the APE for potential eligibility for the NRHP. As a result of the historic property identification and evaluation efforts, no other above-ground resources are recommended as eligible for listing in the NRHP.



With regard to archaeological resources, an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards identified no sites within the project area and no further work is recommended.

Per the Historic Bridges PA, Attachment B, this letter conveys the 60% plans for the Indiana SHPO's review and comment. This letter also conveys the Historic Bridge Alternatives Analysis Addendum, the 800.11(d) Section 106 Effects Finding, and provides a response to the Indiana SHPO staff letter, dated November 22, 2019.

As mentioned previously in this letter, the preferred alternative in the draft Historic Bridge Alternatives Analysis (Dohrenwend and Boot, 7/9/2019) is no longer the preferred alternative due to further opportunities to minimize current impacts to the historic bridge. Thus, the Addendum to the Historic Bridge Alternatives Analysis was prepared (enclosed). As the Addendum document describes, the proposed repairs and preservation efforts are anticipated to achieve the project's purpose for approximately 25 years. However, INDOT may find a need to schedule future repairs in advance of the expiration of the anticipated 25-year life of the currently proposed repair and preservation efforts; and may pursue another solution to provide a vehicular crossing on US 40 over Sallust Branch of Mill Creek before or after the next 25 years. Other options may include consideration of pursuing reclassification of the bridge to Non-Select due to the difficulty in rehabilitating concrete beam structures. Any potential future actions will be coordinated with SHPO and consulting parties.

As previously mentioned, 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. Therefore, the Section 106 finding for this project only applies to other resources located within the APE and not to US 40 over Sallust Branch (Bridge No.: 040-067-01838; and NBI No.: 013740). INDOT, acting on FHWA's behalf has determined a "No historic properties affected" is appropriate to satisfy the Section 106 responsibilities for other resources located in the APE. Please see the enclosed 800.11(d) Section 106 Effects Finding documentation for more information.

The Indiana SHPO staff indicated preference for a fiber wrap color of a color that closely matches the hue and shade of the existing concrete in their letter dated November 22, 2019. In response, INDOT will try to match the color of the fiber wrap and patching material to the hue and tint of the existing concrete so that the repairs are as inconspicuous as possible. A special provision will be included in the contract regarding the color of the fiber wrap and concrete patching. Please find the Indiana SHPO staff's letter in Appendix D of the enclosed 800.11(d) Section 106 Effects Finding documentation.

This letter, the Historic Bridge Alternatives Analysis Addendum, 800.11(d) Section 106 Effects Finding, and 60% Plans are available for review in IN SCOPE at <u>http://erms.indot.in.gov/Section106Documents/</u> (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review these documents and respond with comments. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If you prefer a hard copy of this material, please respond to this email with your request within seven (7) days.

Please review the information and comment within thirty (30) calendar days of receipt. If you indicate that you do not desire to be a consulting party or if you have not previously accepted consulting party status and you do not respond to this letter, you will not be included on the list of consulting parties for this project and will not receive further information about the project unless the design changes.



For questions concerning specific project details, you may contact Randall Brooks of RQAW at 317-670-0634 or rbrooks@rqaw.com or Kyle Boot of RQAW at 317-588-1762 or kboot@rqaw.com. All future responses regarding the proposed project should be forwarded to RQAW at the following address:

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, IN, 46038 kboot@rqaw.com.

Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> or 317-233-6795 or Michelle Allen at FHWA at <u>michelle.allen@dot.gov</u> or 317-226-7344.

Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office Environmental Services

Enclosures:

Historic Bridge Alternatives Analysis Addendum (or available on IN SCOPE) 800.11(d) (or available on IN SCOPE) 60% Plans (or available on IN SCOPE)

Distribution List:

All previously invited consulting parties are included due to changes in the project scope. Additionally, a tribe that recently became a signatory to the Tribal MOU and entities that have recently expressed interest in historic bridge projects in Indiana are included. Entities that have previously accepted consulting party status are in bold.

Federal Highway Administration, Kari Carmany-George, KCarmanyGeorge2@indot.IN.gov
Indiana State Historic Preservation Officer (SHPO), jcarr@dnr.IN.gov; wtharp1@dnr.IN.gov
Indiana Landmarks, Western Regional Office, tkleckner@indianalandmarks.org
Indiana National Road Association, mflowers@indianalandmarks.org
Dr. James Cooper
Indiana Historic Spans Task Force
Main Street Greencastle
Heritage Preservation Society of Putnam County
Putnam County Historian
Putnam County Museum
West Central Indiana Economic Development District, Inc.



Putnam County Commissioners Putnam County Highway Supervisor **Miami Tribe of Oklahoma, dhunter@miamination.com** Peoria Tribe of Indians of Oklahoma Eastern Shawnee Tribe of Oklahoma Pokagon Band of Potawatomi Indians Forest County Potawatomi Community Shawnee Tribe Historicbridges.org Historic Hoosier Bridges Historic Bridge Foundation





Eric Holcomb, Governor Cameron F. Clark, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739 Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov • www.IN.gov/dnr/historic



July 6, 2020

Kyle Boot Architectural Historian RQAW 8770 North Street, Suite 110 Fishers, Indiana 46038

# Federal Agency: Indiana Department of Transportation ("INDOT"), on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: 60% rehabilitation plans, historic bridge alternatives analysis Addendum (boot and Brooks, 4/21/2020), and the Indiana Department of Transportation's finding of "no historic properties affected," with supporting documentation, for the bridge on US 40 over Sallust Branch of Mill Creek (Bridge No. 040-067-01838; NBI. No. 013740), 0.5 mile west of SR 75, in Jefferson Township of Putnam County, Indiana (Des. No. 1601094; DHPA No. 22271)

Dear Mr. Boot:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108); implementing regulations at 36 C.F.R. Part 800; the "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges" ("Indiana Historic Bridges PA"), and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana," and also pursuant to Indiana Code 14-21-1-18 and 312 Indiana Administrative Code ("IAC") 20-4, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed the submitted materials which arrived with your June 4, 2020, Review Request Submittal Form, and under Anuradha Kumar's (INDOT) June 4, 2020, cover letter; which included the 60% rehabilitation plans, the historic bridge alternatives analysis addendum, and the Indiana Department of Transportation's finding of "No Historic Properties Affected," all of which we received on June 9, 20

INDOT's June 4 letter describes the change in the project since the 30% plans were submitted for review in 2019 as follows: "The revised preferred alternative proposes to patch and fiber-wrap the deteriorated beams, patch the remaining substructure (abutments and wing walls), patch to retain the existing railing, and place rip rap along the banks."

As previously indicated, based on the submitted information and the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places within the proposed project area; and we concur with the opinion of the archaeologist,

The DNR mission: Protect, enhance, preserve and wisely use natural, cultural and recreational resources for the benefit of Indiana's citizens through professional leadership, management and education.

www.DNR.IN.gov An Equal Opportunity Employer as expressed in the Indiana archaeological short report (Kelley, 10/17/2019), that no further archaeological investigations appear necessary at the proposed project area.

However, if any prehistoric or historic 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 be reported to INDNR-DHPA within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and -29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. Part 800.

As INDOT's June 3, 2020, finding indicates, the US 40 bridge over Sallust Branch of Mill Creek is the only historic property that has been identified within this project's area of potential effects, and effects on this bridge rated Select by the *Indiana Historic Bridge Inventory* have been taken into account by the Indiana Historic Bridge PA.

# Accordingly, we concur with INDOT's June 3, 2020, Section 106 finding, on behalf of FHWA, of "No Historic Properties Affected," for this federal undertaking, as it is now proposed.

We look forward to receiving final plans for the bridge rehabilitation, at which time we will decide whether it is appropriate to issue a Director's Letter of Clearance for the project, indicating compliance with Indiana Code 14-21-1-18.

The addendum to the historic bridge alternatives analysis identifies the preliminary preferred alternative as B1., Rehabilitation for Continued Vehicular Use Meeting Secretary of Interior's Standards for Rehabilitation -Bridge Maintenance Consisting of Patching and Fiber Wrapping the Beams and Patching the Abutments and Railings. We agree that Alternative B1. would be an appropriate treatment for this Select Bridge.

We have no questions or comments about the 60% bridge rehabilitation plans.

INDOT's June 4 letter includes the following prediction about future concerns with this bridge:

As the Addendum document describes, the proposed repairs and preservation efforts are anticipated to achieve the project's purpose for approximately 25 years. However, INDOT may find a need to schedule future repairs in advance of the expiration of the anticipated 25-year life of the currently proposed repair and preservation efforts; and may pursue another solution to provide a vehicular crossing on US 40 over Sallust Branch of Mill Creek before or after the next 25 years. Other options may include consideration of pursuing reclassification of the bridge to Non-Select due to the difficulty in rehabilitating concrete beam structures. Any potential future actions will be coordinated with SHPO and consulting parties.

We have observed that issues have been arising with Select bridges that no longer can be rehabilitated to meet current bridge standards. It occurs to us, however, that reclassifying more and more bridges as Non-Select on a case-by-case basis may not be in keeping with the spirit of the Indiana Historic Bridges PA. The preservation community thought it had secured a commitment to preserve certain historic bridges by agreeing that they are Select, while allowing many other historic bridges to potentially be replaced by agreeing to their being classified as Non-Select. Although occasionally a bridge previously rated non-historic has been re-evaluated and classified as Select, it seems as though even more Select bridges are being reclassified as Non-Select or are being considered for a kind of replication, rather than rehabilitation, because of newly-discovered difficulties with preserving them. At some point in the not-too-distant future, reconsideration of the Indiana Historic Bridges PA would seem appropriate.

If you have questions regarding our Dual Review of the aforementioned project, please contact IDNR-DHPA. Questions about archaeological issues should be directed to Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. Questions about historic buildings or structures pertaining to this review should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

Kyle Boot July 6, 2020 Page 3

For the benefit of those recipients of a copy of this letter who are not Section 106 consulting parties, please be aware that the documents discussed here can be found online in IN SCOPE at http://erms.indot.in.gov/Section 106Documents/. From there, search by this project's designation number: 1601094.

# Anyone receiving an e-mailed copy of this letter who does *not* wish to receive future copies of our correspondence about this bridge project is asked to reply to jcarr@dnr.in.gov and so advise us.

In all future correspondence regarding the Dual Review of this bridge project on US 40 over Sallust Branch of Mill Creek (Bridge No. 040-67-01838C, NBI No. 013740) in Putnam County (Des. No. 1601094), please continue to refer to DHPA No. 22271.

Very truly yours,

BX. Michal

Beth K. McCord Deputy State Historic Preservation Officer

#### BKM:WTT:JLC:jlc

emc: Karstin Carmany-George, FHWA Michelle Allen, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Kyle Boot, ROAW Haylee Moscato, RQAW Board of Commissioners of Putnam County, c/o Lorie Hallett, County Auditor Michael Ricketts, Putnam County Highway Supervisor Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Pokagon Band of Potawatomi Indians Forest County Potawatomi Indians Shawnee Tribe Larry Tippin, Putnam County Historian Putnam County Museum Michael Flowers, Indiana National Road Association Tommy Kleckner, Indiana Landmarks, Western Regional Office Paul Brandenburg, Historic Spans Task Force James L. Cooper, Ph.D., Professor Emeritus of History, DePauw University Main Street Greencastle West Central Indiana Economic Development District, Inc. HistoricBridges.org Historic Hoosier Bridges Historic Bridge Foundation Heritage Preservation Society of Putnam County J. Scott Keller, Indiana Historic Preservation Review Board Anne Shaw Kingery, Indiana Historic Preservation Review Board Daniel Kloc, AIA, Indiana Historic Preservation Review Board Jason Larrison, AIA, Indiana Historic Preservation Review Board Chandler Lighty, Indiana Historic Preservation Review Board Joshua Palmer, AIA, Indiana Historic Preservation Review Board April Sievert, PhD, Indiana Historic Preservation Review Board Christopher Smith, Deputy Director, INDNR, and Chair, Indiana Historic Preservation Review Board Beth McCord, Deputy SHPO and Director, INDNR-DHPA Chad Slider, Assistant Director, INDNR-DHPA Wade T. Tharp, INDNR-DHPA John Carr, INDNR-DHPA

# Categorical Exclusion Appendix E Red Flag and Hazardous Materials



# **INDIANA DEPARTMENT OF TRANSPORTATION**

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

Date: January 9, 2020

- To: Site Assessment & Management (SAM) Environmental Policy Office - Environmental Services Division Indiana Department of Transportation 100 N Senate Avenue, Room N642 Indianapolis, IN 46204
- From: Cameron Fraser RQAW Corporation 8770 North Street; Suite 110 Fishers, Indiana 46038 <u>cfraser@rqaw.com</u>
- Re: RED FLAG INVESTIGATION Des. Number 1601094, State Project Bridge Rehabilitation Project over Sallust Branch of Mill Creek US 40, 0.50 mile West of SR 75 Putnam County, Indiana

# **PROJECT DESCRIPTION**

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) Crawfordsville District propose to proceed with a bridge rehabilitation project located on US 40 over Sallust Branch in Putnam County, Indiana. Specifically, the project is located approximately 0.50 mile west of State Route (SR) 75 in Jefferson Township, Coatesville and Eminence U.S. Geological Survey (USGS) Quadrangles, Township 14 North, Range 2 West, and Section 30.

The proposed project will involve Structure No. 040-67-01838 B, which carries US 40 over Sallust Branch. The existing single span reinforced concrete girder bridge will be rehabilitated for continued vehicular use. Such rehabilitation activities include: milling approximately 1/4 inch of the bituminous paving surface and providing a new 2 ¼ inch rigid concrete overlay to prevent deterioration, replacement of the existing bridge deck railing, patching and fiber wrapping of the concrete beams, and patching of the substructure (abutments) by fiber wrapping. Scour protection at the abutments will be replaced.

Bridge and/or Culvert Work Included in Project: Yes ⊠ No □ Structure #(s) 040-67-01838 B

If this is a bridge project, is the bridge Historical? Yes oxtimes No  $\Box$  , Select oxtimes Non-Select  $\Box$ 

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

Proposed right of way: Temporary  $\Box$  # Acres \_\_\_\_\_ Permanent  $\Box$  # Acres \_\_\_\_\_, Not Applicable  $\boxtimes$  Type of excavation: The maximum depth of excavation may include up to approximately 2 feet below ground surface (bgs) for the construction of temporary crossovers within the median, utilized in the maintenance of traffic (MOT) plan. Maintenance of traffic: The MOT will consist of temporary lane closures and temporary crossovers for continued vehicular crossing on US 40 over Sallust Branch of Mill Creek.

Work in waterway: Yes ⊠ No □ Below ordinary high water mark: Yes ⊠ No □ State Project: ⊠ LPA: □ Any other factors influencing recommendations: The project area boundaries include the temporary crossovers that will be utilized for the MOT.

# **INFRASTRUCTURE TABLE AND SUMMARY**

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

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

# Explanation:

Religious Facilities: \*One (1) unmapped religious facility is located within the 0.5 mile search radius. Harvest House Church is located approximately 0.25 mile north of the project area. No impact is expected.

Cemeteries: One (1) cemetery is located within the 0.5 mile search radius. Heavin-Lee Cemetery is located approximately 0.25 mile south of the project area. No impact is expected.

# WATER RESOURCES TABLE AND SUMMARY

Water Resources Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:							
NWI - Points         N/A         Canal Routes - Historic         N/A							
Karst Springs	N/A	NWI - Wetlands	5				
Canal Structures – Historic	N/A	Lakes	1*				
NPS NRI Listed	N/A	Floodplain - DFIRM	1				
NWI-Lines	18	Cave Entrance Density	N/A				
IDEM 303d Listed Streams and Lakes (Impaired)	8	Sinkhole Areas	N/A				
Rivers and Streams	17	Sinking-Stream Basins	N/A				

# Explanation:

National Wetlands Inventory (NWI)-Lines: Eighteen (18) NWI-Line segments are located within the 0.5 mile search radius. Three (3) NWI-Line segments transect, or are adjacent to, the project area. A Waters of the US Report will be prepared and coordination with the Indiana Department of Transportation (INDOT) Environmental Services (ES) Ecology and Waterway Permitting will occur.

Indiana Department of Environmental Management (IDEM) 303d Listed Streams and Lakes (Impaired): Eight (8) impaired stream segments are located within the 0.5 mile search radius. Three (3) impaired stream segments, associated with Sallust Branch, transect, or are adjacent to, the project area. Sallust Branch is listed for *Escherichia coli* (*E. coli*). Workers who are working in or near water with E. coli should take care to wear appropriate personal protective equipment (PPE), observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

Rivers and Streams: Seventeen (17) stream segments are located within the 0.5 mile search radius. Five (5) stream segments transect, or are adjacent to, the project area. A Waters of the US Report will be prepared and coordination with the INDOT ES Ecology and Waterway Permitting will occur.

NWI-Wetlands: Five (5) NWI-Wetland polygons are located within the 0.5 mile search radius. The nearest NWI-Wetland polygon is mapped approximately 0.26 mile northeast of the project area. No impacts are expected.

Lakes: \*One (1) unmapped lake is located within the 0.5 mile search radius. This lake is approximately 0.43 mile northeast of the project area. No impacts are expected.

Floodplain – Digital Insurance Flood Rate Map (DFIRM): One (1) Floodplain – DFIRM polygon is located within the 0.5 mile search radius. The Floodplain-DFIRM polygon is mapped approximately 0.28 mile northeast of the project area. No impacts are expected.

# URBANIZED AREA BOUNDARY SUMMARY

Explanation: N/A

# MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Explanation: No mining and mineral exploration resources were identified within the 0.5 mile search radius.

# HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

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

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

# **ECOLOGICAL INFORMATION SUMMARY**

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

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by farm fields and residential properties. The October 21, 2019, INDOT inspection report for Structure No. 040-67-01838 B states that no evidence of bats was seen or heard under the bridge. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's Information for Planning and Consultation (IPaC) System for Listed Bat Consultation INDOT Projects".

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

# **RECOMMENDATIONS SECTION**

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

CULTURAL RESOURCES: Structure No. 040-67-01838 B is listed as a Select status historic bridge in the Indiana historic Bridge Inventory. Coordination with INDOT Cultural Resources Office (CRO) will occur.

# **INFRASTRUCTURE: N/A**

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

Three (3) NWI-Line segments transect, or are adjacent to, the project area.

Five (5) stream segments transect, or are adjacent to, the project area.

IDEM 303d Listed Streams and Lakes (Impaired): Three (3) impaired stream segments, associated with Sallust Branch of Mill Creek, transect, or are adjacent to, the project area. Sallust Branch is listed for *E. coli*. Workers who are working in or near water with E. coli should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

URBANIZED AREA BOUNDARY: N/A

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: N/A

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

Aaron Aldred Digitally signed by Aaron Aldred Date: 2020.01.09 14:42:55 -05'00' **INDOT Environmental Services concurrence:** 

(Signature)

Prepared by:

Cameron Fraser **NEPA Specialist RQAW** Corporation

# Graphics:

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

SITE LOCATION: YES

Omitted to avoid duplication. See graphic in Appendix B of this CE document.

**INFRASTRUCTURE: YES** 

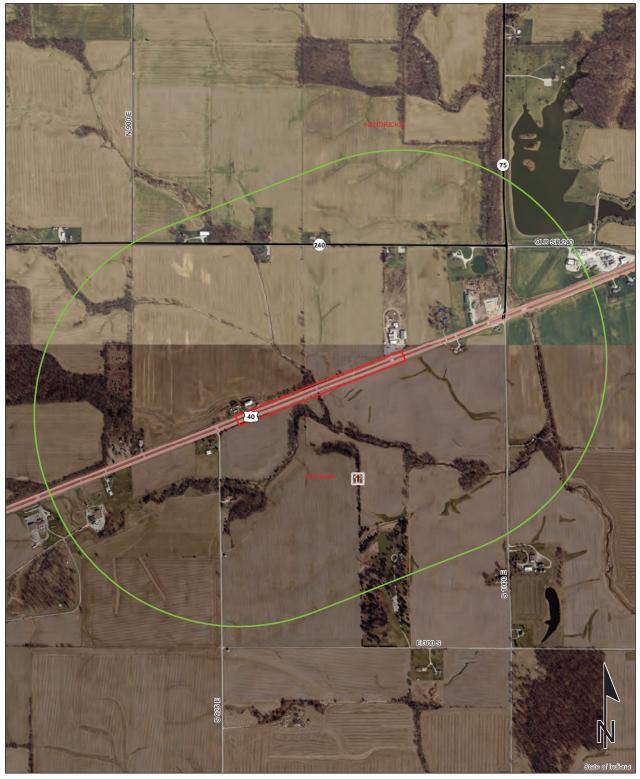
WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: N/A

# MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: N/A

Red Flag Investigation - Infrastructure US 40, 0.50 mile West of SR 75 Des. No. 1601094, Bridge Rehabilitation Project Putnam County, Indiana



Sources: 0.15 0.075 0 0.15 Non Orthophotography Miles	İ	Religious Facility	ŔŔ	Recreation Facility		Project Area
Data - Obtained from the State of Indiana Geographical	+	Airport		Pipeline		Half Mile Radius
Information Office Library	L	Allpolt		Railroad		// Toll
<u>Orthophotography</u> - Obtained from Indiana Map Framework Data (www.indianamap.org)	(H)	Cemeteries		Ramoau		/ Interstate
Map Projection: UTM Zone 16 N Map Datum: NAD83	1.5.3	0011010100		Trails		
This map is intended to serve as an aid in graphic		Hospital	0.0	Managed Lands	$\sim$	<ul> <li>State Route</li> </ul>
representation only. This information is not warranted			h n	managoa Eanao	$\wedge$	/ US Route
for accuracy or other purposes.		School		County Boundary	$\sim$	Local Road

Des. Number 1601094

Red Flag Investigation - Water Resources US 40, 0.50 mile West of SR 75 Des. No. 1601094, Bridge Rehabilitation Project Putnam County, Indiana



Sources: Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Karst Spring

- NWI- Line

Rive

Impaired Stream Lake

Canal Structure - Historic

Canal Route - Historic

- NPS NRI listed

Lake

Floodplain - DFIRM

📝 🐛 Sinkhole Area

Cave Entrance Density

Sinking-Stream Basin

County Boundary

Miles

Half Mile Radius

Interstate

US Route

Local Road

State Route

Toll

Page 1 of 2 05/09/2019

# Indiana County Endangered, Threatened and Rare Species List

County: Putnam

Species Name		Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)						
Epioblasma rangiana		Northern Riffleshell	LE	SE	G2	<u>S1</u>
₋ampsilis fasciola		Wavyrayed Lampmussel		SSC	G5	S3
<mark>Obovaria subrotunda</mark>		Round Hickorynut	С	SE	G4	<u>S1</u>
Ptychobranchus fasciolaris		Kidneyshell		SSC	G4G5	S2
Simpsonaias ambigua		Salamander Mussel	С	SSC	G3	S2
Foxolasma lividus		Purple Lilliput	С	SSC	G3Q	S2
/illosa lienosa		Little Spectaclecase		SSC	G5	S3
nsect: Coleoptera (Beetles) <mark>Dryobius sexnotatus</mark>		Six-banded Longhorn Beetle		ST	GNR	S2
nsect: Hymenoptera Bombus affinis		Rusty-patched Bumble Bee	LE	SE	G1	<u>S1</u>
nsect: Lepidoptera (Butterflies & Moths) Eosphoropteryx thyatyroides		Pinkpatched Looper Moth		ST	G4G5	S2
nsect: Odonata (Dragonflies & Damselflies <mark>Cordulegaster obliqua</mark>	)	A		CD	C4	8282
		Arrowhead Spiketail		SR	G4	S2S3
Enallagma divagans		Turquoise Bluet		SR	G5	S3
Amphibian Necturus maculosus		Common mudpuppy		SSC	G5	S2
Reptile Crotalus horridus		Timelian Dattlean las		CE	G4	S2
		Timber Rattlesnake		SE		
Opheodrys aestivus		Rough Green Snake		SSC	G5	83
Bird					~	
Aimophila aestivalis		Bachman's Sparrow			G3	SXB
Cistothorus platensis		Sedge Wren		SE	G5	S3B
laliaeetus leucocephalus		Bald Eagle		SSC	G5	S2
lelmitheros vermivorus		Worm-eating Warbler		SSC	G5	S3B
anius Iudovicianus		Loggerhead Shrike		SE	G4	S3B
Iniotilta varia		Black-and-white Warbler		SSC	G5	S1S2B
Rallus elegans		King Rail		SE	G4	S1B
Setophaga cerulea		Cerulean Warbler		SE	G4	S3B
Setophaga citrina		Hooded Warbler		SSC	G5	S3B
<mark>⊺yto alba</mark>		Barn Owl		SE	G5	S2
Mammal						
/lustela nivalis		Least Weasel		SSC	G5	S2?
<mark>/lyotis sodalis</mark>		Indiana Bat	LE	SE	G2	S1
Γaxidea taxus		American Badger		SSC	G5	S2
Vascular Plant <mark>Carex cephaloidea</mark>		Thinleaf Sedge		ST	G5	<u>S2</u>
Indiana Natural Heritage Data Center	Fed:	LE = Endangered; LT = Threatened; C = candi	idate; PDL = propo	sed for delisting	3	
Division of Nature Preserves	State:	SE = state endangered; $ST =$ state threatened; $ST =$	SR = state rare; SSC			rn;
Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.	GRANK:	SX = state extirpated; SG = state significant; V Global Heritage Rank: G1 = critically imperile globally; G4 = widespread and abundant globa	d globally; G2 = in		-	
	SRANK:	globally; G? = unranked; GX = extinct; Q = u State Heritage Rank: S1 = critically imperiled G4 = widespread and abundant in state but wit	ncertain rank; T = t in state; S2 = imper	axonomic subu riled in state; S3	nit rank s = rare or uncom	mon in state;

G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status

Page 2 of 2 05/09/2019

# Indiana County Endangered, Threatened and Rare Species List

# County: Putnam

Species Name	Common Name	FED	STATE	GRANK	SRANK
Carex pedunculata	Longstalk Sedge		WL	G5	S3
Chelone obliqua var. speciosa	Rose Turtlehead		WL	G4T3	S3
Juglans cinerea	Butternut		ST	G4	S2
Panax quinquefolius	American Ginseng		WL	G3G4	S3
Poa wolfii	Wolf Bluegrass		SR	G4	S3
Taxus canadensis	American Yew		SE	G5	<u>S1</u>
High Quality Natural Community Forest - floodplain mesic	Mesic Floodplain Forest		SG	G3?	S1
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry-mesic Central Till Plain	Central Till Plain Dry-mesic Upland Forest		SG	GNR	S2
Forest - upland mesic Central Till Plain	Central Till Plain Mesic Upland Forest		SG	GNR	S3
Forest - upland mesic Shawnee Hills	Shawnee Hills Mesic Upland Forest		SG	GNR	S3
Primary - cliff overhang	Sandstone Overhang		SG	G4	S2
Primary - cliff sandstone	Sandstone Cliff		SG	GU	S3
Other Significant Feature Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

Indiana Natural Heritage Data Center	Fed:	LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delis	sting
Division of Nature Preserves	State:	SE = state endangered; $ST = state$ threatened; $SR = state$ rare; $SSC = state$ spectrum state spectrum state state spectrum state state spectrum state	ecies of special concern;
Indiana Department of Natural Resources		SX = state extirpated; SG = state significant; WL = watch list	
This data is not the result of comprehensive county	GRANK:	Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled glo	bally; G3 = rare or uncommon
surveys.		globally; G4 = widespread and abundant globally but with long term concern	s; G5 = widespread and abundant
		globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic s	ubunit rank
	SRANK:	State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state	e; S3 = rare or uncommon in state;
		G4 = widespread and abundant in state but with long term concern; $SG =$ stat	e significant; SH = historical in
		state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unran	nked; SNA = nonbreeding status
Des. Number 1601094	Appendix	E: Red Flag Investigation and Hazardous Materials	E-10

# HAZARDOUS MATERIALS SITE VISIT FORM

Des. Number: 1601094	Project Nu	mber: N/A	<u>Road</u> : US 40					
<u>Type of Project</u> : Bridge project								
Description of Area (either general location or exact location of parcel): The project is located along US 40 over								
its crossing of Sallust Branch, approxim	ately 0.5 mile w	est of SR 75, in Putnam	County, Indiana.					
	-		-					
Person Completing Field Check: Joe Da	ubkowski—RQA	W—July 24, 2018						
		•						
1. Has a Red Flag Investigation been	completed?	$\bigtriangledown$ Yes $\Box$ No						
0 0	I							
Notes: A Red Flag Investigation was co	ompleted by RO	AW and was approved b	v INDOT Site Assessment and					
Management on January 9, 2020. See th	1 .		•					
2. Right-of-Way Requirements:								
	Minor Take	Whole Parcel Take	Information Not Available					
Notes: The project will not require any	permanent or ter	nporary right-of-way						
<u>rotes</u> . The project will not require any j	permanent of ter	inportary right of way.						
3. Land Use History and Development: (Industrial, Light Industry, Commercial, Agricultural, Residential,								
Other – also, indicate source of c	· · · ·	6						
	autu. visuui mop	201011, deriai priotos, 0.5.	0.5. topo maps, etc.)					

<u>Setting (rural or urban)</u>: Rural (visual inspection and aerial photography) <u>Current Land Uses</u>: Transportation, agricultural, riparian (visual inspection and aerial photography) <u>Previous Land Uses</u>: Transportation, agricultural, riparian (aerial photography) <u>Adjacent Land Uses</u>: Agricultural, riparian, residential (visual inspection and aerial photography) <u>Describe any structures on the property</u>: There are no known hazardous material concerns within and/or adjacent to the project area.

4. Visual Inspection:	Property	Adjoining	Property	Adjoining
		Property		Property
Storage Structures:		Evidence of Con	tamination:	
Underground Tanks		Junkyard		
Surface Tanks		Auto Graveyard		
Transformers		Surface Staining		
Sumps		Oil Sheen		
Ponds/Lagoons		Odors		
Drums		Vegetation Damage		
Basins		Dumps		
Landfills		Fill Dirt Evidence		
Other		Vent pipes or fill pipes		
		Other		

5. Is a Phase I, Initial Site Assessment required?

🖂 No

# Categorical Exclusion Appendix F Water Resources



# Waters of the U.S. Determination US 40 over Sallust Branch Bridge Rehabilitation Project Des. No. 1601094

# Prepared by: Ben DeMaria, RQAW Corporation Completed Date: November 8, 2018

#### **Dates of Waters Field Investigation:**

Field investigations were conducted on July 24, 2018 by RQAW Corporation to evaluate the presence of *Waters of the United States* for the proposed US 40 over Sallust Branch Bridge Rehabilitation Project in Putnam County, Indiana.

#### Location:

Section 30, Township 14 N, Range 2 W Coatesville and Eminence U.S. Geological Survey (USGS) Quadrangles Putnam County, Indiana Latitude: 39.62567° N Longitude: -86.678834° W

# National Wetlands Inventory (NWI) Wetlands:

According to the U.S. Fish and Wildlife (USFWS) National Wetlands Inventory (NWI) data available through IndianaMap (<u>http://www.indianamap.org</u>), no impacts to any NWI wetlands are anticipated.

NWI	Cowardin Classification	Approximate	Feature Type
<u>Abbreviation</u>		Distance from	
		Project (Miles)	
PFO1A	Palustrine Forested Broad-Leaved	0.36 mi	Polygon
	Deciduous Temporary Flooded		
PUBGh	Palustrine Unconsolidated Bottom	0.37 mi	Polygon
	Intermittently Exposed		
	Diked/Impounded		
PUBGx	Palustrine Unconsolidated Bottom	0.46 mi	Polygon
	Intermittently Exposed		

# Soils:

According to the Soil Survey Geographic (SSURGO) Database for Putnam County, Indiana, the survey area does not contain soil areas with nationally listed hydric soils.

Map Abbreviation	Soil Name	Classification
Sh	Shoals silt loam (0 to 2%	Not Hydric with 2% Hydric Components
	slopes)	
XeB2	Xenia silt loam (2 to 6%	Not Hydric with 2% Hydric Components
	slopes)	

# 8 Digit HUC:

Patoka-White basin hydrologic unit code (HUC) 05120203

# FISHERS VINCENNES LA PORTE

WWW.RQAW.COM

# **12 Digit HUC:**

Sallust Branch-Mill Creek hydrologic unit code (HUC) 051202030503

#### Attachments: Omitted to avoid duplication. See graphics in Appendix B of this CE document.

Project Location Maps	A1 – A4
Natural Resources Conservation Service (NRCS) Soil Map & Survey Report	A5 – A6
Drainage Basin, Floodplain Map and Water Resources Map.	A7 – A11
Photography Location Map & Photographs.	
Stream Quality Evaluation Forms	A25 – A28
Pre-Jurisdictional Determination Form	A29 – A31

#### **Project Description:**

The proposed project would involve the rehabilitation of the existing structure located on US 40 over Sallust Branch in Putnam County, Indiana.

#### Streams:

According to the hydrology data available through IndianaMap (<u>http://www.indianamap.org/</u>), two streams, Sallust Branch and UNT 1 to Sallust Branch are located within the survey area. A description of both streams is discussed below.

Sallust Branch flows in a northwest to southeast direction under US 40 and eventually converges into the White River. The stream substrate predominately consisted of sand and silt. Sallust Branch contained overhanging vegetation, aquatic macrophytes, logs and woody debris. This stream exhibited Ordinary High-Water Mark (OHWM) characteristics of 10.3 feet in width and 8 inches in depth. Sallust Branch received a QHEI score of 49, indicating "Good/Fair" quality. The stream has a gradient of 39.5 ft/mile and a drainage area of 2.3 square miles. Due to this stream's connectivity to the White River, a Traditionally Navigable Waterway (TNW), this stream is likely to be considered a *Waters of the United States*.

UNT 1 to Sallust Branch flows in a southwest to northeast direction along the north side of US 40 and converges with Sallust Branch. The stream substrate predominately consisted of gravel and sand. This stream exhibited OHWM characteristics of 10 feet in width and 10 inches in depth. UNT 1 to Sallust Branch received an HHEI score of 42, indicating "good" quality. This stream has a drainage area of 0.3 square miles. Due to this stream's connectivity to the White River, a TNW, this stream is likely to be considered a *Waters of the United States*.

# **Roadside Ditches:**

The survey area is well drained. Two roadside ditches (RSD 1 and RSD 2) were identified within the survey area along the south side of US 40. These roadside ditches convey storm water drainage from the roadway and surrounding landscape to Sallust Branch. The roadside ditches did not exhibit OHWM characteristics and are not captured streams. Therefore, the roadside ditches are not likely to be considered a *Waters of the United States*.

Roadside Ditch (RSD) 1 is located on the south side of US 40 in the southwest portion of the survey area. This RSD flows northeast and empties into Sallust Branch. This roadside ditch conveys storm water runoff from the roadway and adjacent land.

Roadside Ditch (RSD) 2 is located on the south side of US 40 in the southeast portion of the survey area. This RSD flows southwest and empties into Sallust Branch. This roadside ditch conveys storm water runoff from the roadway and adjacent land.

# Wetlands:

No wetlands were observed within the project area. There was not any visual evidence of wetland hydrology or a dominance of hydrophytic vegetation. Since hydrophytic vegetation and wetland hydrology were not observed, data points were not taken.

Table 1: Stream Summary US 40 over Sallust Branch Bridge Rehabilitation Project Des. No. 1601094 Putnam County, Indiana

Name	Photos	Lat/Long	OHWM Width (feet)	OHWM Depth (inches)	USGS Blue- line?	Riffles/ Pools?	Substrate	Quality (QHEI/ HHEI)	Likely Water of U.S.?
Sallust Branch	5-7, 9	39.62496° N -86.67877° W	10.3	8	Yes	Yes	Sand & Silt	49 Good/Fair	Yes
UNT 1 to Sallust Branch	10, 12, 13	39.62526° N -86.67917°W	10	10	No	No	Gravel & Sand	42 Class II/Good	Yes

#### Table 2: Roadside Ditch Summary US 40 over Sallust Branch Bridge Rehabilitation Project Des. No. 1601094 Putnam County, Indiana

Stream Name	Photos	Lat/Long	OHWM Width (feet)	OHWM Depth (inches)	USGS Blue-line?	Riffles/ Pools?	Likely Water of U.S.?
RSD 1	4	39.62486° N -86.67.928° W	N/A	N/A	No	N/A	No
RSD 2	14, 15	39.62505° N -86.67865° W	N/A	N/A	No	N/A	No

# **Conclusions:**

A field reconnaissance was conducted on July 24, 2018 by RQAW Corporation to evaluate the presence of *Waters of the United States* for the US 40 over Sallust Branch structure in Putnam County, Indiana. Field observations identified Sallust Branch and UNT 1 to Sallust Branch. Both streams are tributaries to the White River, a TNW. Based on connectivity to the White River, a TNW, Sallust Branch and UNT 1 to Sallust Branch are likely to be considered a *Waters of the United States*.

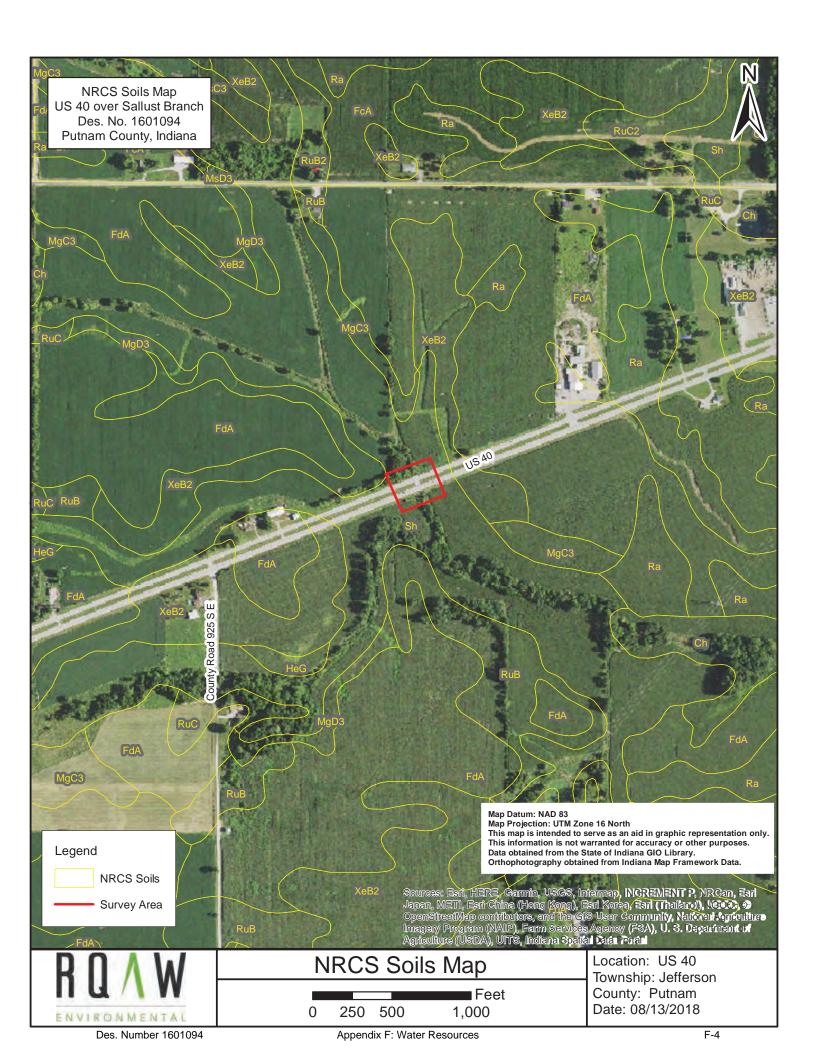
Every effort should be taken to avoid and minimize impacts to these waterways. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made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

# Acknowledgement:

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

# Prepared by: Ben DeMaria

Ben DeMaria Ben DeMaria Environmental Scientist RQAW | Environmental Department bdemaria@rqaw.com

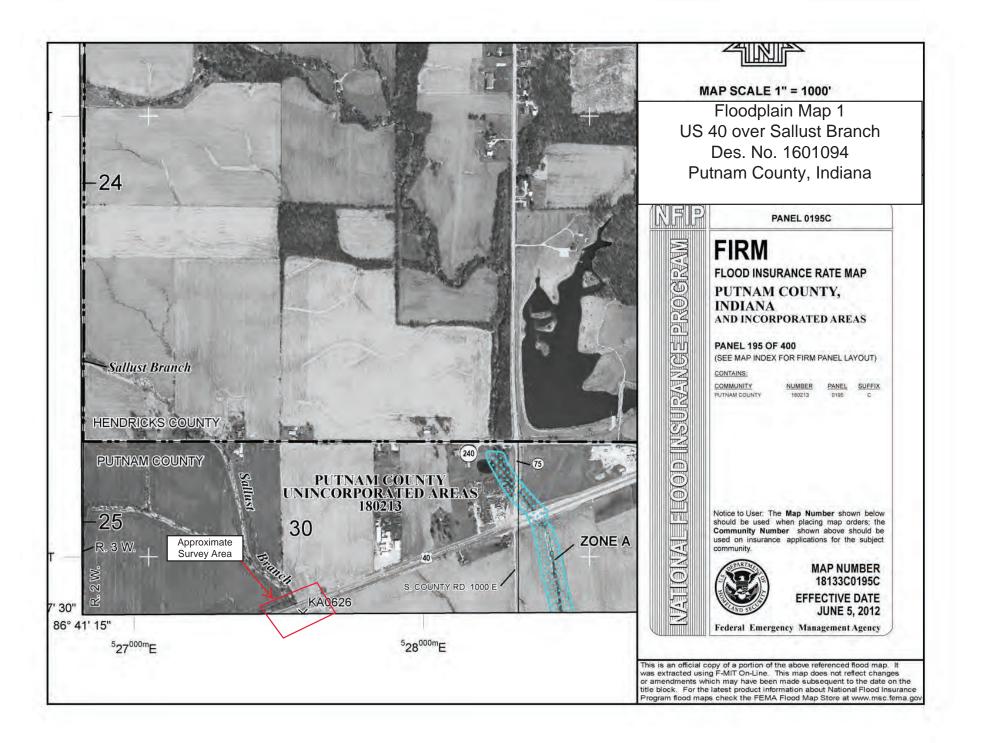


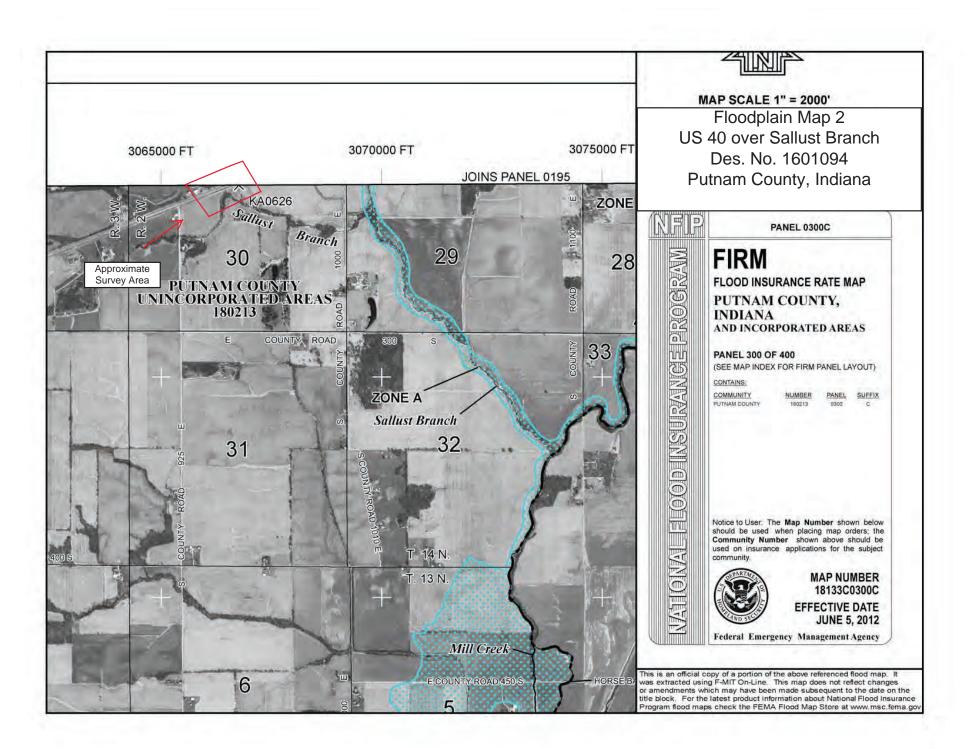
# **Report—Hydric Soil List - All Components**

Hyd	ric Soil List - All Comp	onents-IN1	33-Putnam County, Inc	liana	
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
Sh: Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Shoals	75-95	Flood plains	No	_
	Eel	3-5	Flood plains	No	—
	Sloan	0-15	Flood plains,meander scars,backswamps	Yes	2
	Genesee	0-5	Natural levees,flood- plain steps,flood plains	No	_
XeB2: Xenia silt loam, 2 to 6 percent slopes, eroded	Xenia-Eroded	85-95	Till plains	No	—
	Treaty	0-5	Depressions, till plains	Yes	2
	Fincastle	0-5	Till plains	No	—
	Russell-Eroded	0-5	Till plains	No	—

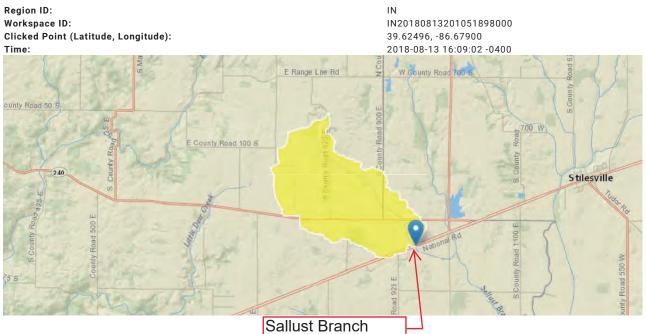
# **Data Source Information**

Soil Survey Area: Putnam County, Indiana Survey Area Data: Version 20, Sep 7, 2018





# **StreamStats Report**



Sallust Dialich

Basin Characteristi	cs		
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.313	square miles
T2INDNR	Average transmissivity (ft2/d) for the full depth of unconsolidated deposits from InDNR well database.	813	square feet per day
LOWREG	Low Flow Region Number	1729	dimensionless
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	2	ft per day
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014- 5177	37.49	dimensionless
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	9.7	percent

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.2.1

A study area is needed before viewing the report

# StreamStats Report



UNT to Sallust Branch

#### Basin Characteristics

Parameter			
Code	Parameter Description	Value	Unit
BFREGNO	BFREGNO	1566	dimensionless
BSLDEM10M	Mean basin slope computed from 10 m DEM	2.72	percent
CONTDA	Area that contributes flow to a point on a stream	0.296	square miles
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	41.5	feet per mi
DRNAREA	Area that drains to a point on a stream	0.296	square miles
HIGHREG	HIGHREG	1008	dimensionless
INSINKHOLE	Percent Sinkhole drainage area per basin from Indiana Geological Survey.	0	percent
INSINKING	Percent Sinking stream drainage area from Indiana Geological Survey.	0	percent
K1INDNR	Average hydraulic conductivity (ft/d) for the top 70 ft of unconsolidated deposits from InDNR well database.	2	ft per day
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	3	ft per day
LAT_OUT	Latitude of Basin Outlet	39.626073	degrees
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	25	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	10.3	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	2.21	percent
LOWREG	Low Flow Region Number	1729	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	25	dimensionless
ST2INDNR	Average transmissivity (ft2/d) for the full depth of unconsolidated deposits within 1000 ft of stream channel from InDNR well database.	548	square feet per day
T2INDNR	Average transmissivity (ft2/d) for the full depth of unconsolidated deposits from InDNR well database.	721	square feet per day
URBAN	Percentage of basin with urban development	0	percent
WETLAND	Percentage of Wetlands	0	percent

#### General Disclaimers

Parameter values have been edited, computed flows may not apply.
Upstream regulation was checked for this watershed.
This watershed is percent regulated, computed flows may not apply.
This watershed has been edited, computed flows may not apply.

Sample # bioSa	mple #	Stream Name		Loca	tion	
.1		Sallust Branch		US 4	0	
Surveyor Sample Date	County	٨	lacro SampleT	ype Habitat	1	QHEI Score: 49
BDD 07/24/2018	Putnam			Complete		49
1-Substrate (20)	points n	naximum)			Sul	ostrate Score: 9
Check 1 Predomina	ant Pool & 1	Predominant Riffl	e [5	Substrate Quality (ch	neck only 1, or cl	heck 2 and AVERAGE)
Check all that are pro	esent	P=Pool, R=			Substrate Ori	and the second s
Predominant F	resent	Predominant	Present	Limestone(1)	Hardpan(0)	Lacustrine(0)
PR	PR	PR	PR	J Tills(1)	Sandstone(	0) Shale(-1)
Bldrs/Slabs(10)		Hardpan(4		Wetlands(0)	Rip/Rap(0)	Coal fines(-2)
Boulders(9)		Detritus(3)	000	Silt Cover		Embeddedness
Cobble(8)	11	Muck(2)		Silt heavy(-2		Extensive(-2)
Gravel(7)		Silt(2)	an	Silt moderat		Moderate(-1)
Sand(6)		Sludge(1)		Silt free(1)		Low/Normal(0)
NOTE: ignore sludge orig	ainating fro		substrates pres	Silt free(1)	L	None(1)
sources; score based on	-		nents:	senter		
2 Instroom Covo	- 120 00					-
2-Instream Cove		ints maximu			Instream	n Cover Score: 10
Type (check ALL that a	pply)					y 1, or 2 and AVERAGE
Undercut banks(1)	1	Deep pools(2)	Oxbows(1)			sive >75% (11)
Overhanging vegetat		Boulders(1)	<u> </u>	acrophytes(1) voody debris(1)		rate 25-75% (7)
Rootmats(1)	Comments	the second se	Logs and a	voody debris(1)		e 5-25% (3) / absent <5% (1)
		001				
3-Channel Morph	nology (	20) (check only of	one per categoi	ry, OR two and AVE	RAGE)	Channel Score: 10
Sinuosity Deve	elopment	Channelizatio	n	Stability	Modifications/O	ther
	xcellent (7)			High (3)	Snagging	Impound
	Good (5)	Recovered	(4)			Islands
/ Low (2) / E				Moderate (2)	Relocation	
-	air (3)	Recovering	(3)	✓ Moderate (2)	Canopy Rem	oval Leveed
None (1)	air (3) 'oor (1)				Canopy Rem	oval 🗌 Leveed
None (1)	'oor (1)	Recent or	i (3) no recovery (1)	Low (1)	Canopy Rem	oval Leveed
-	'oor (1)	Recent or	i (3) no recovery (1)	Low (1)	Canopy Rem Dredging One side cha	oval 🗌 Leveed
None (1)	& Bank	Recent or r	(3) to recovery (1) points max	Low (1)	Canopy Rem Dredging One side cha	oval Leveed Bank shapir nnel modifications Riparian Score: 8
None (1) P Comments:	& Bank	Recent or r	(3) no recovery (1) points max tegory, check of	Low (1) <b>ximum)</b> only one per bank, C	Canopy Rem Dredging One side cha	oval Leveed Bank shapir nnel modifications Riparian Score: 8
None (1)	Coor (1) & Bank king downst	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp R (most predomina	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank)	Low (1) <b>ximum)</b> only one per bank, C	Canopy Rem Dredging One side cha	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE).
None (1) P Comments: 4-Riparian Zone Left/Right banks look Riparian width L R (per bank) Wide >50m (4)	eoor (1) & Bank king downst Eros L F	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp R (most predomina Forest, Swamp (3	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) )	Low (1) ximum) only one per bank, C st 100 ft Riparian) L R Conservati	Canopy Rem Dredging One side cha R DR two per bank	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3)
None (1) P Comments:  A-Riparian Zone Left/Right banks look Riparian width L R (per bank) Wide >50m (4) Moderate 10-50m	King downst Eros L F (3)	Recent or r Erosion (10) tream (For each cas sion/Runoff-Floodp (most predomina Forest, Swamp (3 Shrub or Old field	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2)	Low (1) ximum) only one per bank, C st 100 ft Riparian) L R Conservati Urban or In	Canopy Rem Dredging One side cha R two per bank on Tillage (1) dustrial (0)	oval     Leveed       Bank shapir       nnel modifications       Riparian Score:       8       and AVERAGE).       Bank Erosion       L     R (per bank)       ✓     None or little (3)       Moderate (2)
None (1) P Comments:  A-Riparian Zone Left/Right banks look Riparian width L R (per bank) Wide >50m (4) Moderate 10-50m C Narrow 5-10m (2)	King downst	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp (most predomina Forest, Swamp (3) Shrub or Old field Residential, Park,	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1)	Low (1) <b>ximum)</b> only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co	Canopy Rem Dredging One side cha R two per bank on Tillage (1) adustrial (0) nstruction (0)	oval     Leveed       Bank shapir       nnel modifications       Riparian Score:       8       and AVERAGE).       Bank Erosion       L     R (per bank)       ✓     None or little (3)       Moderate (2)
None (1)       P         Comments:	Bank         & Bank         king downst         Eros         L         (3)         V         (1)	Recent or r Erosion (10) tream (For each cas sion/Runoff-Floodp (most predomina Forest, Swamp (3 Shrub or Old field	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1)	Low (1) ximum) only one per bank, C st 100 ft Riparian) L R Conservati Urban or In	Canopy Rem Dredging One side cha R two per bank on Tillage (1) adustrial (0) nstruction (0)	oval     Leveed       Bank shapir       nnel modifications       Riparian Score:       8       and AVERAGE).       Bank Erosion       L     R (per bank)       ✓     None or little (3)       Moderate (2)
None (1)       P         Comments:       P         4-Riparian Zone       P         Left/Right banks look       Riparian width         L       R (per bank)         Wide >50m (4)       Moderate 10-50m         ✓       Narrow 5-10m (2)         Very narrow <5m	Yoor (1)         & Bank         Eros         L         (3)         (3)         (1)         Comments:	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp (most predomina Forest, Swamp (3 Shrub or Old field Residential, Park, Fenced pasture (1	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) ((2) New field (1)	Low (1) <b>ximum)</b> only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co	Canopy Rem Dredging One side cha R two per bank on Tillage (1) adustrial (0) nstruction (0)	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V V None or little (3) Moderate (2)
None (1)       P         Comments:	Yoor (1)         & Bank         Eros         L         (3)         (3)         (1)         Comments:	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp (most predomina Forest, Swamp (3) Shrub or Old field Residential, Park,	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) ((2) New field (1)	Low (1) <b>ximum)</b> only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co	Canopy Rem Dredging One side cha R DR two per bank on Tillage (1) adustrial (0) nstruction (0) ure/Rowcrop (0)	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V V None or little (3) Moderate (2)
None (1)         P           Comments:         P           4-Riparian Zone         P           Left/Right banks look         Riparian width           L         R (per bank)           Wide >50m (4)         Moderate 10-50m           Varrow 5-10m (2)         Very narrow <5m	Coor (1)         & Bank         king downst         Eros         L         (3)         (3)         (1)         comments:         tality (12)	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp (most predomina Forest, Swamp (3) Shrub or Old field Residential, Park, Fenced pasture (1) Points maximum Morphology (che	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) I (2) New field (1) ) Mem field (1) ) mum ck only one,	Low (1) <b>ximum)</b> only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co C Copen Paste	Canopy Rem Dredging One side cha Reference On Tillage (1) Industrial (0) Instruction (0) Une/Rowcrop (0)	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1
None (1)       P         Comments:	Coor (1)         & Bank         king downst         Eros         L         (3)         (3)         (1)         comments:         tality (12)	Recent or r Erosion (10 tream (For each ca sion/Runoff-Floodp (most predomina Forest, Swamp (3 Shrub or Old field Residential, Park, Fenced pasture (7 2 points max Morphology (che OR check two and	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) (2) New field (1) ) New field (1) ) (1) Mum ck only one, AVERAGE)	Low (1) <b>ximum)</b> only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co C Copen Paste	Canopy Rem Dredging One side cha R DR two per bank on Tillage (1) adustrial (0) nstruction (0) ure/Rowcrop (0) Pool e current velocity	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1
None (1) P Comments: 4-Riparian Zone Left/Right banks look Riparian width L R (per bank) Wide >50m (4) Moderate 10-50m Very narrow <5m None (0) C Da-Pool/Glide Qu Max pool depth (check >1m (6) 0.7-1m (4)	Coor (1)         & Bank         king downst         Eros         L         (3)         (3)         (1)         comments:         tality (12)	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp (most predomina Forest, Swamp (3) Shrub or Old field Residential, Park, Fenced pasture (7) 2 points maxi Morphology (che OR check two and C Pool width > rif	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) (2) New field (1) ) (2) New field (1) ) (1) (2) New field (1) (1) (1) (2) New field (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Low (1) ximum) only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co C Open Paster Pool/Run/Riffle	Canopy Rem Dredging One side cha R DR two per bank on Tillage (1) adustrial (0) nstruction (0) ure/Rowcrop (0) Pool e current velocity	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1
None (1)       P         Comments:	Coor (1)         & Bank         king downst         Eros         L         (3)         (3)         (1)         comments:         tality (12)	Recent or r Erosion (10) tream (For each ca sion/Runoff-Floodp (most predomina Forest, Swamp (3) Shrub or Old field Residential, Park, Fenced pasture (1) 2 points maximum Morphology (che OR check two and Pool width > rif Pool width = rif	(3) no recovery (1) points max tegory, check of lain quality (pa ant per bank) ) (2) New field (1) ) (2) New field (1) ) (1) (2) New field (1) (1) (1) (2) New field (1) (1) (2) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	Low (1) ximum) only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co C Open Pastu Pool/Run/Riffi Eddies (1) Fast (1) Moderate (1)	Canopy Rem Dredging One side cha R DR two per bank on Tillage (1) ndustrial (0) nstruction (0) ure/Rowcrop (0) Pool e current velocity	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1 Col/Glide Score: 5 y (check all that apply) Forrential (-1) nterstitial (-1) ntermittent (-2)
None (1)       P         Comments:	A Bank King downst Eros L F (3) V • (1) 0 Comments: Iality (12) cone)	Recent or r Erosion (10) tream (For each cas sion/Runoff-Floodp (most predomina Forest, Swamp (3) Shrub or Old field Residential, Park, Fenced pasture (7) 2 points maxi Morphology (che OR check two and Pool width > rif Pool width > rif Pool width < rif	(3) no recovery (1) points max tegory, check of lain quality (pa ant per bank) ) (2) New field (1) ) (2) New field (1) ) (1) (2) New field (1) (1) (1) (2) New field (1) (1) (2) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	Low (1) ximum) only one per bank, C st 100 ft Riparian) L R Conservati Urban or In Mining, Co C Open Pastu Pool/Run/Riffu Eddies (1) Fast (1)	Canopy Rem Dredging One side cha R DR two per bank on Tillage (1) ndustrial (0) nstruction (0) ure/Rowcrop (0) Pool e current velocity	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1 Col/Glide Score: 5 y (check all that apply) forrential (-1) nterstitial (-1)
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None (1)       P         Comments:	& Bank         & Bank         & Eros         L         I         (3)         (3)         I         (3)         I          I         I         I         I         I         I         I         I         I         I         I         I         I         I <td>Recent or r  Erosion (10  ream (For each ca ion/Runoff-Floodp (most predomina Forest, Swamp (3 Shrub or Old field Residential, Park, Fenced pasture (7  Pool width &gt; rif Pool width &gt; rif Pool width &gt; rif Pool width &gt; rif (check only one p Riffle/run si Stable-e</td> <td>(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1) 1) mum ck only one, d AVERAGE) file width (2) file width (2) file width (1) file width (0) per category, O ubstrate</td> <td>Low (1)  ximum)  only one per bank, C st 100 ft Riparian)  L R  Conservati Urban or Im Mining, Co Gr Copen Paste  Pool/Run/Riffle Eddies (1) Fast (1) K two and AVERAG  Ider (2)</td> <td>Canopy Rem Dredging One side cha Reference On Tillage (1) Industrial (0) Instruction (0) Deference E current velocity In I Carter State Control (0) Deference Control (0) Defere</td> <td>oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1 0)/Glide Score: 5 y (check all that apply) Forrential (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) fle/Run Score: 3 dedness</td>	Recent or r  Erosion (10  ream (For each ca ion/Runoff-Floodp (most predomina Forest, Swamp (3 Shrub or Old field Residential, Park, Fenced pasture (7  Pool width > rif Pool width > rif Pool width > rif Pool width > rif (check only one p Riffle/run si Stable-e	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1) 1) mum ck only one, d AVERAGE) file width (2) file width (2) file width (1) file width (0) per category, O ubstrate	Low (1)  ximum)  only one per bank, C st 100 ft Riparian)  L R  Conservati Urban or Im Mining, Co Gr Copen Paste  Pool/Run/Riffle Eddies (1) Fast (1) K two and AVERAG  Ider (2)	Canopy Rem Dredging One side cha Reference On Tillage (1) Industrial (0) Instruction (0) Deference E current velocity In I Carter State Control (0) Deference Control (0) Defere	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1 0)/Glide Score: 5 y (check all that apply) Forrential (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) fle/Run Score: 3 dedness
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None (1)       P         comments:       Image: Comments:         Image: Comments:       Image: Comments: <td>Comme ality (8) cone) cone) cone) cone) cone) cone) cone) cone) cone) cone)</td> <td>Recent or r      Erosion (10      tream (For each cas      sion/Runoff-Floodp      (most predomina      Forest, Swamp (3      Shrub or Old field      Residential, Park,      Fenced pasture (7      Pool width &gt; rif      Check only one p      Riffle/run su      Stable-e      [ Mod. stable-e</td> <td>(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1) 1) mum ck only one, d AVERAGE) fle width (2) fle width (1) fle width (2) fle width (1) fle width (0) per category, O ubstrate .g. cobble, bou ble-e.g. pea gro</td> <td>Low (1)  ximum)  only one per bank, C st 100 ft Riparian)  L R Oconservati Urban or Im Mining, Co Mining, Co Gr Gopen Paste  Pool/Run/Riffle Eddies (1) Fast (1) Fast (1) Slow (1)  R two and AVERAG Ider (2) avel (1)</td> <td>Canopy Rem Dredging One side cha Cone side c</td> <td>oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V V None or little (3) Moderate (2) Moderate (2) Heavy/Severe (1 0)/Glide Score: 5 y (check all that apply) Forrential (-1) nterstitial (-1) nterstitial (-1) ntermittent (-2) No pool (0) fle/Run Score: 3 dedness V Normal/Low (1) None (2)</td>	Comme ality (8) cone) cone) cone) cone) cone) cone) cone) cone) cone) cone)	Recent or r      Erosion (10      tream (For each cas      sion/Runoff-Floodp      (most predomina      Forest, Swamp (3      Shrub or Old field      Residential, Park,      Fenced pasture (7      Pool width > rif      Check only one p      Riffle/run su      Stable-e      [ Mod. stable-e	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1) 1) mum ck only one, d AVERAGE) fle width (2) fle width (1) fle width (2) fle width (1) fle width (0) per category, O ubstrate .g. cobble, bou ble-e.g. pea gro	Low (1)  ximum)  only one per bank, C st 100 ft Riparian)  L R Oconservati Urban or Im Mining, Co Mining, Co Gr Gopen Paste  Pool/Run/Riffle Eddies (1) Fast (1) Fast (1) Slow (1)  R two and AVERAG Ider (2) avel (1)	Canopy Rem Dredging One side cha Cone side c	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V V None or little (3) Moderate (2) Moderate (2) Heavy/Severe (1 0)/Glide Score: 5 y (check all that apply) Forrential (-1) nterstitial (-1) nterstitial (-1) ntermittent (-2) No pool (0) fle/Run Score: 3 dedness V Normal/Low (1) None (2)
None (1)       P         Comments:	Poor (1)         & Bank         king downst         Eror         L       I         (3)       I         (1)       I         comments:       Iality (12         iality (12       Iality (12         cone)       Ial	Recent or r      Erosion (10      tream (For each cat     sion/Runoff-Floodp      (most predomina     Forest, Swamp (3     Shrub or Old field     Residential, Park,     Fenced pasture (7      Points max      Morphology (che     OR check two and     Pool width > rif     Pool width > rif     Pool width > rif     Pool width > rif     Pool width < rif ents:     (check only one )     Riffle/run ss     Stable-e     [7 Mod. stable mments:	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1) 1) mum ck only one, d AVERAGE) fle width (2) fle width (1) fle width (2) fle width (1) fle width (0) per category, O ubstrate .g. cobble, bou ble-e.g. pea gro	Low (1)  ximum)  only one per bank, C st 100 ft Riparian)  L R Oconservati Urban or Im Mining, Co Mining, Co Gr Gopen Paste  Pool/Run/Riffle Eddies (1) Fast (1) Fast (1) Slow (1)  R two and AVERAG Ider (2) avel (1)	Canopy Rem Dredging One side cha Remove the side cha Con	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V V None or little (3) Moderate (2) Moderate (2) Heavy/Severe (1 0)/Glide Score: 5 y (check all that apply) Forrential (-1) nterstitial (-1) nterstitial (-1) ntermittent (-2) No pool (0) fle/Run Score: 3 dedness V Normal/Low (1) None (2)
None (1)       P         Comments:	Poor (1)         & Bank         king downst         Eror         L       I         (3)       I         (1)       I         comments:       Iality (12         iality (12       Iality (12         cone)       Ial	Recent or r      Erosion (10      tream (For each cat     sion/Runoff-Floodp      (most predomina     Forest, Swamp (3     Shrub or Old field     Residential, Park,     Fenced pasture (7      Points max      Morphology (che     OR check two and     Pool width > rif     Pool width > rif     Pool width > rif     Pool width > rif     Pool width < rif ents:     (check only one )     Riffle/run ss     Stable-e     [7 Mod. stable mments:	(3) no recovery (1) points may tegory, check of lain quality (pa ant per bank) ) 1 (2) New field (1) ) 1 (2) New field (1) 1) mum ck only one, 1 AVERAGE) fle width (2) fle width (2) fle width (1) fle width (0) per category, O ubstrate .g. cobble, bou ble-e.g. pea gra- e-e.g. sand, gra	Low (1)  ximum)  only one per bank, C st 100 ft Riparian)  R  Pool/Run/Riffle  Pool/Run/Riffle  Eddies (1)  Fast (1)  Kiwo and AVERAG  Ider (2)  avel (1)  vel (0)	Canopy Rem Dredging One side cha Remove the side cha Con	oval Leveed Bank shapir nnel modifications Riparian Score: 8 and AVERAGE). Bank Erosion L R (per bank) V None or little (3) Moderate (2) Heavy/Severe (1 Ol/Glide Score: 5 y (check all that apply) Forrential (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) nterstitial (-1) steams Normal/Low (1) None (2) No riffle (0)

Sample #	bioSan	nple #	Sallust Branch		Loca US 4				
urveyor		County		Macro SampleType	Habitat		QHEI Score:		
BDD	D 07/24/2018 Putnam				Complete				
Majo	r Suspected Im	pacts (Chec	k all that apply)	1	Miscellane	ous QHEI Info	mation		
	None		ırban	Subjective ratin	Subjective rating (1-10): 5		Is reach repr	resentative	
	Industrial	✓ Chan	nelization	Aesthetic rating (1-10): 6	a (1-10): 6	% Run: 15	of stream?	yes	
	WWTP	Ripa	rian Removal	Augunous ruun	91.101.0	% Glide: 15			
1	Agricultural	Flow	Alteration	Canopy Cover (% Open): 50		% Pool: 50			
	Livestock	CSO	5	General QHEI Note	es:		-		
	Silviculture	Minir	ng						
	Construction	Land	fills						
	Urban Runoff	Natu	ral						
		ents:							

**ChieEPA** Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) :

42

SITE NUMBER RIVER BASIN DRAINAGE AREA (mi²)	.30
LENGTH OF STREAM REACH (ft) LAT. 39.62526 LONG86.67917 RIVER CODE RIVER MILE	
DATE 07/24/18 SCORER BDD COMMENTS	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REC MODIFICATIONS:	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.	HHEI
TYPE PERCENT TYPE PERCENT	Metric
BLDR SLABS [16 pts] 0% SILT [3 pt] 0%	Points
BOULDER (>256 mm) [16 pts] 0% LEAF PACK/WOODY DEBRIS [3 pts] 0%	Substrate
	Max = 40
COBBLE (65-256 mm) [12 pts]       0%       CLAY or HARDPAN [0 pt]       0%         GRAVEL (2-64 mm) [9 pts]       50%       MUCK [0 pts]       0%	
□       ✓       SAND (<2 mm) [6 pts]	17
Total of Percentages of 0.00% (A) Substrate Percentage 100% (B)	A + B
Bldr Slabs, Boulder, Cobble, Bedrock Check TOU 70 SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 2	
2. Maximum Pool Depth ( <i>Measure the maximum pool depth within the 61 meter (200 ft)</i> evaluation reach at the time of	Pool Dept
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	Max = 30
> 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	
> 22.5 - 30 cm [30 pts]          < 5 cm [5 pts]	0
OHWM Donthy 10 in	
COMMENTS OHWM Depth: 10 In MAXIMUM POOL DEPTH (centimeters): 26	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	
	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width
$ \begin{array}{ c c c c c } &> 4.0 \text{ meters } (> 13') [30 \text{ pts}] \\ \hline &> 3.0 \text{ m} - 4.0 \text{ m} (> 9' 7" - 13') [25 \text{ pts}] \\ \hline &> 1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}] \end{array} \end{array} $	
$ \begin{array}{ c c c c c } &> 4.0 \text{ meters } (> 13') [30 \text{ pts}] \\ \hline \\ &> 3.0 \text{ m} - 4.0 \text{ m} (> 9' 7" - 13') [25 \text{ pts}] \\ \hline \\ &> 1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}] \end{array} $	Width Max=30
$ \begin{array}{ c c c c c c } &> 4.0 \text{ meters } (> 13') [30 \text{ pts}] \\ \hline &> 3.0 \text{ m} - 4.0 \text{ m} (> 9' 7" - 13') [25 \text{ pts}] \\ \hline &> 1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}] \\ \hline &> 1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}] \\ \hline &> 0 \text{LWMA Width: 10ft} \end{array} $	Width
$ \begin{array}{ c c c c c } &> 4.0 \text{ meters } (> 13') [30 \text{ pts}] \\ \hline \\ &> 3.0 \text{ m} - 4.0 \text{ m} (> 9' 7" - 13') [25 \text{ pts}] \\ \hline \\ &> 1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}] \end{array} $	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
$ \begin{array}{ c c c c c } \hline > 4.0 \text{ meters } (> 13') [30 \text{ pts}] \\ \hline > 3.0 \text{ m} - 4.0 \text{ m} (> 9' 7" - 13') [25 \text{ pts}] \\ \hline > 1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}] \\ \hline \\ $	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
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> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
→ 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
→ 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
→ 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       - 1.0 m (<=3' 3") [5 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (<=3' 3") [5 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       1.0 m (<=3' 3") [5 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (-s3' 3") [5 pts]         > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]       AVERAGE BANKFULL WIDTH (meters):         COMMENTS         OHWM Width: 10ft         AVERAGE BANKFULL WIDTH (meters):         Image: Stream Flowing          KIPARIAN ZONE AND FLOODPLAIN QUALITY          AVERAGE BANKFULL WIDTH (meters):          RIPARIAN WIDTH         FLOODPLAIN QUALITY       *ANOTE: River Left (L) and Right (R) as looking downstream *          (Per Bank)       L          (Most Predominant per Bank)       L          Moderate 5-10m       Mature Forest, Shrub or Old       Urban or Industrial          Narrow <5m	Width Max=30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3' - 4' 8") [15 pts]         > 3.0 m - 4.0 m (> 9' 7' - 13') [25 pts]       > 1.0 m (-s' 3") [5 pts]         > 1.5 m - 3.0 m (> 9' 7' - 4' 8") [20 pts]       AVERAGE BANKFULL WIDTH (meters): 3.00         This information must also be completed         RIPARIAN ZONE AND FLOODP LAIN QUALITY *XNOTE: River Left (L) and Right (R) as looking downstream %         RIPARIAN WIDTH       FLOOOPLAIN QUALITY       *XNOTE: River Left (L) and Right (R) as looking downstream %         (Per Bank)       L R       (Most Predominant per Bank)       L R         (Per Bank)       L R       (Most Predominant per Bank)       L R         (Wide >10m       Mature Forest, Shrub or Old       Urban or Industrial         Moderate 5-10m       Immature Forest, Shrub or Old       Urban or Industrial         More       Fenced Pasture       Mining or Construction         None       Fenced Pasture       Mining or Construction         COMMENTS       Stream Flowing       Moist Channel, isolated pools, no flow (Intermittent Dry channel, no water (Ephemeral)         COMMENTS       1.0       2.0       3.0         0.5       1.5       2.5       3.0	Width Max=30

October 24, 2002 Revision

Des. Number 1601094

PHWH Form Page - 1 Appendix F: Water Resources

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed)	<u>):</u>
QHEI PERFORMED? - Yes 🖌 No QHEI Score (If Yes, A	Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
WWH Name:	Distance from Evaluated Stream
CWH Name:	_ Distance from Evaluated Stream
EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSH	IED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Coatesville, Eminence NRCS Soil Ma	
County: Putnam Township / City: Jeff	erson Township
MISCELLANEOUS	_
Base Flow Conditions? (Y/N):_Y Date of last precipitation:	Quantity:
Photograph Information:	
Elevated Turbidity? (Y/N): N Canopy (% open): 70%	
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or i	d. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.)	Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:	
Additional comments/description of pollution impacts:	
ID number. Include appropriate field data sheets from the         Fish Observed? (Y/N)         N         Voucher? (Y/N)	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM	I REACH (This must be completed):
/	· · ,
UNT 1 to Sallust Branch	
$\vee$	US
	40
	Sallust
	Branch
>	

#### Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

#### **BACKGROUND INFORMATION**

- A. REPORT COMPLETION DATE FOR PJD: November 8, 2018
- **B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Ben DeMaria, RQAW Corporation, 8770 North St., Ste. 110, Fishers, IN 46038
- C. DISTRICT OFFICE, FILE NAME, AND NUMBER:
- **D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:** The proposed project (Des. No. 1601094) would involve the rehabilitation of the existing small structure located on US 40 in Putnam County, Indiana. There are two streams (Sallust Branch and UNT to Sallust Branch) within the survey area, totaling approximately 415 linear feet.

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

State: Indiana County/parish/borough: Putnam County City: Stilesville

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

Lat.: 39.62567° N Long.: -86.678834° W

Universal Transverse Mercator: 16 N 527564 4386261

Name of nearest waterbody: Sallust Branch

#### E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s):

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

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non- wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Sallust Branch	39.62496° N	-86.67877° W	275 linear feet	Non-wetland	Non-Section 10/ Section 404
UNT 1 to Sallust Branch	39.62526° N	-86.67917° W	140 linear feet	Non-wetland	Non-Section 10/ Section 404

- The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that; (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

#### SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:
Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Maps: General Location, Topographic, Soils, Photo Locations, NWI
<ul> <li>Data sheets prepared/submitted by or on behalf of the PJD requestor.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report. Rationale:</li> </ul>
Data sheets prepared by the Corps:
Corps navigable waters' study:
<ul> <li>U.S. Geological Survey Hydrologic Atlas:</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: <u>Coatesville, Eminence/ 1:24,000</u>.</li> <li>Natural Resources Conservation Service Soil Survey. Citation: <u>NRCS Web Soil Survey</u>:</li> </ul>
Putnam County       .         National wetlands inventory map(s).       Cite name: USFWS NWI data: Putnam County.         State/local wetland inventory map(s):
FEMA/FIRM maps: <u>FIRM Maps: Putnam County and Incorporated Areas</u>
<ul> <li>100-year Floodplain Elevation is:(National Geodetic Vertical Datum of 1929)</li> <li>Photographs: Aerial (Name &amp; Date): <u>Putnam County/ 2016</u>.</li> </ul>
or Other (Name & Date): <u>Photographs taken on July 24, 2018</u> .
Previous determination(s). File no. and date of response letter:
Other information (please specify):

# IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory staff member completing PJD

Ben DeMaria 11/08/2018

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

From:	Evans, Julie (INDOT)
To:	Benjamin DeMaria
Cc:	Todd, Kristi (INDOT); Mcgill, Justus; Gilyeat, Richard
Subject:	APPROVED 1601094 Waters Report
Date:	Friday, November 9, 2018 10:28:00 AM
Attachments:	image001.png
	1601094 FINAL Waters Report US 40.pdf

Hello Ben,

Thank you for submitting the waters report for the US 40 bridge rehabilitation project (DES 1601094) in Putnam County The approved waters report is attached and can also be found on ProjectWise through this <u>link</u>.

*It is the responsibility of the Project Manager to forward a copy of this report to the Project Designer.* 

The information in this report should be used by the Project Designer to determine if waters of the U.S. will be impacted by the project. Avoidance and minimization of impacts must occur *before* mitigation will be considered. If mitigation is required, the Project Manager or Project Designer must coordinate with the Ecology and Waterway Permitting Office to discuss how adequate compensatory mitigation will be provided.

The Project Manager should notify the Ecology and Waterway Permitting Office if there is any change to the project footprint presented in this report. Such changes may require additional fieldwork and submittal of an updated waters report covering areas not previously investigated. *This report is only valid for a period of five years from the date of earliest fieldwork*. If the report expires prior to waterway permit application submittal, additional fieldwork and a revised waters report will be required.

It will not be sent to the United States Army Corps of Engineers (USACE) or the Indiana Department of Environmental Management (IDEM) until the waterways permit applications are submitted to these agencies.

Thank you,

#### Julie Evans, MES

## Categorical Exclusion Appendix G Public Involvement



### **INDIANA DEPARTMENT OF TRANSPORTATION** *Driving Indiana's Economic Growth*

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Eric Holcomb, Governor Joe McGuinness, Commissioner

#

March 19, 2018

First Name, Last Name Or Current Property Owner Street City, State, Zip

Re: Notice of Entry for Survey or Investigation
 Des. Number 1601094
 US 40 over Sallust Branch Bridge Project (located approximately 0.88 mile southwest of the US 40/SR 240
 East junction) in Putnam County, Indiana

Dear Property Owner,

Information indicates that you own property near the above referenced transportation project. RQAW Corporation has been selected by the Indiana Department of Transportation (INDOT) Crawfordsville District to complete the environmental document for this proposed project. RQAW will be performing a survey of environmental resources within the project area in the near future. It may be necessary for representatives from RQAW or sub-consultants for RQAW to enter your property to complete this work. This is permitted by law per Indiana Code (IC) 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself, if you are available, before they enter your property. If you no longer own this property, or if it is currently occupied by someone else, please let us know the name of the new owner or occupant so we can contact them about the survey.

Please read the attached notice to inform you what the "Notice of Entry for Survey or Investigation" means. The survey work may include the identification and mapping of wetlands and historic resources, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites) and various other environmental studies. The information we obtain from these studies is necessary for the proper planning and design of the transportation project.

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

RQAW and its sub-consultants will be conducting the field surveys for this project. If any problems occur, please contact Jaime Byerly at RQAW at 317.815.7200 or at <u>jbyerly@rqaw.com</u>. You may also contact the INDOT Project Manager, Richard Gilyeat, at 765.361.5684 (X 15134) or at <u>rgilyeat@indot.in.gov</u>. For archaeological concerns, you may contact Shaun Miller at INDOT at 317.233.6795 or at <u>smiller@indot.ing.gov</u>.

Please be aware that IC 8-23-7-27 and 28 provides that you may seek compensation from INDOT for damages occurring to your property (land or water) that result from entry for the purposes mentioned above in IC 8-23-7-

26. In this case, a basic procedure that may be followed is for you and/or an INDOT employee or representative present an account of the damages to the above named INDOT staff. They will check the information and forward it to the appropriate person at INDOT who will contact you to discuss the situation and compensation. In addition, you may contact Bert Herron, the INDOT Crawfordsville District Real Estate Manager (DREM) at 765.361.5243 (X 15139) or at <u>bherron@indot.IN.gov</u>. The DREM can provide you with a form to request compensation for damages. After filling out the form, you can return it to the DREM for consideration, and the DREM may be contacted if you have questions regarding the matter, rights, and procedures.

If you are not satisfied with the compensation that INDOT determines is owed to you, IC 8-23-7-8 provides the following:

The amount of damages shall be accessed by the county agricultural extension educator of the county in which the land or water is located and two (2) disinterested residents of the county, one (1) appointed by the aggrieved party and one (1) appointed by the department. A written report of the assessment of damages will be mailed to the aggrieved party and the department by first class United States mail. If either the department or the aggrieved party is not satisfied with the assessment of damages, either or both may file a petition, not later than fifteen (15) days after receiving the report, in the circuit or superior court of the county in which the land or water is located.

Please note that you have the right to claim ownership of any cultural artifacts found on your property. If artifacts are encountered on your property, they will be collected and analyzed for potential historical significance. Artifacts will be curated at a state approved curation facility unless you choose to have them returned to you. If you choose to have artifacts returned to you, please contact Shaun Miller at the number or e-mail address above.

It is our sincere desire to cause you as little inconvenience as possible during our work and we thank you in advance for your cooperation.

Sincerely,

Jaime Byerly

Jaime Byerly Environmental Department RQAW Corporation

Attachment: INDOT's Notice of Entry for Survey or Investigation

### INDIANA DEPARTMENT OF TRANSPORTATION



Driving Indiana's Economic Growth

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204

Eric Holcomb, Governor Joe McGuinness, Commissioner

### Indiana Department of Transportation Notice of Entry for Survey or Investigation Indiana Department of Transportation

If you have received a "Notice of Entry for Survey or Investigation" from INDOT or an INDOT representative, you may be wondering what it means. In the early stages of a project's development, INDOT must collect as much information as possible to ensure that sound decisions are made in designing the proposed project. Before entering onto private property to collect that data, INDOT is required to notify landowners that personnel will be in the area and may need to enter onto their property. Indiana Code, Title 8, Article 23, Chapter 7, Section 26 deals with the department's authority to enter onto any property within Indiana.

Receipt of a Notice of Entry for Survey or Investigation does not necessarily mean that INDOT will be buying property from you. It doesn't even necessarily mean that the project will involve your property at all. Since the Notice of Entry for Survey or Investigation is sent out in the very early stages and since we want to collect data within AND surrounding the project's limits more landowners are contacted than will actually fall within the eventual project limits. It may also be that your property falls within the project limits but we will not need to purchase property from you to make improvements to the roadway. Another thing to keep in mind is that when you receive a Notice of Entry for Survey or Investigation, very few specifics have been worked out and actual construction of the project may be several years in the future.

Before INDOT begins a project that requires them to purchase property from landowners, they must first offer the opportunity for a public hearing. If you were on the list of people who received a Notice of Entry for Survey or Investigation, you should also receive a notice informing you of your opportunity to request a public hearing. These notices will also be published in your local newspaper so interested individuals who are not adjacent to the project will also have the opportunity to request a public hearing. If a public hearing is to be held, INDOT will publicize the date, location, and time. INDOT will present detailed project information at the public hearing, comments will be taken from the public in spoken and written form, and question and answer sessions will be offered. Based on the feedback INDOT receives from the public, a project can be modified and improved to better serve the public.

So, if you have received a "Notice of Entry for Survey or Investigation", remember:

1. You do not need to take any action at this time. It is merely letting you know that people in orange/lime vests are going to be in your neighborhood.

- 2. The project is still in its very early planning stages.
- 3. You will be notified of your opportunity to comment on the project at a later date.

www.in.gov/dot/ An Equal Opportunity Employer

## Categorical Exclusion Appendix H Air Quality

#### Indiana Department of Transportation (INDOT)

				cts FY 2018 - 2021													
SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
Indiana Department of Transportation	39321 / 1592730	Init.	170	Bridge Thin Deck Overlay	CR 325W over I-70 EBL, 1.75 mi W SR 243	Crawfordsville	(	0 NHPP		Bridge Construction	CN	\$78,300.00	\$8,700.00		\$87,000.00		
Indiana Department of Transportation	39321 / 1592731	Init.	1 70	Bridge Thin Deck Overlay	CR 325 W over I-70 WBL, 1.75 mi W SR 243	Crawfordsville		0 NHPP		Bridge Construction	CN	\$78,300.00	\$8,700.00		\$87,000.00		
Indiana Department of Transportation	39321 / 1592732	Init.	1 70	Bridge Thin Deck Overlay	Mill Creek, EB 8.19 mi E US 231	Crawfordsville		0 NHPP		Bridge Construction	CN	\$173,700.00	\$19,300.00		\$193,000.00		
Indiana Department of Transportation	39321 / 1592733	Init.	1 70	Bridge Thin Deck Overlay	Mill Creek, WB 8.19 mi E US 231	Crawfordsville	(	0 NHPP		Bridge Construction	CN	\$173,700.00	\$19,300.00		\$193,000.00		
Indiana Department of Transportation	39321 / 1592845	Init.	1 70	Bridge Deck Replacement	170 EB over US 231, 4.02 mi E SR 243, EBL	Crawfordsville		0 NHPP		Bridge Construction	CN	\$1,991,700.00	\$221,300.00		\$2,213,000.00		
Indiana Department of Transportation	39321 / 1592846	Init.	1 70	Bridge Deck Replacement	I70 WB over US 231, 4.02 mi E SR 243	Crawfordsville	(	0 NHPP		Bridge Construction	CN	\$2,259,900.00	\$251,100.00		\$2,511,000.00		
Indiana Department of Transportation	39786 / 1500663	Init.	1 70	Bridge Deck Overlay	WB Bridge over Croys Creek, 7 .10 mi W of SR 243	Crawfordsville	(	0 NHPP		Bridge Construction	CN	\$663,300.00	\$73,700.00			\$737,000.00	
Indiana Department of Transportation	39786 / 1500663	A 17	1 70	Bridge Deck Overlay	WB Bridge over Croys Creek, 7 .10 mi W of SR 243	Crawfordsville	(	0 NHPP	\$0.00	Bridge Construction	CN	-\$626,400.00	-\$69,600.00			(\$696,000.00)	
Comments:No MPO;	Removed F	Y20 CN \$	696,000 - e	liminating project	•			•									
Indiana Department of Transportation	39786 / 1592706	Init.	1 70	Bridge Deck Overlay	EB bridge over Croys Creek 7. 10 mi W of SR 243	Crawfordsville		0 NHPP		Bridge Construction	CN	\$1,506,600.00	\$167,400.00			\$1,674,000.00	
Indiana Department of Transportation	39786 / 1592706	A 11	1 70	Bridge Deck Overlay	EB bridge over Croys Creek 7. 10 mi W of SR 243	Crawfordsville	(	0 NHPP	\$1,662,000.00	Bridge Consulting	PE	\$45,000.00	\$5,000.00	\$50,000.00			
Comments:No MPO;	Add FY18 P	E \$50,00	0.00									·					
Indiana Department of Transportation	39814 / 1592829	Init.	US 40	Bridge Deck Overlay	Bridge over Deer Creek, 0.76 mi E of SR 243	Crawfordsville	(	0 NHPP		Bridge Construction	CN	\$719,200.00	\$179,800.00			\$899,000.00	
Indiana Department of Transportation	39814 / 1592829	A 02	US 40	Bridge Deck Overlay	Bridge over Deer Creek, 0.76 mi E of SR 243	Crawfordsville		0 STP	\$909,000.00	Bridge Consulting	PE	\$8,000.00	\$2,000.00	\$10,000.00			
Comments:No MPO;	Add \$10,000	0.00 PE F	Y18 funds	·	·			·		·		·······					
Indiana Department of Transportation	39814 / 1601094	Init.	US 40	Br Repl, Comp.Cont.Pr es.Conc. I-Beam	Bridge over Sallust Branch, 0.5 0 mi W of SR 75	Crawfordsville	(	0 NHPP		Bridge Construction	CN	\$1,403,200.00	\$350,800.00				\$1,754,000.00
Indiana Department of Transportation	<mark>39814 /</mark> 1601094	A 06	US 40	Br Repl, Comp.Cont.Pr es.Conc. I-Beam	Bridge over Sallust Branch, 0.5 0 mi W of SR 75	Crawfordsville	(	0 STP	\$1,764,000.00	Bridge Consulting	PE	\$8,000.00	\$2,000.00	\$10,000.00			
Comments:No MPO;	Add FY18 P	E \$10,00	D					•		•			I				
Indiana Department of Transportation	39952 / 1601882	Init.	SR 240	New Signal Installation	at Percy Julian Drive, 0.70 mi E of US 231	Crawfordsville	(	0 Safety		Safety Construction	CN	\$178,000.00	\$0.00	\$178,000.00			
Indiana Department of Transportation	40101 / 1602093	Init.	1 70	Bridge Thin Deck Overlay	Poplar Grove Road over I-70 EB/WB, 1.43 mi E of SR 243	Crawfordsville	(	0 NHPP		Bridge Construction	CN	\$95,400.00	\$10,600.00			\$106,000.00	
Indiana Department of Transportation	40101 / 1602095	Init.	SR 243	Bridge Thin Deck Overlay	Bridge over Mosquito Creek, 1. 45 mi S of US 40	Crawfordsville		0 NHPP		Bridge Construction	CN	\$66,400.00	\$16,600.00			\$83,000.00	

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\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

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

Match :\$15,415,404.81

	CONTR ACT #/ LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
	42538 / 1902062	A 10	US 231	Small Structures & Drains Construction	Various Locations (6) in Putnam County	Crawfordsville	2.88	STBG	\$794,335.00	Bridge Consulting	PE	\$96,000.00	\$24,000.00	\$120,000.00				
omments:PE phase f	for \$120,000	) FY20 an	d CN Pha	se for \$794,335 FY23, No	MPO	1												
	42911 / 1592829	A 25	US 40	Bridge Thin Deck Over <b>l</b> ay	Bridge over Deer Creek, 0.76 mi E of SR 243	Crawfordsville	0	STBG	\$902,329.00	Bridge Construction	CN	\$721,863.20	\$180,465.80		\$902,329.00			
omments:Add CN pha	ase for \$90	2,329 FY2	21; No MP	0		1												
	42911 / 1601094	A 25	US 40	Bridge Replacement	Bridge over Sallust Branch, 0.5 0 mi W of SR 75	Crawfordsville	0	STBG	\$1,967,863.00	Bridge Construction	CN	\$1,574,290.40	\$393,572.60		\$1,967,863.00			
omments:Add CN pha	ase for \$1,9	967,863 F	Y21; No M	PO														
	42934 / 2000869	A 25	US 36	HMA Overlay, Preventive Maintenance	From 4.36 mi E of US 231 to 0.1 8 mi E of SR 75	Crawfordsville	8.33	STBG	\$3,259,559.00	Road Construction	CN	\$2,563,647.20	\$640,911 <u>.</u> 80				\$3,204,559.00	
				·		•	•			Road Consulting	PE	\$44,000.00	\$11,000.00		\$55,000.00			
ommente: Add PE ph	ase for \$55	000 FY21	and CN p	hase for \$3,204,559 FY23	3. No MPO						1						1	

Federal: \$69,943,235.73

2021: \$15,287,461.20

2020: \$28,159,978.18

2022: \$20,692,382.16 2023: \$18,535,031.00 2024: \$2,683,788.00

\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

## Categorical Exclusion **Appendix I** Other Information

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

ProjectNumber	SubProjectCode	County	Property
1800070	1800070B	Putnam	Lieber State Recreation Area
1800118	1800118D	Putnam	Lieber State Recreation Area
1800171	1800171S	Putnam	Lieber State Recreation Area
1800263	1800263	Putnam	Robe-Ann Park
1800312	1800312F	Putnam	Lieber State Recreation Area
1800323	1800323	Putnam	Lieber State Recreation Area (Cagles Mill / Lieber
1800363	1800363O	Putnam	Lieber State Recreation Area
1800364	1800364B	Putnam	Big Walnut Nature Preserve
1800375	1800375C	Putnam	Lieber State Recreation Area
1800405	1800405D	Putnam	Big Walnut Nature Preserve
1800413	1800413E	Putnam	Lieber State Recreation Area
1800557	1800557	Putnam	Big Walnut Sports Park
1800578	1800578	Putnam	Big Walnut Community Park
1800582	1800582	Putnam	Robe-Ann Park

Please note, some of the property names are cut off on the ends due to character limits

Also, park names may have changed and is not reflected on the list.

\*This may include multiple sites in multiple counties and should always be included in your searches by county.

### **Bridge Inspection Report**

040-67-01838 B US 40 over SALLUST BRANCH



Inspection Date: 10/21/2019 Inspected By: Matthew Ference Inspection Type(s): Routine \_\_\_\_

Bridge Inspection Report

This bridge is in poor overall condition (Matt Ference, 10-21-2019).

5-17-18: Item 104 and 26 were changed. Structure is now on NHS, based on INDOTs current roadway inventory map.

Bridge Inspection Report

<b>IDENTIFICATION</b>			
IDENTIFICATION (1) STATE CODE: (8) STRUCTURE: (5 A-B-C-D-E) INV. ROUTE: (2) HIGHWAY AGENCY DISTRICT: (3) COUNTY CODE: (4) PLACE CODE:	185 - Indiana 013740 1 - 2 - 1 - 00040 - 0 01 - Crawfordsville 067 - PUTNAM 00000 - N/A	<ul> <li>(12) BASE HIGHWAY NETWORKS</li> <li>(13A) INVENTORY ROUTE:</li> <li>(13B) SUBROUTE NUMBER:</li> <li>(16) LATITUDE:</li> <li>(17) LONGITUDE:</li> <li>(98) BORDER</li> <li>A) STATE NAME:</li> </ul>	: 1 0000000001 01 39.62515 -86.67882
(6) FEATURES INTERSECTED:	SALLUST BRANCH	B) PERCENT	%
<ul><li>(7) FACILITY CARRIED:</li><li>(9) LOCATION:</li><li>(11) MILEPOINT:</li></ul>	US 40 00.50 W SR 75 0018.780	(99) BORDER BRIDGE STRUCT. NO:	
STRUCTURE TYPE AND M	IATERIAL		
<ul> <li>(43) STRUCTURE TYPE, MAIN:</li> <li>A) KIND OF MATERIAL/DESIGN:</li> <li>B) TYPE OF DESIGN/CONSTR:</li> <li>(44) STRUCTURE TYPE, APPROACH SPANS:</li> <li>A) KIND OF MATERIAL/DESIGN:</li> <li>B) TYPE OF DESIGN/CONSTR:</li> </ul>	1 - Concrete 02 - Stringer/Multi- beam or Girder 0 - Other 00 - Other	<ul> <li>(45) NUMBER OF SPANS IN MAIN UNIT:</li> <li>(46) NUMBER OF APPROACH SPANS:</li> <li>(107) DECK STRUCTURE TYPE:</li> <li>(108) WEARING SURFACE/PROT SYS: <ul> <li>A) WEARING SURFACE:</li> <li>B) DECK MEMBRANE:</li> <li>C) DECK PROTECTION:</li> </ul> </li> </ul>	N 001 0000 1 - Concrete Cast-in- Place 6 - Bituminous 0 - None 0 - None
AGE OF SERVICE			

#### AGE OF SERVICE

(27) YEAR BUILT:	1921	(28) LANES:		
(106) YEAR RECONSTRUCTED:	1938	A) ON BRIDGE:	04	
		B) UNDER BRIDGE:	00	
(42) TYPE OF SERVICE:		(29) AVERAGE DAILY TRAFFIC:	007004	1
A) ON BRIDGE:	1 - Highway	(30) YEAR OF AVERAGE DAILY	2004	
B) UNDER BRIDGE:	5 - Water way	TRAFFIC:		
		(109) AVERAGE DAILY TRUCK TRAFFIC:	10	%
		(19) BYPASS DETOUR LENGTH:	002	MI

Bridge Inspection Report

#### GEOMETRIC DATA

(48) LENGTH OF MAX SPAN:	0030.0 FT	(35) STRUCTURE FLARED:	0 - No flare
(49) STRUCTURE LENGTH:	00032.0 FT	(10) INV RTE, MIN VERT CLEARANCE:	99.99 FT
<ul> <li>(50) CURB/SIDEWALK WIDTHS:</li> <li>A) LEFT</li> <li>B) RIGHT:</li> <li>(51) BRDG RDWY WIDTH CURB- TO-CURB:</li> <li>(52) DECK WIDTH, OUT-TO-OUT:</li> <li>(32) APPROACH ROADWAY</li> <li>(33) BRIDGE MEDIAN:</li> <li>(34) SKEW:</li> </ul>		<ul> <li>(47) TOT HORIZ CLEARANCE:</li> <li>(53) VERT CLEAR OVER BR RDWY:</li> <li>(54) MIN VERTICAL</li> <li>UNDERCLEARANCE: <ul> <li>A) REFERENCE FEATURE:</li> <li>B) MIN VERT UNDERCLEAR:</li> <li>(55) LATERAL UNDERCLEARANCE</li> <li>RIGHT: <ul> <li>A) REFERENCE FEATURE:</li> <li>B) MIN LATERAL UNDERCLEAR</li> </ul> </li> <li>(56) MIN LATERAL UNDERCLEAR</li> <li>(56) MIN LATERAL UNDERCLEAR</li> </ul></li></ul>	N 0 FT N
INSPECTIONS (90) INSPECTION DATE: (92) CRITICAL FEATURE INSPECTION: A) FRACTURE CRITICAL REQUIRED/FREQUENCY: B) UNDERWATER INSPECTION REQUIRED/FREQUENCY: C) OTHER SPECIAL INSPECTION REQUIRED/FREQUENCY:	10/21/2019 N N N	<ul> <li>(91) DESIGNATED INSPECTION FREQUENCY:</li> <li>(93) CRITICAL FEATURE INSPECTION DATE:</li> <li>A) FRACTURE CRITICAL DATE:</li> <li>B) UNDERWATER INSP DATE:</li> <li>C) OTHER SPECIAL INSP DATE:</li> </ul>	12 MONTHS
<ul><li>(58) DECK:</li><li>(58.01) WEARING SURFACE:</li><li>(59) SUPERSTRUCTURE:</li></ul>	<ul> <li>5 - Fair Condition (minor section loss)</li> <li>5 - Fair Condition</li> <li>4 - Poor Condition (advanced deterioration)</li> </ul>	<ul><li>(60) SUBSTRUCTURE:</li><li>(61) CHANNEL/CHANNEL</li><li>PROTECTION:</li><li>(62) CULVERTS:</li></ul>	<ul><li>5 - Fair Condition (minor section loss)</li><li>7 - Bank protection needs minor repairs</li><li>N - Not Applicable</li></ul>

#### **CONDITION COMMENTS**

5 - Fair Condition (minor section loss)

#### (58) DECK: Comments:

The deck underside has hairline transverse cracks with white efflorescence and longitudinal cracks with white efflorescence between the beam lines. The deck on the north side of the joint is chipping off along the edge.

#### (58.01) WEARING SURFACE: 5 - Fair Condition

#### Comments:

The deck wearing surface is asphalt. The asphalt has many wide transverse and longitudinal cracks in all of the lanes some have been sealed. There are 2 small patches in the eastbound passing lane.

#### Page 6 of 14 Appendix I: Other Information

Asset Name: 040-67-01838 B Facility Carried: US 40

Bridge Inspection Report

#### (59) SUPERSTRUCTURE:

Comments:

4 - Poor Condition (advanced deterioration)

Beams 3, 11, and 12 have deep spalls and exposed rebar with section loss. Beams 1, 2, 7, 10, and 19 have cracking with white efflorescence. Beams 2 and 7 have shallow spalls. A critical find was reported 2 inspections ago due to the concrete beam deterioration and no load posting was required. There are no changes to the deterioration previously reported.

(60) SUBSTRUCTURE: 5 - Fair Condition (minor section loss)

#### Comments:

There are medium and wide vertical cracks with white efflorescence and/or rust stains. There are a few small spalls in both bent caps at the edges of the original structure and a larger spall at the east bent on the construction joint.

#### (61) CHANNEL/CHANNEL 7 - Bank protection needs minor repairs

#### PROTECTION

Comments:

Both bents are protected by rip rap throughout most of the span. Sediment has covered most of the west end riprap. The channel flows from the north to the south.

(62) CULVERTS: N - Not Applicable

Comments:

#### LOAD RATING AND POSTING

	/111(0					
(31) DESIGN LOAD:	4 - H 20	(66) INVENTORY RATING: 40				
(70) BRIDGE POSTING	5 - Equal to or above	(65) INVENTORY RATING METHOD: 1 - Load Factor (LF)				
	legal loads	(66B) INVENTORY RATING (H): 26				
(41) STRUCTURE	A - Open	(66C) TONS POSTED :				
OPEN/POSTED/CLOSED:		(66D) DATE POSTED/CLOSED:				
(64) OPERATING RATING:	67					
(63) OPERATING RATING METHOD:	1 - Load Factor (LF)					

APPRAISAL

SUFFICIENCY RATING:	69.5	(36) TRAFFIC SAFETY FEATURE:	
STATUS:	1	36A) BRIDGE RAILINGS:	0
(67) STRUCTURAL EVALUATION	I:4	36B) TRANSITIONS:	0
(68) DECK GEOMETRY:	9	36C) APPROACH GUARDRAIL:	1
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL:	Ν	36D) APPROACH GUARDRAIL ENDS:	1
<ul> <li>(71) WATERWAY ADEQUACY:</li> <li>Comments:</li> <li>Wing Elev. = 784.71'</li> <li>Max High Water Elev. = 779.0</li> <li>Average High Water Elev. = 7</li> </ul>	'	Above Flood Water Elevations	
(72) APPROACH ROADWAY ALIC Comments:	1	to present desirable criteria	
No speed reduction needed wh	en approaching the struct	are at the current speed limit.	

#### **Bridge Inspection Report**

#### (113) SCOUR CRITICAL BRIDGES:

7 - Countermeasures installed to correct scour problem

(115) YR OF FUTURE ADT:

#### Comments:

Sheet piling & rip rap was placed along the original structure before April 1997

$\mathbf{CI}$	ASSI	FICΔ	ΓΙΟΝ
	ADDI		

CLASSIFICATION					
(20) TOLL:	3 - On Free Road	(21) MAINT. RESPONSIBILITY:	01 - State Highway Agency		
(22) OWNER:	01 - State Highway Agency	(26) FUNCTIONAL CLASS OF INVENTORY RTE:	02 - Rural - Principal Arterial - Other		
(37) HISTORICAL SIGNIFICANO	CE: 2 - Eligible for National Register	(100) STRAHNET HIGHWAY:	Not a STRAHNET route		
(101) PARALLEL STRUCTURE:	N - No parallel structure				
(103) TEMPORARY STRUCTUR	E:	(102) DIRECTION OF TRAFFIC:	2-way traffic		
(105) FEDERAL LANDS	0-Not Applicable	(104) HIGHWAY SYSTEM OF INVENTORY ROUTE:	1 - Structure/Route is on NHS		
HIGHWAYS: (112) NBIS BRIDGE LENGTH:	Yes	(110) DESIGNATED NATIONAL NETWORK:	Inventory route not on network		
	105	NETWORK.	network		
NAVIGATION DATA					
(38) NAVIGATION CONTROL:	0 - No navigation	(39) NAVIGATION VERTICAL C	LEAR: 000.0 FT		
	control on waterway (bridge permit not required)	(116) MINIMUM NAVIGATION V CLEARANCE, VERT. LIFT BRID			
(111) PIER OR ABUTMENT PROTECTION:		(40) NAV HORIZONTAL CLEAR	ANCE: 0000.0 FT		
PROPOSED IMPROVEMENTS					
(75A) TYPE OF WORK:	35 - Rehabilitation - Deterioration	(95) ROADWAY IMPROVEMENT	Г COST:\$ 000000		
(75B) WORK DONE BY:	1 - Work to be done by	(96) TOTAL PROJECT COST:	\$ 000942		
	contract	(97) YR OF IMPROVEMENT COS	ST EST: 2006		
(76) LENGTH OF IMPROVEMEN	NT: 000053 FT	(114) FUTURE AVG DAILY TRA	FFIC: 011626		

(76) LENGTH OF IMPROVEMENT: 000053 FT (94) BRIDGE IMPROVEMENT \$ 000942 COST:

2030

#### **Miscellaneous Asset Data**

013740

Asset Management

Load Rating	<u>2:</u>	
	load or the structural condition of the primary load bers changed since the last inspection?	No - Load Rating Update Not Required
Extended Fre	equency:	Submittal Date:
Inspector:		
INDOT Revie	wer:	
This bridge has	been accepted into the Extended Frequency Program.	Approval Date:
Joints:	* Indicate location, type, and rating of lowest rated join	nt.
Mid-Section	J	8 - Very Good Condition
Comments: <u>Terminal Join</u> Comments:	nts: *Rating of lowest rated terminal joint.	 N
Concrete Slo	<b>pewall:</b> *Rating of lowest rated slopewall.	N
Bearings: ' N - No Bearin Comments:	f Indicate type, and rating of lowest rated bearing. g(s)	

<u>Approach Slabs:</u> \* Indicate if present & condition rating.

N - No Approach Slabs Comments: Paint: \* Indicate if paint present , year painted & condition rating.

Not Rated

Comments:

Scour Analysis:5Scour Critical:Scour POA?NBI 113 Scour Comment:NoSheet piling & rip rap was placed along the original structure before April 1997

Endangered Species: * If yes, add one photo to the dropdown field			
Bats: seen or heard under structure? * N			
Birds/swallows/nests seen? Empty nests present? *			

BRIDGE Culvert Geometry: Barrel Length: Height: Width:

- Methods to be implemented to ensure notification of an emergency and the proper responses can be done to reach all populations, including those with special needs.
- The location and amenities at various shelters (both short- and long-term). Consideration is required to ensure that shelters, depending on the duration of their utilization, have the amenities required for all users. These amenities may include accessible restrooms, accessible showers or bathing facilities, facilities that can support service animals, refrigeration for medications, etc.
- Specific consideration must be given to providing necessary medical equipment at shelters, depending on the duration of its use. In particular, medical equipment such as dialysis machines, etc. and availability of prescription drugs are essential for a large percentage of the population.
- In the event that roads become unusable by motor vehicles (i.e., floods) a contingency plan for rescue of persons with special needs should be considered (boats, helicopter, etc.).
- Methods that the County will utilize throughout an event to provide information in formats that are accessible to everyone.
- All County staff should be made aware of the location of the posted emergency maps within all County facilities. These maps should also be conspicuously posted for the public within each facility.
- Emergency evacuation plans need to be developed for all County facilities, but especially the Courthouse. Include within evacuation plans for each building guidelines for the evacuation of persons with disabilities for various emergency situations. Each Department should use these guidelines to create their own emergency evacuation plans, which should:
  - Address what to do when an alarm is triggered;
  - Establish meeting places for assistance and evacuation at staircases;
  - Establish floor captains who will ensure that each floor is vacated prior to leaving themselves and ensuring that persons that need assistance are removed to safety.

#### 3.17 Curb Ramps and Sidewalks

The Highway Department is responsible for approximately County roads, bridges, small structures (culverts with a span greater than 4 feet but less than 20 feet), and many more smaller roadway culverts. Also within the County, many portions of the ROW fall under the control of INDOT or incorporated cities and towns.

Title II of the ADA (<u>28 CFR Section 35.150 (d</u>)) requires that state and local governmental entities develop a Transition Plan specific to curb ramps or other sloped areas at locations where walkways cross curbs. A curb ramp (or sometimes referred to as a curb cut) is a short sidewalk ramp cutting through a curb or built up to it.

Curb ramps are a relatively small but important part of making sidewalks, crossings at intersections, and other pedestrian routes accessible to people with disabilities. The ADA requires state and local governments to make pedestrian crossings accessible to people with disabilities by providing curb ramps (<u>28 CFR 35.150</u> (d)(2); <u>35.151(a)</u>, (b), and (i)). There is no requirement under Title II of the ADA or proposed PROWAG that sidewalks be made accessible or be provided where they are not currently provided. The law stipulates that the public entity provide curb ramps, or other sloped areas where pedestrian walks cross curbs, that are accessible. New construction or alterations would require that non-compliant sidewalks be improved to the extent possible. The County is quite rural and as such has no facilities within the ROW.

#### Self-Evaluation Findings:

- The County has very no pedestrian facilities located within their ROW.
- Design of roads and bridges is the responsibility of the Highway Department, subdivision developers, or consultants that they hire.

#### Recommended Action:

- The County should develop a curb ramp reconstruction program to correct noted deficiencies and ensure accessibility.
- The County should continue to prepare design plans and construction documents to meet or exceed state and Federal accessibility requirements.
- Provide advance notice of all street closures on informational materials and the County website.
- The County should continue to update its design standards to meet any additions or changes to ADA standards.

#### 3.18 Employment

Title I of the ADA requires public entities not to discriminate against persons with disabilities in all parts of the recruitment and employment process (28 CFR 35.140 and 29 CFR 1630.4).

#### Self-Evaluation Findings:

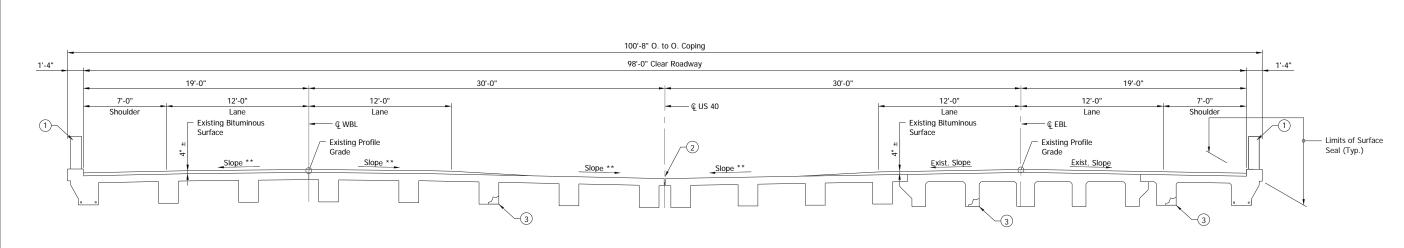
- The Auditor's Department performs Human Resources functions for the County and provides services to job applicants, County employees, and retirees. It is not clear if the Human Resources and Payroll Deputy in the Auditor's Department has any formal training on Title I issues.
- The Employee Policy Manual for Putnam County (no date included on the document but there is a reference within of July 1, 2012) includes the following statement on page 6 in the sections entitled "You're Part of Our Team": No one will be denied opportunities or benefits on the basis of age, sex, sexual preference, color, race, creed, national origin, religious persuasion, marital status, political belief or disability that does not prohibit performance of essential job functions; nor will anyone receive special treatment for those reasons.
- The Employee Policy Manual includes the following text (<u>relevant text underlined and bolded</u>) on page 44 in the section entitled "Equal Employment": Employment opportunities with the County shall be open and available to all citizens. Nothing in the employment procedure shall preclude consideration of an application because of the prospective employee's race, color, age, sex, religion, national origin, <u>disability</u> or political affiliation.

It is the policy and practice of the County to <u>comply fully with the Americans with Disabilities Act and</u> <u>Section 504 of the Rehabilitation Act of 1973</u> ensuring equal opportunity in employment for all qualified persons with disabilities. The County is committed to ensuring non-discrimination in all terms, conditions and privileges of employment. All employment practices and activities, whether provided or conducted by the County or another on its behalf, shall be conducted on a non-discriminatory basis.

Recruiting, advertising and job application procedures have been reviewed and provide persons with disabilities meaningful employment opportunities. <u>Upon request, assistance in completing the application is available. Pre-employment inquires are only made reqarding and applicant's ability to perform the essential functions of the position, not as to any disabling condition.</u>

<u>Reasonable accommodation is available to all employees and applicants requiring accommodation to</u> <u>perform the essential functions of their position.</u> Work sites shall be accessible. All employment <u>decisions are based on the ability of the applicant or employee to perform the essential functions of</u> <u>their position</u>.

Employees are expected to perform the essential functions of the assigned position. Where a disability prevents an employee form (sic) performing an essential job function, the employee and Department Head/Supervisor shall engage in an interactive dialogue concerning possible reasonable accommodations that will enable the employee to perform the essential functions of the position.





#### **GENERAL NOTES:**

Plans for the existing structure are on file in the Central Office of the Indiana Department of Transportation as bridge files: 040-67-01838, 040-67-01838A and 040-67-01838B.

Stationing, elevations and dimensions shown in these plans are based on the existing plans and are for reference only.

Reinforcing bar cover shall be 2 1/2" min. in top and 1" min. in bottom of bridge deck and 2" in all other locations unless noted otherwise.

Removal of unsound concrete shall be as directed by the Engineer. It is the intent of these plans that all unsound concrete be removed.

Epoxy Resin Adhesive shall be used where new concrete abuts existing concrete.

Surface Seal all exposed surfaces of the new concrete bridge railing, bridge railing transitions and the new approach slabs.

All pavement markings disturbed during construction shall be replaced in kind.

Where new work is to be fitted to old work, the contractor shall check all elevations, dimensions and conditions in the field and report any errors or discrepancies to the engineer and assume responsibility for the fit of the new part to old.

#### DESIGN DATA:

DESIGN STRENGTHS: Class "C" Concrete f'c = 4,000 PSI Reinforcing Bars fy = 60,000 psi

#### LIVE LOADS:

Existing bridge designed for H20 with impact, with distribution of loads in accordance with the 1935 AASHTO Specifications, and all subsequent Interim specifications. (Slab designed for Single Live Load)

#### DEAD LOADS:

Designed for actual dead load plus 15 psf for future wearing surface. Slab Designed with 1/2" wearing surface.

#### EXISTING HYDRAULIC INFO:

O100 Elevation (Str.)	101
Q100 Elevation (Str.)	= 194 sq. ft.
Existing Road Overflow Waterway Area	= 0 sq. ft.
Existing Low Structure Elevation	= 791.98 ft.
Existing Backwater	= 0.68 ft.
Existing Headwater Elevation	= 778.90 ft.

	RECOMMENDED FOR APPROVAL		INDL DEPARTMENT OF T
	DESIGNED: RMM	drawn: DRD	GENERAL PL
	CHECKED: REB	CHECKED: <u>REB</u>	GENERAL PL

#### LEGEND

- 2 Clean existing joint at the centerline of structure, and place new Pre-Compressed Foam Joint. (Est. 33 lft.)

and surface seal (Est. 562 sft.) for limits shown on Typical Section.

- 3 Patch existing reinforced concrete beams, abutments and wingwalls and Fiber wrap. (Est. 1,057 Sft. patching)
- 4 Remove and reset existing Guardrail as required to install haul road for work under existing structure. (Est. 65 Lft.)

1 Patch existing concrete bridge railing (Est. 48 sft.) and portions of concrete curb,

5 Place 234 Tons Class I Riprap on 264 Sys. Geotextiles for Riprap type 1A for scour protection.

#### REINFORCED CONCRETE GIRDER BRIDGE 1 - 30'-0" CLEAR SPAN, SKEW: SQUARE CLEAR ROADWAY: 98'-0" US 40 OVER SALLUST BRANCH CREEK PUTNAM COUNTY

	HORIZONTAL SCALE			BRIDGE FILE		
IANA	N/A			040-67-01838C		
TRANSPORTATION	VERTICAL SCALE			DESIGNATION		
	N/A		1601094			
	DRAWING		SHEET		т	
I AN DETAILS	C2	of	C2	8	of	8
LAN DETAILS	CONTRACT		PROJECT			
	B-42911			1601094		