

Appendix D

Section 106 of the National Historic Preservation Act

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

Excerpts

SR 163 over Brouilletts Creek Vermillion County, Indiana DES. NO.: 1701589

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

The Area of Potential Effects (APE) for this project was drawn to include the land that might be physically and visually impacted by the project. Visibility is low on the north, south, and east sides of the bridge due to dense tree lines and the curve of the roadway as it approaches the bridge from the east. The APE expands further on the west side of the bridge due to clearer views across agricultural fields. The archaeological APE was defined by a survey area encompassing approximately 3.11 acres that included all of the existing and proposed right-of-way required for the undertaking. A map of the APE can be found in Appendix A.

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

The APE contains no properties listed in the National Register of Historic Places (National Register). The APE contains one property eligible for National Register listing: INDOT Bridge No. 163-83-01393A (NBI No. 28420), SR 163 over Brouilletts Creek. It is eligible under Criterion C as a good example of a Parker through truss designed by the Indiana State Highway Commission (ISHC) and built by the Vincennes Bridge Company. The bridge was also determined to be Select per the parameters of the *Indiana Historic Bridge Inventory*.

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 Bridge No. 163-83-01393A has been classified as a "Select" bridge per the INDOT Historic Bridge Inventory and, thus, the procedures outlined in Stipulation III.A. of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the bridge. Additionally, because rehabilitation of the bridge is the preferred alternative, the standard treatment approach, described in Attachment B of the Historic Bridges PA (Standard Treatment Approach for Historic Bridges) will be followed.

Therefore, the finding for this project only applies to other resources located within the APE and not Bridge No. 163-83-01393A. This document will satisfy the Section 106 responsibilities for other resources located in the project APE. Regarding other resources located in the project area, the INDOT, on behalf of the FHWA, has determined a "no historic properties affected" finding is appropriate because no other properties listed in or eligible for listing in the NRHP are present within the area of potential effects.

INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect.

DES. NO. 1701589, Page 1 of 2

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	
03/28/2022	
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)

SR 163 over Brouilletts Creek Vermillion County, Indiana DES. NO.: 1701589

1. DESCRIPTION OF THE UNDERTAKING

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes a bridge project on State Route (SR) 163 over Brouilletts Creek in Vermillion County, Indiana. The subject of this project is INDOT Bridge No. 163-83-01393A (NBI No. 28420). The project is located on SR 163 approximately 1.18 miles east of SR 71. The closest community is Blanford, Indiana, approximately one mile west of the study area. SR 163 is oriented east to west, and Brouilletts Creek flows northwest to southeast through the area.

The need for the project is due to the deteriorating condition and non-standard lane and shoulder widths of the existing structure. This 175- foot single-span steel truss bridge on vertical abutments was originally constructed from 1932-1933 and rehabilitated in 1979. Recent inspections have found the bridge substructure to be in poor condition (INDOT SI&A rating 4 out of 9) with cracking wingwalls and advanced spalling. The superstructure was noted to be in fair condition (INDOT SI&A rating 5 out of 9) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank were noted.

The bridge was originally designed with an H20 structural capacity (20-ton truck). Based on the INDOT design standards, as a 2-lane rural collector on the state highway system, the bridge should accommodate an HS15 design vehicle (27 tons).

The existing bridge does not meet current design standards for lane width or shoulder width. The existing bridge provides two 11-foot lanes with 1-foot shoulders, for a total clear roadway width of 24 feet. INDOT design criteria for 2-lane rural collector roadways that are on the state highway system indicate a minimum 2-foot shoulder is required and based on the approach roadway width (24 feet), the minimum clear roadway width required for two lanes of traffic is 28 feet. These geometric deficiencies have led to numerous collisions, resulting in damage to the bridge's railing and end post.

The purpose of the project is to:

- Extend the life of the structure by a minimum of 30 years,
- Provide a minimum HS-15 load rating, and
- Improve the clear roadway width of the bridge to improve safety and protect the bridge.

The preferred alternative is described in more detail in the Historic Bridge Alternatives Analysis (HBAA) document and is summarized as follows. The bridge would be rehabilitated to address the structural condition, but would the roadway would be reduced to a single lane, using a signal at either end to maintain bi-directional travel. The relatively low-volume of existing traffic (1,803 vehicles per day [vpd]) and forecasted traffic (2,640 vpd in 2032 as stated in the 2020 inspection report) provides the opportunity to adequately serve future demand via a single travel lane. A signal and stop bar would be installed at each end of the bridge, approximately 100 feet from each end of the bridge.

Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic properties. The federal involvement in the project is the funding received from the FHWA.

Per the Section 106 procedures, a project's 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. The area of potential effects is influenced by the scale and nature of an undertaking..." (36 CFR 800.9(a)).

The APE for this project was drawn to include the land that might be physically and visually impacted by the project, which is depicted in the maps in Appendix A. This section of SR 163 has two 12-foot travel lanes, one in each direction, with 2-foot shoulders. The project is located along a rural section of SR 163. Land adjacent to the bridge consists of maintained highway right-of-way, trees, row crop fields, a few residences, and a cemetery. The architectural historian started with an APE approximately 0.25 mile in all directions from the bridge. After the site visit, the APE was reduced down on the north, south, and east sides of the bridge. Visibility is low in these directions due to dense tree lines and the curve of the roadway as it approaches the bridge from the east. The APE was expanded out on the west due to clearer views across agricultural fields. Photos of the APE can be found in Appendix B. The archaeological APE was defined by a survey area encompassing approximately 3.11 acres that included all of the existing and proposed right-of-way required for the undertaking.

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

A Section 106 early coordination letter (ECL) was distributed on December 19, 2019 inviting the following consulting parties to participate in consultation for this project (the consulting party list can also be found in Appendix G):

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State Historic Preservation Officer (SHPO)

Vermillion County Commissioners

Dail Ellen Henry, Vermillion County Historian

Vermillion County Highway Department

Vermillion County Historical Society

Indiana Landmarks, Western Regional Office

James Cooper, Bridge historian

Paul Brandenburg, Historic Spans Task Force

Historic Hoosier Bridges

Historicbridges.org

Historic Bridge Foundation

West Central Indiana Economic Development District, Inc.

Eastern Shawnee Tribe of Oklahoma

Miami Tribe of Oklahoma

Peoria Tribe of Indians of Oklahoma

Pokagon Band of Potawatomi Indians

Shawnee Tribe

Delaware Tribe of Indians, Oklahoma

Forest County Potawatomi Community

The SHPO responded via letter on January 6, 2020 indicating they were not aware of any other consulting parties to invite and asking to be provided with a list of those who accepted the invitation.

The Miami Tribe of Oklahoma responded in a letter on January 7, 2020 stating in part, "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."

The Western Regional Office of Indiana Landmarks responded via email on January 20, 2020 indicating the National Register status of the bridge should be reevaluated, and recommending rehabilitation in place for continued vehicular use.

No other responses to the ECL were received. Copies of all correspondence mentioned can be found in Appendix H.

In an effort to identify historic properties within the project's APE, an INDOT architectural historian consulted the National Register of Historic Places (National Register) and the Indiana State Register of Historic Sites and Structures (State Register) lists for Vermillion County. No listed properties are located within the APE. The Indiana Historic Sites and Structures Inventory (IHSSI) information for Vermillion County was also checked. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and through the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). Two IHSSI properties are recorded within the project's APE:

165-120-25011, State Road 163 Bridge, c.1935, "contributing" 165-120-25012, Spangler Cemetery, 1811-present, "contributing"

Additionally, Bridge No. 163-83-01393A is found in the historic bridge portion of SHAARD as HB-1708, and Spangler Cemetery is found in the Cemetery Registry in SHAARD as CR-83-10.

The 2009 INDOT-sponsored *Indiana Historic Bridge Inventory (Inventory)* was consulted. Bridge No. 163-83-01393A was determined not to be National Register-eligible in the *Inventory* with the following justification:

This bridge does not appear to possess significance under the National Register evaluation system. No evidence was found during data collection activities to indicate that this bridge is an important example of bridge design, engineering, or construction or that it possesses a significant association with important historical events or trends. As such, it is recommended not eligible under Criteria A and C.

The bridge was not included in the 1987 James Cooper book, *Iron Monuments to Distant Posterity*, due to its construction date being outside the time period examined in the book (1870-1930).

The INDOT architectural historian prepared a historic properties short report (HPSR) to consider the potential National Register eligibility of every above-ground resource within the APE. The text of the HPR included a National Register-eligibility evaluation of Bridge No. 163-83-01393A in order to see if the evaluation from the *Inventory* holds true with the passage of time. The HPSR recommended Bridge No. 163-83-01393A eligible for listing in the National Register under Criterion C for its engineering significance, as a rare example of its type within its region and as an example of a structure built by a significant Indiana firm, the Vincennes Bridge Company. Excerpts from the HPSR can be found in Appendix C. The full HPSR, and full copies of other

documents mentioned herein, can be found in INDOT's public Section 106 portal, IN SCOPE at http://erms.indot.in.gov/Section106Documents.

An email on April 2, 2020 notified consulting parties that a historic property short report (HPSR; Kennedy, March 23, 2020) was available for review and comment. The SHPO responded in a letter on April 27, 2020 agreeing with the conclusions of the HPSR that Bridge No. 163-83-01393A is eligible for inclusion in the National Register under Criterion C. No other responses were received on the HPSR.

On May 26, 2020, INDOT distributed a Historic Bridge Select/Non-Select Analysis to consulting parties that recommended the bridge as Non-Select. The transmittal letter was sent to all previously invited consulting parties to participate in the project, whether or not they responded to the December 19, 2019 invitation letter, in order to request a dual review of the project per 312 IAC 20-4-11.5. The report concluded that based on Bridge No. 163-83-01393A being assigned a "Low" Eligibility Score in the HPSR, and a "Medium" Condition score (37) based on the condition analysis in the Select/Non-Select report, the bridge would be placed in Box 8 of the Selection Matrix from the Inventory (Volume 3). As defined in the *Inventory*, bridges in Boxes 6, 7, 8, and 9 are Non-Select bridges due to their low priority through a combination of Eligibility and Condition Scores. Excerpts from this document can be found in Appendix E.

The SHPO responded in a letter on June 22, 2020 disagreeing with the conclusions of the Historic Bridge Select/Non-Select Analysis and revisiting the conclusions of the HPSR and the amount of points awarded the bridge for National Register eligibility. The letter stated, in part:

Regarding the point system, we are curious about the two-point deduction reasoning. While the steel pan does add a non-historic element to the bridge as it was left in place, rather than the original deck been poured into a wood form that would have been later removed, is the underside of a concrete deck that integral to the overall integrity of the bridge warranting a two point deduction in this evaluation? We are curious if there are other "Select" truss bridges within the state that have a similar pan under the concrete deck. Our office has seen other bridge rehabilitation projects where components are added to reinforce the structural members or stabilize the truss without compromising its overall integrity. Without that two point deduction, the bridge's eligibility score would be five (5) points, which would assign it as a "Medium" eligibility score and thus place the bridge into Box 5 of the Selection Matrix, which would make it a "Select" Bridge.

The SHPO also sent an email to previously invited consulting parties asking them if they had any comments on the project. As a result, Nathan Holth, a representative of historicbridges.org responded via email on July 29, 2020 agreeing that two points should not be deducted in the analysis for the bridge for the stay-in-place deck pans, and indicating a desire to be consulting party on the project.

Paul Brandenburg of the Historic Spans Task Force responded via email on August 5, 2020 indicating further discussion should occur regarding the bridge deck integrity issue, and requesting to become a consulting party for the project.

No other responses to the ECL were received on the Select/Non-Select Analysis document.

Based on the input received, INDOT reexamined the deduction of two (2) points for the deck replacement with metal stay-in-place forms on Bridge 163-83-01393A through an addendum to the HPSR. The HPSR addendum (Kennedy, 12-31- 2020) assigned a total of five (5) points to

Bridge No. 163-83-01393A as its Eligibility Score, which is "Medium." Additionally, an updated Historic Bridge Select/Non-Select Analysis (dated January 7, 2021) was prepared. Based on the updated Eligibility Score, the bridge now has a "Medium" Eligibility and "Medium" Condition score, placing the bridge in Box 5 of the Historic Bridge Inventory Selection Matrix. As defined in *Indiana Historic Bridge Inventory, Volume 3*, bridges in Boxes 4 and 5 that have a "Medium" Eligibility Score and "High" or "Medium" Condition Score are programmatically determined Select unless they were constructed after 1944. The HPSR addendum and updated Historic Bridge Select/Non-Select Analysis were distributed to consulting parties on January 8, 2021. The only comments received were from the SHPO, who responded via letter dated January 21, 2021. The SHPO concurred with the conclusions of the revised reports and the ultimate determination that the bridge is Select. Excerpts from these reports can be found in Appendices C and E.

To aid in the examination of alternatives to be included in the Historic Bridge Alternatives Analysis (HBAA) document that was under development, on March 22, 2021, INDOT invited consulting parties to a virtual meeting on April 7, 2021. A summary of the meeting was distributed to consulting parties on April 13, 2021, and can be found in Appendix I. On April 22, 2021, SHPO sent a letter with the following summary of their comments on the various alternatives presented in the meeting:

Regarding Alternative 1 (rehabilitate truss for continued two-way traffic), we recognize that this may not achieve the project's purpose and need as the narrow width of the travel lanes and shoulders would still present an issue for traffic safety and protection of the historic bridge. Alternative 2 on the other hand, allows one-way traffic on the bridge that is stop-controlled on either end. As long as traffic patterns allow this, we see this alternative as a workable solution to preserve the bridge and keep it in use.

Alternative 3 would require widening the truss which would alter the aesthetics and materials of the bridge to accommodate its change in size. This alternative, while extending the life of the bridge to ~30 years, it is the same as Alternatives 1 and 2, which seems to be more work to achieve the same result, at the risk of altering the bridge and its character-defining features that warrant its eligibility for inclusion in the National Register of Historic Places.

We agree that Alternative 4 (superstructure replacement with a widened truss used as a decorative feature) and Alternative 6 (rehab truss for pedestrian use) will be eliminated from consideration after the discussion during the consulting parties meeting.

Alternative 5 would rehab the bridge similar to Alternative 2, but also construct a new bridge to handle one-way traffic in conjunction with the historic bridge. We recognize that the major difference between Alternatives 2 and 5 will come down to the cost of the new bridge. However, the new bridge would carry a longer design life and be built to accommodate two-way traffic, should the historic bridge be taken out of service. This seems to be an alternative that accomplishes the project's goals long-term.

The HBAA document was distributed to consulting parties on November 1, 2021. Excerpts from the HBAA can be found in Appendix F. SHPO responded to the HBAA in a letter dated November 22, 2021 commenting on the alternatives presented as follows:

Based on the results of the HBAA that was previously discussed at the April 7, 2021, consulting parties meeting, we agree that Alternative 3: Rehabilitation for Continued Vehicular Use – One Way Operation & Alternative 4: Rehabilitation for Continued

Vehicular Use – One Way Pair are the only alternatives that are both feasible and prudent as Alternative 1: No Build does not address the project's purpose and need, and Alternative 2: Rehabilitation for Continued Vehicle Use – Two Way Operation does not address geometric needs of the bridge rehabilitation. Both Alternatives 3 & 4 would transform the historic bridge to one-way traffic, but we recognize why Alternative 3 is preferable as it does not require the construction of an adjacent new bridge causing greater impacts and requiring a maintenance commitment. However, the feasibility of Alternative 4 may also be prudent at a future date should the structural capacity and traffic numbers warrant a need to satisfy future demand at this location.

Furthermore, while the scope of work presented in Alternatives 3 & 4 includes the replacement of numerous steel materials, we note within the HBAA that the replacement with modern steel will replicate "the dimensions of the existing members, maintaining the aesthetic and engineering integrity of replaced portions of the truss." Additionally, both Alternatives 3 & 4 would increase the lifespan of the historic bridge by approximately 30 years.

The SHPO also requested photo documentation of the bridge since Alternative 3 is the preferred alternative. The SHPO requested copies of the documentation be provided to their office and a local not-for-profit organization that is willing to accept it. INDOT will list this documentation as a commitment in the environmental document and will complete this documentation before construction activities commence.

No other comments were received on the HBAA document.

On November 29, 2021, following the process outlined in Stipulation II.C. of the Historic Bridge PA, INDOT sent notification of the request to re-classify the bridge to the Task Group (through email) and consulting parties that would normally be invited to participate in a FHWA-sponsored project for the bridge (through email & US mail notification and as identified per the INDOT Cultural Resources Manual procedures). Comments regarding the reclassification of the bridge were requested by the close of business on December 31, 2021. A public notice in a local newspaper, *The Terre Haute Tribune Star*, ran on December 3, 2021. A public notice in a statewide newspaper, *The Indianapolis Star*, also ran on December 3, 2021. The notices requested comments by the close of business on January 3, 2022.

Comments on the reclassification request were received from two entities as summarized below: Tony Dillon, Historic Hoosier Bridges – via an email dated December 1, 2021 Eastern Shawnee Tribe – letter dated December 30, 2021

Mr. Dillon thanked INDOT for the work to reclassify the bridge given that "the remaining pool of state highway design Parker trusses are especially vulnerable."

The Tribal Historic Preservation Officer (THPO) for the Eastern Shawnee Tribe indicated that the proposed project would have no adverse effect or endangerment to known sites of interest to the tribe.

It should be noted that the reclassification request was not formally reviewed by the Indiana SHPO staff due to previous comments indicating support for reclassifying this bridge to a National Register-eligible Select Bridge, specifically, in a letter dated January 21, 2021.

The reclassification memo was signed by INDOT on January 27, 2022; by the SHPO on February 21, 2022, and by the FHWA on February 24, 2022, finalizing Bridge 163-83-01393A's reclassification as a Select Bridge. A copy of the memo can be found in Appendix J.

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. As a result of those efforts, no sites were recommended as eligible for listing in the National Register and no further work was recommended. The resultant report (Crider and Hillard, 12/14/2021) was distributed to the SHPO and Tribes on January 22, 2022. See Appendix D for excerpts from the archaeological report.

The Eastern Shawnee Tribe of Oklahoma responded on January 27, 2022 indicating the proposed project would have no adverse effect or endangerment to known sites of interest to the tribe. The SHPO responded on February 21, 2022 agreeing with the conclusions of the archaeological report. The SHPO also noted that portions of the proposed project area appear to lie immediately adjacent to Spangler Cemetery and if ground disturbing activities will be within 100 feet of this cemetery, a cemetery development plan will be required. The Eastern Shawnee Tribe of Oklahoma responded again on March 3, 2022, echoing previous comments expressed about the project.

See Appendix H for a copy of all of the correspondence mentioned above.

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 Bridge No. 163-83-01393A has been classified as a "Select" bridge per the INDOT Historic Bridge Inventory and, thus, the procedures outlined in Stipulation III.A. of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the bridge. Additionally, because rehabilitation of the bridge is the preferred alternative, the standard treatment approach, described in Attachment B of the Historic Bridges PA (Standard Treatment Approach for Historic Bridges) will be followed.

Per Attachment B of the Historic Bridges PA, plans will be submitted to the SHPO for review at approximately 30% complete, 60% complete, and final plans. INDOT will list these plan reviews as a commitment in the environmental document.

Pursuant to Section 11.5(f) of the rule governing dual review, at the conclusion of the SHPO's review of the final plans, it is anticipated that the Division of Historic Preservation and Archaeology's Division Director would issue a letter of clearance exempting this project from obtaining a Certificate of Approval under IC 14-21-1-18. Obtaining a letter of clearance will be listed as a commitment in the environmental document.

A public notice, requesting any comments on the project, regarding the APE and "No Historic Properties Affected" finding, will be issued for this project in a local newspaper. This document will be revised, if necessary, after the public notice to reflect any substantive comments received. Per Stipulation III.A. of the Historic Bridges PA, INDOT will hold a public hearing for the project prior to completion of National Environmental Policy Act (NEPA) studies. All originally invited consulting parties will be provided notice of the public hearing.

3. BASIS FOR FINDING

The finding for this project only applies to other resources located within the APE and not Bridge No. 163-83-01393A. This document will satisfy the Section 106 responsibilities for other resources located in the project APE. Regarding other resources located in the project area, the INDOT, on behalf of the FHWA, has determined a "no historic properties affected" finding is appropriate because no other properties listed in or eligible for listing in the NRHP are present within the area of potential effects.

APPENDIX

- A. Maps Intentionally omitted refer to Appendix B.
- B. Photos
- C. Summary/Recommendations of Historic Property Reports
- D. Summary/Recommendations of Archaeology Report
- E. Summary/Recommendations of Select/Non-Select Analysis Reports

Intentionally omitted - refer to Appendix I.

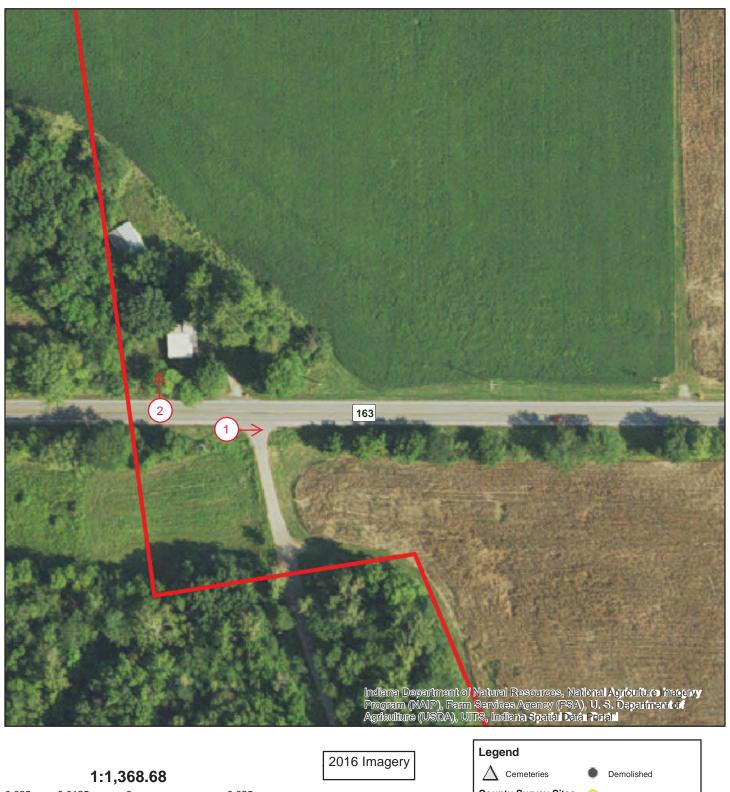
- F. Summary/Recommendations of HBAA Intentionally omitted to avoid duplication.
- **G.** Appendix List of Consulting Parties
- H. Correspondence
- I. Consulting Party Meeting Summary
- J. Reclassification Memo

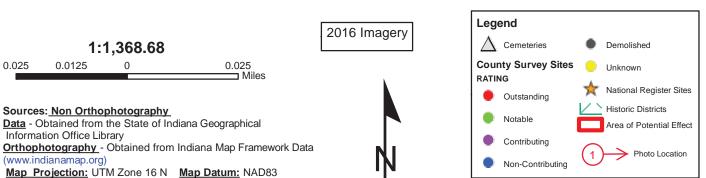
APPENDIX A. Maps

Intentionally omitted - refer to Appendix B.

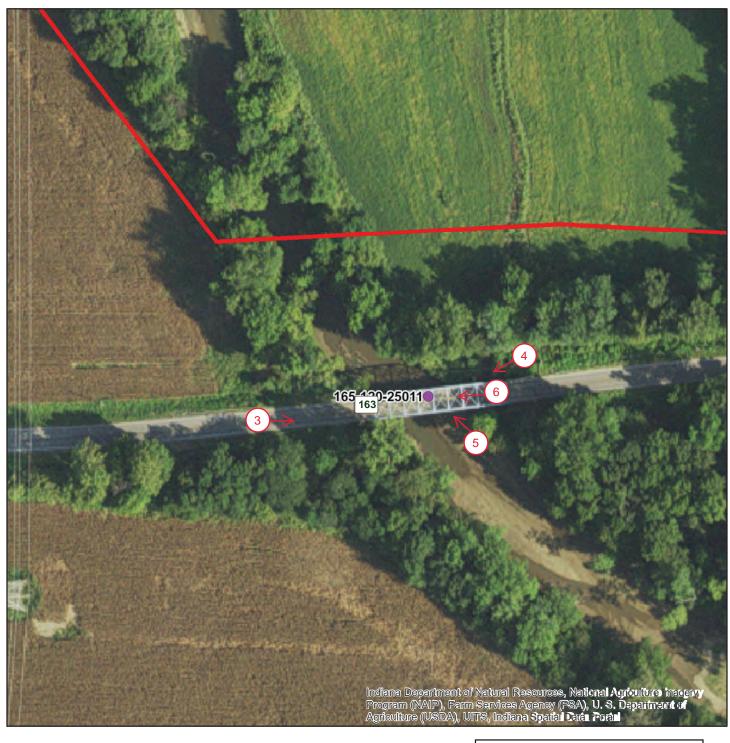
APPENDIX B. Photos

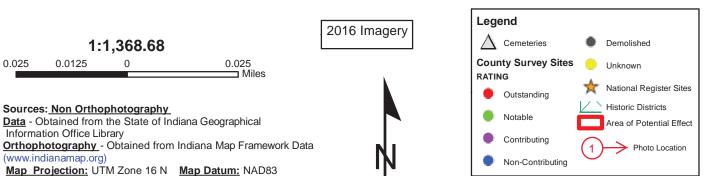
Des. No. 1701589
SR 163 over Brouilletts Creek
1.18 miles east of SR 71
Vermillion County
Photo Key 1



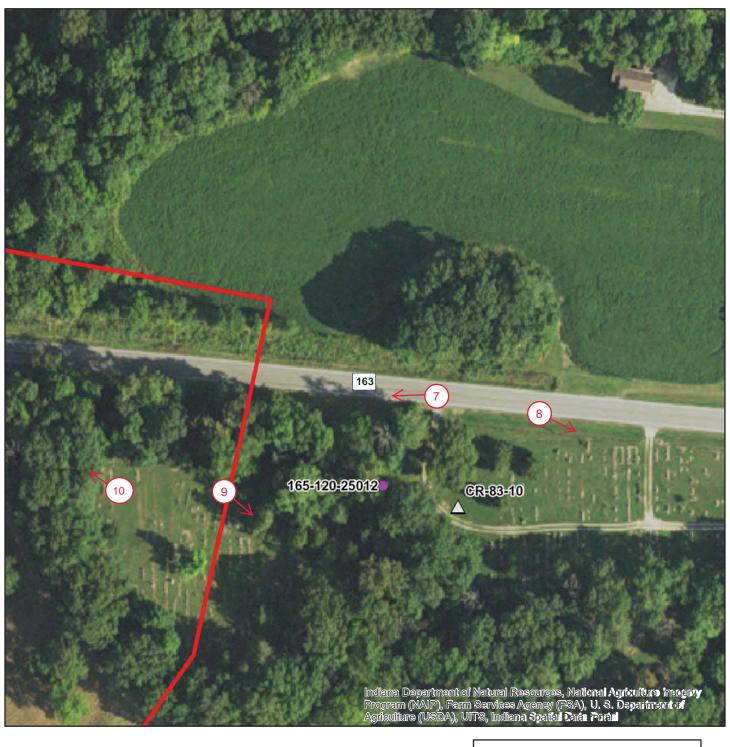


Des. No. 1701589
SR 163 over Brouilletts Creek
1.18 miles east of SR 71
Vermillion County
Photo Key 2





Des. No. 1701589
SR 163 over Brouilletts Creek
1.18 miles east of SR 71
Vermillion County
Photo Key 3



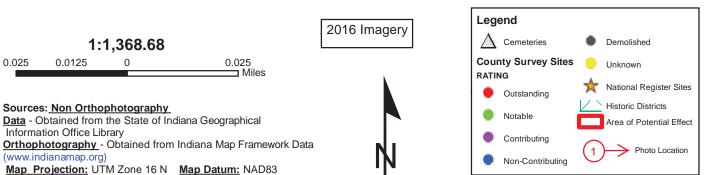




Photo 1 - Looking east toward bridge from S. Gorton Rd.



Photo 2 – Looking north toward remaining outbuilding at 225 E SR 163



Photo 3 – Looking east at bridge



Photo 4 – Looking southwest at bridge



Photo 5 – Looking northwest at bridge



Photo 6 – Looking west through bridge



Photo 7 – Looking west toward bridge from Spangler Cemetery entrance



Photo 8 – Looking southeast at Spangler Cemetery



Photo 9 – Looking southeast within Spangler Cemetery



Photo 10 – Looking northwest toward bridge from within Spangler Cemetery

APPENDIX C. Summary/Recommendations of Historic Property Reports



INDIANA DEPARTMENT OF TRANSPORTATION

HISTORIC PROPERTY SHORT REPORT

Bridge Project
Bridge No. 163-83-01393A, NBI No. 28420
SR 163 over Brouilletts Creek, 1.18 miles east of SR 71
Des. No. 1701589
Clinton Township, Vermillion County, Indiana



Prepared by Mary E. Kennedy Indiana Department of Transportation March 23, 2020

Executive Summary

This report documents the identification and evaluation efforts for properties included in the Area of Potential Effects (APE) for the SR 163 over Brouilletts Creek Bridge Project in Vermillion County, Indiana. Above-ground resources located within the project APE were identified and evaluated in accordance with Section 106, National Historic Preservation Act (NHPA) of 1966, as amended, and the regulations implementing Section 106 (36 CFR Part 800).

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

The APE contains no properties listed in the National Register. The APE contains one property recommended eligible for listing in the National Register: the SR 163 over Brouilletts Creek Bridge (No. 163-83-01393A).



INDIANA DEPARTMENT OF TRANSPORTATION

HISTORIC PROPERTY SHORT REPORT ADDENDUM

Bridge Project
Bridge No. 163-83-01393A, NBI No. 28420
SR 163 over Brouilletts Creek, 1.18 miles east of SR 71
Des. No. 1701589
Clinton Township, Vermillion County, Indiana



Prepared by Mary E. Kennedy Indiana Department of Transportation December 31, 2020

Executive Summary

This report serves as an addendum to a historic properties short report (HPSR) prepared March 23, 2020 that documented the identification and evaluation efforts for properties included in the Area of Potential Effects (APE) for the SR 163 over Brouilletts Creek Bridge Project in Vermillion County, Indiana. Above-ground resources located within the project APE were identified and evaluated in accordance with Section 106, National Historic Preservation Act (NHPA) of 1966, as amended, and the regulations implementing Section 106 (36 CFR Part 800).

The HPSR concluded that the APE contains no properties listed in the National Register, but that one property located within the APE is recommended eligible for listing in the National Register: the SR 163 over Brouilletts Creek Bridge (Bridge No. 163-83-01393A). In order to assess the National Register eligibility of Bridge No. 163-83-01393A, the "System for Applying the National Register Criteria for Evaluation" (System) from the *Historic Bridge Inventory (Inventory)* was utilized (found in *Volume 1: National Register Eligibility Results*, Appendix A). The System assigns points to calculate an Eligibility Score. The HPSR concluded that the point-total/Eligibility Score for Bridge No. 163-83-01393A was three (3).

Upon analysis of comments received after completion of the March 23, 2020 HPSR and Historic Bridge Select/Non-Select Analysis, this addendum is now assigning a total of five (5) points to Bridge No. 163-83-01393A as its Eligibility Score.

APPENDIX D. Summary/Recommendations of Archaeology Report

INDIANA SHORT REPORT

Phase Ia Archaeological Records Check and Reconnaissance Survey for the Proposed SR 163 over Brouillettes Creek Bridge Project in Clinton Township, Vermillion County, Indiana (Des. No. 1701589)

By

Andrea Crider, MA, RPA and Nora Hillard

Submitted By:
Harry Nikides
Indiana Regional Manager
ASC Group, Inc.
9376 Castlegate Drive
Indianapolis, Indiana 46256
317.915.9300
hnikides@ascgroup.net

Submitted To:
Parsons
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46204
317.616.4693

Lead Agency: Indiana Department of Transportation

December 14, 2021

Endrea D. Crider

Andrea D. Crider, MA, Principal Investigator

ASC
GROUP, INC.

CULTURAL · ENVIRONMENTAL · HAZARDOUS
EVALUATION & CONSULTING

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No cultural material was encountered during the survey. Augering within alluvial soils revealed no deeply buried cultural	
material or evidence for a buried A soil horizon. No further deep testing is recommended for the survey area.	
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RECOMMENDATIONS	
Records check (Check all that apply.)	
No archaeological investigation is recommended before the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined that the project is allowed to proceed because the records check has determined the project in the project in the project is allowed to provide the project in the project in the project is allowed to provide the project in the proje	ject
area does not have the potential to contain archaeological resources.	
A Phase la archaeological reconnaissance is recommended.	
A cemetery development plan may be required under Indiana Code 14-21-1-26.5 because project ground disturbance will be within 100 feet of a	
cemetery.	
Phase la archaeological reconnaissance (Check all that apply.)	
It is recommended that the project be allowed to proceed as planned because the Phase Ia archaeological reconnaissance has located no	
archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.	
It is recommended that Phase Ic archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase Ia	
archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological	
deposits.	
Other recommendations / commitments	

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

APPENDIX E. Summary/Recommendations of Select/Non-Select Analysis Reports

Intentionally omitted - refer to Appendix I.

APPENDIX F. Summary/Recommendations of HBAA

Intentionally omitted - refer to Appendix D-

APPENDIX H. Correspondence

From: Kennedy, Mary

Sent: Thursday, December 19, 2019 10:25 AM

To: Slider, Chad (DNR); Dhpacommentsfromcro, Dnr; amy.tolbert@vermillioncounty.in.gov; hopper690

@aol.com; tjwilson56@yahoo.com; duke1959@att.net; milisa.carty@vermillioncounty.in.gov; info@vcihs.com; eliza@integrityred.com; Tommy Kleckner; eroyer@indianalandmarks.org; 'James L. Cooper'; Paul Brandenburg; Tony Dillon; Nathan Holth; Kitty Henderson; rkeller@westcentralin.com;

jweir@westcentralin.com; 'thpo@estoo.net'; 'Diane Hunter'; 'lpappenfort@peoriatribe.com'; Matthew.Bussler@pokagonband-nsn.gov; lheady@delawaretribe.org; Michael LaRonge

Cc: Miller, Daniel J; Patton, Melissa; Mcmullen, Kenneth B; Branigin, Susan; Miller, Shaun (INDOT); Allen,

Michelle (FHWA); Dirks, Robert (FHWA)

Subject: FHWA Project: Des. No. 1701589, SR 163 over Brouilletts Creek, Vermillion Co, Ind. - ECL

Des. No.: 1701589

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to proceed with proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State

Historic Preservation Officer (SHPO) Vermillion County Commissioners

Vermillion County Highway Department

Vermillion County Historical Society

Dail Ellen Henry, Vermillion County Historian

Indiana Landmarks, Western Regional Office

James Cooper

Paul Brandenburg, Historic Spans Task Force

Historic Hoosier Bridges

Historicbridges.org

Historic Bridge Foundation

West Central Indiana Economic Development District, Inc.

Eastern Shawnee Tribe of Oklahoma

Miami Tribe of Oklahoma

Peoria Tribe of Indians of Oklahoma

Pokagon Band of Potawatomi Indians

Delaware Tribe of Indians, Oklahoma

Forest County Potawatomi Community

This email 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 early coordination letter (ECL) 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 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 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 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,

Mary E. Kennedy

Historic Bridge Specialist 100 N. Senate Ave., Room N642-ES Indianapolis, IN 46204

Office: (317) 232-5215

Email: mkennedy@indot.in.gov



**Updated guidance for historic bridge projects can be found in the links below:

Overview-Indiana Historic Bridges Program

Historic Bridge Project Development Process

Procedures for Public Hearings under the Historic Bridges PA

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



INDIANA DEPARTMENT OF TRANSPORTATION

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

Eric Holcomb, Governor Joe McGuinness, Commissioner

December 19, 2019

This letter was sent to the listed parties.

RE: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Vermillion County, Indiana

Des. No. 1701589

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration, proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, in Vermillion County, Indiana. It is within Clinton Township, on the Saint Bernice and Clinton USGS Topographic Quadrangle, in Sections 10, 11, 14, and 15 of Township 14 North, Range 10 West.

INDOT Bridge No. 163-83-01393A is a single span, metal Parker through truss that was designed by the Indiana State Highway Commission, and built from 1932-1933 by the Vincennes Bridge Company. The bridge's deck and railings were replaced in 1979. The bridge was determined not to be eligible for the National Register of Historic Places (National Register) in the INDOT Historic Bridge Inventory conducted by Mead & Hunt on INDOT's behalf (Volume 2, Section 2, page 1022).

The purpose of the proposed project is to address the deteriorated condition of the bridge. In the October 15, 2018 Bridge Inspection Report, the bridge was given a sufficiency rating of 49.3 (out of 100). The substructure was rated 4 (out of 9; poor condition), with cracking wingwalls and advanced spalling. The superstructure was rated 5 (fair condition) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank was noted.

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.

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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 http://www.achp.gov/citizensguide.pdf.

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 Mary Kennedy of this office at 317-232-5215 or mkennedy@indot.in.gov.

Tribal contacts may contact Shaun Miller at <u>smiller@indot.in.gov</u> 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

Historic Hoosier Bridges

Enclosures:

Topographic map showing project area

Distribution List:

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State Historic Preservation Officer (SHPO) Vermillion County Commissioners Vermillion County Highway Department Vermillion County Historical Society Dail Ellen Henry, Vermillion County Historian Indiana Landmarks, Western Regional Office James Cooper Paul Brandenburg, Historic Spans Task Force

Historic Bridge Foundation
West Central Indiana Economic Development
District, Inc.
Eastern Shawnee Tribe of Oklahoma
Miami Tribe of Oklahoma
Peoria Tribe of Indians of Oklahoma
Pokagon Band of Potawatomi Indians
Delaware Tribe of Indians, Oklahoma
Forest County Potawatomi Community



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

HISTORIC PRESERVATION AND ARCHAEOLOGY

January 6, 2020

Mary Kennedy INDOT – Cultural Resources Office 100 North Senate Avenue, Room 642 Indianapolis, Indiana 46204

Federal Agency: Indiana Department of Transportation ("INDOT"),

on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Early coordination letter for INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek in

Clinton Township, Vermillion County, Indiana (Des. No. 1701589; DHPA No. 24808)

Dear Ms. Kennedy:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, 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," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed INDOT's December 19th, 2019 early coordination letter, which we received on December 20, 2019 for the aforementioned project.

We are not aware of any parties who should be invited to participate in the Section 106 consultation on this federal undertaking, beyond those whom INDOT already has invited. In your next regular correspondence on this project, please advise us as to which of the invited consulting parties has accepted the invitation.

We look forward to reviewing the proposed area of potential effects and the reports on investigations of above-ground cultural resources and archaeological resources that the early coordination letter indicated will be forthcoming,

The Indiana SHPO staff's archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Danielle Kauffmann, In all future correspondence about the INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek in Clinton Township, Vermillion County, Indiana (Des. No. 1701589), please refer to DHPA No. 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

BKM:DMK:dmk

emc: Robert Dirks, PE, FHWA Anuradha Kumar, INDOT Shaun Miller, INDOT

Susan Branigin, INDOT Susan Branigin, INDOT Shirley Clark, INDOT Mary Kennedy, INDOT

Wade T. Tharp, INDNR-DHPA Danielle Kauffmann, INDNR-DHPA

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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



Via email: smiller@indot.IN.gov

January 7, 2020

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

Re: Des. No. 1701589, SR 163 over Brouilletts Creek, Vermillion 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 project 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 dhunter@miamination.com 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 Hunter

Diane Hunter

Tribal Historic Preservation Officer

From: Kennedy, Mary

Tuesday, January 21, 2020 11:10 AM Sent:

To: Emily Eckardt

Branigin, Susan; Kumar, Anuradha; 'Miller, Daniel J'; Patton, Melissa; Dirks, Robert (FHWA) Cc: Subject: RE: FHWA Project: Des. No. 1701589, SR 163 over Brouilletts Creek, Vermillion Co, Ind. - ECL

Emily,

Thank you for the response and the willingness to be a consulting party on this project. A historic property report analyzing the significance of the bridge is under development. Consulting parties will be notified via email when the document is available for review.

With regard to the 10-year review of the Historic Bridge Programmatic Agreement, per Stipulation II.C.2. of the PA, "FHWA, INDOT, and the Indiana SHPO will consult to determine if conditions have changed that would require updating the list of bridges eligible for the NRHP, the criteria for identifying Select and Non-Select Bridges, and the list of Select and Non-Select Bridges. . . If FHWA, INDOT and the Indiana SHPO determine the existing survey is still valid, then INDOT will notify the Task Group, County Commissioners, and the public of the decision." The FHWA issued a letter on December 28, 2016 explaining that FHWA, SHPO and INDOT met several times in 2016 regarding Stipulation II.C.2. of the Historic Bridge PA. The agencies decided that a full review of bridge determinations was not necessary at that time, and the issue will be revisited at the next 10-year review (2026). As a result of the meetings in 2016, INDOT was tasked with creating an updated list of the current status of Select/Non-Select bridges. The letter and the list have been available for download from INDOT's website since December 28, 2016 (https://www.in.gov/indot/2531.htm). An announcement regarding this letter was made via INDOT's Environmental Services listsery on December 28, 2016, and the Historic Bridge Task group (of which Indiana Landmarks is a member) was directly emailed about this letter on the same date.

We look forward to your continued participation in the SR 163 Bridge Project. Please don't hesitate to let us know if you have any questions or need more information.

Mary E. Kennedy Historic Bridge Specialist

100 N. Senate Ave., Room N642-ES

Indianapolis, IN 46204 Office: (317) 232-5215

Email: mkennedy@indot.in.gov









**Updated guidance for historic bridge projects can be found in the links below:

Overview-Indiana Historic Bridges Program Historic Bridge Project Development Process Procedures for Public Hearings under the Historic Bridges PA

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

From: Emily Eckardt [mailto:eeckardt@indianalandmarks.org]

Sent: Monday, January 20, 2020 1:22 PM

To: Kennedy, Mary < MKENNEDY@indot.IN.gov>

Subject: Re: FHWA Project: Des. No. 1701589, SR 163 over Brouilletts Creek, Vermillion Co, Ind. - ECL

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

Mary,

Thank you for your invitation to serve as a consulting party on Des No. 1701589 - SR 163 over Brouilletts Creek. My office would like to serve as a consulting party for this project.

Though this bridge was found to be ineligible for the National Register of Historic Places in the INDOT Historic Bridge Inventory and is listed as a non-select bridge. These documents do not take into consideration the changes in extant select bridges since the Bridge Inventory was created. Had consulting parties been invited to comment on — or even been made aware of - the ten year review of the Historic Bridge Programmatic Agreement, there would have been an opportunity for the list of select/non-select bridges to be revised. Changes to the list could have been made with consideration to the select bridges that have been lost, and the consequent increase of importance in bridges rated as non-select. A bridge such as this could have been included on the reformed select list and thus preserved had parties been provided the opportunity to comment on the renewal of the Historic Bridge Programmatic Agreement.

With the above comment taken into consideration, Indiana Landmarks at this time recommends rehabilitation in place for continued vehicular use.

Best, Emily From: Kennedy, Mary

Sent: Thursday, April 2, 2020 8:44 AM

To: Kauffmann, Danielle M; Tharp, Wade; Diane Hunter; Emily Eckardt; Tommy Kleckner

Cc: Miller, Shaun (INDOT); Miller, Daniel J; Patton, Melissa; michelle.allen@dot.gov; Branigin, Susan;

Carmany-George, Karstin (FHWA)

Subject: FHWA Project: Des. No. 1701589, SR 163 over Brouilletts Creek, Vermillion Co, Ind. - HPR

Des. No.: 1701589 **DHPA No.:** 24808

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

A historic properties report (HPR) has been prepared and is ready for review. The HPR can be found in IN-SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des No. is the most efficient search term, once in IN-SCOPE). 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 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.

Stay well,

Mary E. Kennedy

Historic Bridge Specialist

100 N. Senate Ave., Room N642-ES

Indianapolis, IN 46204 Office: (317) 232-5215

Email: mkennedy@indot.in.gov









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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 27, 2020



Mary Kennedy Cultural Resources Office – Environmental Services Indiana Department of Transportation 100 N. Senate Avenue, IGCN, Room N642 Indianapolis, Indiana 46204

Federal Agency: Indiana Department of Transportation ("INDOT"),

on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Historic property short report (Kennedy, 3/23/2020) for the INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek in Clinton Township, Vermillion County, Indiana (Des. No. 1701589; DHPA No. 24808)

Dear Ms. Kennedy:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, 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," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed your April 2, 2020, review request submittal form, which enclosed the aforementioned historic property short report ("HPSR"; Kennedy, 3/23/2020), which we received electronically the same day, for the aforementioned project.

The electronic submission received by our office April 2, and the documents uploaded to IN SCOPE did not include an INDOT cover letter. In your next regular correspondence, please advise us as to which of the invited consulting parties, if any, accepted the invitation to participate in the Section 106 process of this proposed project.

The proposed area of potential effects ("APE") appears to be of adequate size to encompass the geographic area in which direct and indirect effects of a project of this nature could occur.

For the purposes of the Section 106 review of this federal undertaking, we agree with the conclusions of the HPSR that the INDOT Bridge No. 163-83-01393A is eligible for inclusion in the National Register of Historic Places under Criterion C.

As previously indicated, we look forward to reviewing the report on investigations of archaeological resources that the early coordination letter indicated was forthcoming.

The Indiana SHPO staff's archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Danielle Kauffmann. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

Mary Kennedy April 26, 2020 Page 2

In all future correspondence about the INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek in Clinton Township, Vermillion County (Des. No. 1701589), please continue to refer to DHPA No. 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

BKM:DMK:dmk

emc: Kari Carmany-George, FHWA

Charl W. Slides

Anuradha Kumar, INDOT Shaun Miller, INDOT Mary Kennedy, INDOT Susan Branigin, INDOT Shirley Clark, INDOT

Danielle Kauffmann, INDNR-DHPA Wade T. Tharp, INDNR-DHPA From: Kennedy, Mary

Sent: Tuesday, May 26, 2020 11:33 AM

To: Slider, Chad (DNR); Dhpacommentsfromcro, Dnr; Kauffmann, Danielle M; Tharp, Wade;

amy.tolbert@vermillioncounty.in.gov; hopper690@aol.com; tjwilson56@yahoo.com; duke1959 @att.net; milisa.carty@vermillioncounty.in.gov; info@vcihs.com; eliza@integrityred.com; Tommy Kleckner; eroyer@indianalandmarks.org; 'James L. Cooper'; Paul Brandenburg; Tony Dillon; Nathan Holth; Kitty Henderson; rkeller@westcentralin.com; jweir@westcentralin.com; thpo@estoo.net; Diane

Hunter; 'lpappenfort@peoriatribe.com'; Matthew.Bussler@pokagonband-nsn.gov;

lheady@delawaretribe.org; Michael LaRonge; tonya@shawnee-tribe.com

Cc: Miller, Daniel J; Patton, Melissa; Branigin, Susan; Miller, Shaun (INDOT); Allen, Michelle (FHWA);

Carmany-George, Karstin (FHWA)

Subject: FHWA Project: Des. No. 1701589, SR 163 over Brouilletts Creek, Vermillion Co, Ind. - Historic Bridge

Select/Non-Select Analysis

Des. No.: 1701589

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to proceed with proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 again to become consulting parties:

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State Historic Preservation Officer (SHPO)

Vermillion County Commissioners

Vermillion County Highway Department

Vermillion County Historical Society

Dail Ellen Henry, Vermillion County Historian Indiana Landmarks, Western Regional Office

James Cooper

Paul Brandenburg, Historic Spans Task Force

Historic Hoosier Bridges

Historicbridges.org

Historic Bridge Foundation

West Central Indiana Economic Development District, Inc.

Eastern Shawnee Tribe of Oklahoma

Miami Tribe of Oklahoma

Peoria Tribe of Indians of Oklahoma Pokagon Band of Potawatomi Indians Delaware Tribe of Indians, Oklahoma Forest County Potawatomi Community

This email 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 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. It should be noted that typically a dual review is requested at the onset of a project, which would have been through the December 19, 2019 letter. However, Bridge No. 163-83-01393A was not considered historic at that time. Due to the recommendations in the HPR and SHPO concurrence therein, Indiana preservation and archaeology laws dealing with alterations of historic sites and structures are now applicable. In order to invoke the dual review at this point in the process, INDOT is again inviting all previously invited consulting parties to participate in the project, whether or not they responded to the December 19, 2019 Section 106 early coordination invitation letter.

Please review the Historic Bridge Select/Non-Select **Analysis** 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 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 as soon as possible.

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 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,

Mary E. Kennedy

Historic Bridge Specialist 100 N. Senate Ave., Room N642-ES

Indianapolis, IN 46204 Office: (317) 232-5215

Email: mkennedy@indot.in.gov









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INDIANA DEPARTMENT OF TRANSPORTATION

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

Eric Holcomb, Governor Joe McGuinness, Commissioner

May 26, 2020

This letter was sent to the listed parties.

RE: Dual Review Project: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Vermillion County, Indiana

Des. No. 1701589 DHPA No. 24808

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration, proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 December 19, 2019. Responses accepting the invitation to participate in the Section 106 process for this project were received from the Miami Tribe of Oklahoma, the Indiana State Historic Preservation Officer (SHPO), and the Western Regional Office of Indiana Landmarks. In addition, an email on April 2, 2020 notified consulting parties that a historic property report (HPR) was available for review and comment.

INDOT Bridge No. 163-83-01393A is a single span, metal Parker through truss that was designed by the Indiana State Highway Commission, and built from 1932-1933 by the Vincennes Bridge Company. The bridge's deck and railings were replaced in 1979. The bridge was determined not to be eligible for the National Register of Historic Places (NRHP) in the INDOT Historic Bridge Inventory conducted by Mead & Hunt on INDOT's behalf (Volume 2, Section 2, page 1022). However, the HPR recommended the bridge is now eligible for listing in the NRHP due to the fact that it is now considered a scarce type for its region, combined with the fact that it was built by a significant Indiana builder. The only comments received were from the staff of the SHPO who concurred with the conclusions of the HPR in a letter dated April 27, 2020.

The proposed undertaking is on SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, in Vermillion County, Indiana. It is within Clinton Township, on the Saint Bernice and Clinton USGS Topographic Quadrangle, in Sections 10, 11, 14, and 15 of Township 14 North, Range 10 West.

The purpose of the proposed project is to address the deteriorated condition of the bridge. In the October 15, 2018 Bridge Inspection Report, the bridge was given a sufficiency rating of 49.3 (out of 100). The substructure was rated 4 (out of 9; poor condition), with cracking wingwalls and advanced spalling. The superstructure was rated 5 (fair condition) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank was noted.



In accordance with 36 CFR 800.2 (c), you were invited to become a consulting party as part of the Section 106 process, and you are hereby invited again 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 https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf.

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 14-21-18 (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 with contact information, including email addresses, for processing the dual review submission.

It should be noted that typically a dual review is requested at the onset of a project, which would have been through the December 19, 2019 letter. However, Bridge No. 163-83-01393A was not considered historic at that time. Due to the recommendations in the HPR and SHPO concurrence therein, Indiana preservation and archaeology laws dealing with alterations of historic sites and structures are now applicable. In order to invoke the dual review at this point in the process, INDOT is again inviting all previously invited consulting parties to participate in the project, whether or not they responded to the December 19, 2019 invitation letter.

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. 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, and the above-mentioned HPR was prepared. As a result of the historic property identification and evaluation efforts, Bridge No. 163-83-01393A is the only resource in the APE recommended as eligible for listing in the NRHP. The results of archaeological identification and evaluation efforts will be forthcoming.

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. 163-83-01393A was not recommended NRHP eligible in the original Historic Bridge Inventory results, it was not subjected to a Select/Non-Select analysis. A Select/Non-Select analysis, following the methodology of the Historic Bridge Inventory, has now been prepared. Based on the scores determined through the analysis, Bridge No. No. 163-83-01393A is recommended as Non-Select.

The Historic Bridge Select/Non-Select Analysis is available for review in IN SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review these documents and to 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.

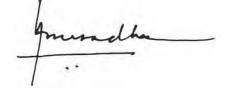
Please review the information and comment within thirty (30) calendar days of receipt. If you indicate that you do not desire to be a consulting party or if you have not previously accepted consulting party status and you do not respond to this letter, you will not be included on the list of consulting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



For questions concerning specific project details or to provide any comments on the project, you may contact Mary Kennedy of this office at 317-232-5215 or mkennedy@indot.in.gov.

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 Select/Non-Select Analysis

Distribution List:

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State Historic Preservation Officer (SHPO)

Vermillion County Commissioners

Vermillion County Highway Department

Vermillion County Historical Society

Dail Ellen Henry, Vermillion County Historian

Indiana Landmarks, Western Regional Office

James Cooper

Paul Brandenburg, Historic Spans Task Force

Historic Hoosier Bridges

Historicbridges.org

Historic Bridge Foundation

West Central Indiana Economic Development District, Inc.

Eastern Shawnee Tribe of Oklahoma

Miami Tribe of Oklahoma

Peoria Tribe of Indians of Oklahoma

Pokagon Band of Potawatomi Indians

Shawnee Tribe

Delaware Tribe of Indians, Oklahoma

Forest County Potawatomi Community



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



June 22, 2020

Mary Kennedy Cultural Resources Office Indiana Department of Transportation 100 N. Senate Avenue, Room N642 Indianapolis, Indiana 46204

State Agency: Indiana Department of Transportation ("INDOT"),

Federal Agency: Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Request for Dual Review and Historic Bridge Select/Non-Select Analysis for INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek in Clinton Township, Vermillion County, Indiana (Des. No. 1701589; DHPA 24808)

Dear Ms. Kennedy:

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 your May 26, 2020 submittal, with the aforementioned enclosures, transmitting INDOT's proposal for a dual review, pursuant to 312 Indiana Administrative Code ("IAC") 20-4-11.5, for the aforementioned project in Clinton Township, Vermillion County, Indiana.

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, as well as Indiana Code 14-21-1-18 and 312 IAC 20-4. By copy of this letter, Indiana SHPO is providing notification of the commencement of the dual review to potentially 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 note that your letter acknowledges that typically a dual review is requested at the onset of a project, but following the recommendation of the eligibility of Bridge No. 163-83-01393A for listing in the National Register of Historic Places ("NRHP"), Indiana preservation and archaeology laws are now applicable. Thank you for inviting all the consulting parties again in order to provide them an opportunity to comment. 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 additional, potentially interested parties to the list of parties we intend to copy with our comment letters. Anyone receiving an e-mailed copy of this letter who *does not wish to receive future copies of our correspondence about this project* is asked to reply by e-mail to dkauffmann@dnr.IN.gov and advise us that he or she does not wish to receive any further copies of our e-mails on this project.

For the benefit of all invited consulting parties and interested persons, INDOT submitted a historic property short report ("HPSR"; Kennedy, 3/23/2020) to our office on April 2, 2020 which recommended the subject bridge eligible for listing in

Mary Kennedy June 22, 2020 Page 2

the NRHP. Our office agreed with that eligibility call. Within the HPSR, the "System for Applying the National Register Criteria for Evaluation" (System) from the *Indiana Historic Bridge Inventory, Volume 1: National Register Eligibility Results* was utilized to assess the bridge's potential eligibility. The bridge received two (2) points for being a rare remaining example in the Crawfordsville District, three (3) points for its association with a master building, the Vincennes Bridge Company, while two (2) points were deducted for loss of integrity, specifically, a deck replacement in 1979 that used metal stay-in-place forms that are visible on the underside of the deck.

While our April 26 response letter agreed with the overall conclusion of the HPSR regarding the bridge's eligibility, we realize as an oversight that we did not at that time comment on the steps taken to determine that eligibility. Regarding the point system, we are curious about the two-point deduction reasoning. While the steel pan does add a non-historic element to the bridge as it was left in place, rather than the original deck been poured into a wood form that would have been later removed, is the underside of a concrete deck that integral to the overall integrity of the bridge warranting a two point deduction in this evaluation? We are curious if there are other "Select" truss bridges within the state that have a similar pan under the concrete deck. Our office has seen other bridge rehabilitation projects where components are added to reinforce the structural members or stabilize the truss without compromising its overall integrity. Without that two point deduction, the bridge's eligibility score would be five (5) points, which would assign it as a "Medium" eligibility score and thus place the bridge into Box 5 of the Selection Matrix, which would make it a "Select" Bridge.

As INDOT's May 26 letter indicates, additional information regarding archaeological resources is forthcoming. Once the indicated information is received, the Indiana SHPO will resume identification and evaluation procedures for this project. Please keep in mind that additional information may be requested in the future.

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 Danielle Kauffmann at (317) 232-0582 or dkauffmann@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: 1701589.

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 dkauffmann@dnr.IN.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on SR 163 over Brouilletts Creek in Clinton Township, Vermillion County (Des. No. 1701589), please continue to refer to DHPA No. 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

What W. Shih

BKM:DMK:dmk

EMC to federal and state agency or consultant staff members:

Kari Carmany-George, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Mary Kennedy June 22, 2020 Page 3

> Shirley Clark, INDOT Wade T. Tharp, INDNR-DHPA Danielle Kauffmann, INDNR-DHPA

EMC to Indiana Historic Preservation Review Board Members:

J. Scott Keller, Review Board
Anne Shaw Kingery, Review Board
Daniel Kloc, AIA, Review Board
Jason Larrison, AIA, Review Board
Chandler Lighty, Review Board
Beth K. McCord, INDNR-DHPA, Review Board
Joshua Palmer, AIA, Review Board
April Sievert, Ph.D., Review Board
Christopher Smith, Deputy Director, INDNR, and Chairman, Review Board

EMC to potentially interested persons:

Eastern Shawnee Tribe of Oklahoma Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Pokagon Band of Potawatomi Indians Shawnee Tribe Delaware Tribe of Indiana, Oklahoma Forest County Potawatomi Community

Amy Tolbert, Vermillion County Commissioners
Harry Crossley, Vermillion County Commissioners
Tim Yocum, Vermillion County Commissioners
Tim Wilson, Vermillion County Commissioners
Vermillion County Historian
Vermillion County Historial Society
Vermillion County Highway Department
Tommy Kleckner, Indiana Landmarks, Western Regional Office
Dr. James L. Cooper, DePauw University Professor Emeritus of History
Paul Brandenburg, Indiana Historic Spans Task Force
Tony Dillon, Historic Hoosier Bridges
Nathan Holth, HistoricBridges.org
Kitty Henderson, Historic Bridge Foundation
West Central Indiana Economic Development District, Inc.

Des. 1701589 Appendix D Appendix D Appendix D-50

From: Paul Brandenburg <paul@prbrandy.com>
Sent: Wednesday, August 5, 2020 2:31 PM

To: Kennedy, Mary

Subject: Historic Spans request to be CP-Des. NO. 1701589

Follow Up Flag: Follow up **Flag Status:** Flagged

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

Mary – I am not certain who I should address a request for Consulting Party status for this project; when you have a moment please let me know the contact.

Thanks,

Paul

From: Paul Brandenburg

Sent: Wednesday, August 5, 2020 2:29 PM

To: Carr, John <JCarr@dnr.IN.gov>; Nathan Holth <nathan@historicbridges.org>; indianabridges@sbcglobal.net;

jlcooper@ccrtc.com; TKleckner@indianalandmarks.org; spansaver@hotmail.com; Kitty Henderson

<kitty@historicbridgefoundation.com>; Betsy Merritt <betsy_merritt@nthp.org>

Cc: Kauffmann, Danielle M < DKauffmann@dnr.IN.gov>; McCord, Beth K < BMccord@dnr.IN.gov>; Slider, Chad (DNR)

<CSlider@dnr.IN.gov>

Subject: RE: Proposed Non-Select status for SR 163 bridge over Brouilletts Creek, Vermillion County, Indiana (INDOT Des. NO. 1701589)

John,

My thanks to INDOT to undertake the re-evaluation of this structure and for you message with the detailed information. After reviewing the documentation associated with this project. I am not certain that the deck replacement using metal stay-in-place forms that are visible on the underside of the deck has resulted in a loss of integrity sufficient for consideration as Non-Select during scoring as "overall the bridge maintains its original materials, workmanship, and design and its integrity of location, setting, feeling, and association" according to the report. As there has been a the loss of "Select" Bridges during the time since the completion of the Historic Bridge Inventory under the Programmatic Agreement and this may be an ideal candidate for consideration to Select status. Thus, it would be prudent to confirm the deck replacement constitutes sufficient loss of integrity to deduct the points under the evaluation methodology as indicated.

I look forward to further discussions regarding the evaluation and the project.

Cheers,

Paul

From: Carr, John < <u>JCarr@dnr.IN.gov</u>>
Sent: Monday, August 3, 2020 9:51 PM

To: Nathan Holth <nathan@historicbridges.org>; Paul Brandenburg <paul@prbrandy.com>;

<u>indianabridges@sbcglobal.net</u>; <u>jlcooper@ccrtc.com</u>; <u>TKleckner@indianalandmarks.org</u>; <u>spansaver@hotmail.com</u>; <u>Kitty Henderson</u> < kitty@historicbridgefoundation.com >

Cc: Kauffmann, Danielle M < <u>DKauffmann@dnr.IN.gov</u>>; McCord, Beth K < <u>BMccord@dnr.IN.gov</u>>; Slider, Chad (DNR) < CSlider@dnr.IN.gov>

Subject: RE: Proposed Non-Select status for SR 163 bridge over Brouilletts Creek, Vermillion County, Indiana (INDOT Des. NO. 1701589)

Thanks for sharing your thoughts on this situation, Nathan!

John L. Carr
Team Leader for Historic Structures Review
Division of Historic Preservation and Archaeology
Indiana Department of Natural Resources
402 West Washington Street, Room W274
Indianapolis, Indiana 46204
317-233-1949
jcarr@dnr.IN.gov
www.dnr.IN.gov/historic

From: Nathan Holth <<u>nathan@historicbridges.org</u>>

Sent: Wednesday, July 29, 2020 3:56 PM

To: Carr, John < <u>JCarr@dnr.IN.gov</u>>; <u>paul@prbrandy.com</u>; <u>indianabridges@sbcglobal.net</u>; <u>jlcooper@ccrtc.com</u>; <u>TKleckner@indianalandmarks.org</u>; <u>spansaver@hotmail.com</u>; <u>Kitty Henderson < kitty@historicbridgefoundation.com</u>> **Cc:** Kauffmann, Danielle M < DKauffmann@dnr.IN.gov>

Subject: Re: Proposed Non-Select status for SR 163 bridge over Brouilletts Creek, Vermillion County, Indiana (INDOT Des. NO. 1701589)

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

John,

I do not think I signed on as a consulting party for this bridge, however I am a CP on the US-41 Pigeon Creek bridge (also an ISHC standard thru truss). The documentation for that bridge leads me to believe that the Pigeon Creek Bridge is headed for a replacement. The population of surviving ISHC standard through truss bridges has dropped significantly over the past number of years. Therefore, I strongly support the SR-163 bridge as being NR Eligible as its an increasingly rare example of an ISHC through truss.

I admit I do not have a detailed knowledge of the referenced point system used in regards to determining whether a bridge is Select or Non Select. In particular, I am confused about the deck situation. I have always been told that on metal truss bridges, the deck is not a character-defining feature and thus it is not a concern if its replacement is not in-kind. Furthermore, replacement of deck

^{*} Please let us know about the quality of our service by taking this brief customer survey.

is a common maintenance procedure for any metal truss bridge. I've never heard of a deck replacement being considered a loss of integrity for a metal truss bridge. The deck simply isn't considered important to the significance of this bridge type, and moreover from your description the new deck remains concrete, with the only difference being the use of steel pans. Case in point: recent relocation, and full in-kind restoration of the "Select" Clover Ford Bridge (incuding use of hot riveting, retention of original fishbelly floorbeams, etc). Despite the in-kind restoration of the historically significant truss, replicating the bridge's original deck design was not part of the project. The new deck is a modern glulam style timber deck. So, like the original deck, it remains timber, but the layout and use of the timber is different than the original timber plank deck would have been. To me, this is similar to a new concrete deck with steel pan, vs a concrete deck set using wooden formwork. Same material, different

configuration. https://historicbridges.org/bridges/browser/?bridgebrowser=indiana/cloverfordbridge/

Any insight into this would be of interest to me.

Thanks,

-Nathan Holth

Nathan Holth

Author/ Photographer/Webmaster

-----HistoricBridges.org-----

"Promoting the Preservation Of Our Transportation Heritage"

<u>nathan@historicbridges.org</u> www.historicbridges.org

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----- Original Message -----

From: "Carr, John" <JCarr@dnr.in.gov>

To: "paul@prbrandy.com" <paul@prbrandy.com>; "indianabridges@sbcglobal.net"

<indianabridges@sbcglobal.net>; "jlcooper@ccrtc.com" <jlcooper@ccrtc.com>;

"TKleckner@indianalandmarks.org" < TKleckner@indianalandmarks.org > ; "spansaver@hotmail.com"

<spansaver@hotmail.com>; "Nathan Holth" <nathan@historicbridges.org>; "Kitty Henderson"

<kitty@historicbridgefoundation.com>

Cc: "Kauffmann, Danielle M" < <u>DKauffmann@dnr.in.gov</u>>

Sent: 7/30/2020 2:37:05 AM

Subject: Proposed Non-Select status for SR 163 bridge over Brouilletts Creek, Vermillion County,

Indiana (INDOT Des. NO. 1701589)

I think you may have been invited to become a consulting party on a project involving the SR 163 bridge over Brouilletts Creek in Vermillion County. From INDOT's correspondence on this project to date, we cannot tell whether you have accepted consulting party status on this Section 106 review.

Please see our two most recent comment letters on this project. At the moment, we do not have any submissions in our office for this project that are awaiting our review. We anticipate that before too long, INDOT will respond to our comments about this bridge in our June 22, 2020, letter.

If you are not already a consulting party on this Section 106 review and wish to become one, please contact Mary Kennedy of INDOT (mkennedy@indot.in.gov or 317-232-5215).

You may view the letters and information provided by INDOT to date on this project by searching under Designation Number 171589 at IN SCOPE (https://erms.indot.in.gov/Section106Documents/).

Due to the passage of time, INDOT had voluntarily undertaken to re-evaluate this 1933 Parker through truss bridge, which had not been identified as historic in the *Indiana Historic Bridge Inventory*. INDOT concluded that it is now eligible for the National Register of Historic Places. However, in doing the re-evaluation, INDOT deducted points because the bridge has a replacement concrete deck that was poured into a steel pan that remains in place, whereas the original concrete deck had apparently been poured into a wooden form that was then removed. Thus, the bridge contains a non-historic feature, the steel pan. The deduction of two points in the scoring system for loss of integrity was sufficient to drop the bridge into a Non-Select rating.

We realize that you may not have the time to actively participate in this Section 106 review or that this bridge may not be a priority for you. However, we wanted to bring this project to your attention, because it represents another, unusual effort by INDOT to re-evaluate a bridge previously considered non-historic (like Des. No. 1701511, involving the SR 256 bridge over the Muscatatuck River in Jackson and Scott counties).

John L. Carr
Team Leader for Historic Structures Review
Division of Historic Preservation and Archaeology
Indiana Department of Natural Resources
402 West Washington Street, Room W274
Indianapolis, Indiana 46204
317-233-1949
jcarr@dnr.IN.gov
www.dnr.IN.gov/historic

* Please let us know about the quality of our service by taking this brief customer survey.

From: Kennedy, Mary

Sent: Friday, January 8, 2021 9:00 AM

To: Slider, Chad (DNR); Dhpacommentsfromcro, Dnr; Kauffmann, Danielle M; Tharp, Wade; Tommy

Kleckner; Paul Brandenburg; Nathan Holth; Diane Hunter; HLFI Western Regional Office

Cc: Miller, Daniel J; Patton, Melissa; Branigin, Susan; Miller, Shaun (INDOT); Carmany-George, Karstin

(FHWA); Prevost, Daniel

Subject: FHWA Project: Des. No. 1701589, SR 163 over Brouilletts Creek, Vermillion Co, Ind. - Addendum

HPSR & Updated Historic Bridge Select/Non-Select Analysis

Attachments: SR163BrouillettsCrk_DesNo1701589_UpdatedHPR&S-N-SReportLetter_2021-01-08.pdf

Des. No.: 1701589 **DHPA No.** 24808

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to proceed with proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

A Section 106 early coordination letter was distributed for this project on December 19, 2019. An email on April 2, 2020 notified consulting parties that a historic property short report (HPSR; Kennedy, March 23, 2020) was available for review and comment. A Historic Bridge Select/Non-Select Analysis (Parsons, May 20, 2020) was sent out on May 26, 2020 for review and comment. Several comments were received after the distribution of the Historic Bridge Select/Non-Select Analysis. Based on the input received, INDOT reexamined the bridge and prepared an Addendum to the Historic Property Short Report (Kennedy, December 31, 2020) and an updated Historic Bridge Select/Non-Select Analysis (Parsons, January 7, 2021). Based on the information in these updated reports, the bridge now receives a "Medium" Eligibility and "Medium" Condition score, placing the bridge in Box 5 of the Historic Bridge Inventory Select Matrix. As defined in *Indiana Historic Bridge Inventory, Volume 3*, bridges in Boxes 4 and 5 that have a medium Eligibility Score and high or medium Condition Score are programmatically determined Select unless they were constructed after 1944.

Please review the HPSR Addendum and updated Historic Bridge Select/Non-Select Analysis 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 your comments. If a hard copy of the materials is needed, please respond to this email with your request as soon as possible.

Tribal contacts 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 smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Thank you in advance for your input,

Mary E. Kennedy
Historic Bridge Specialist
100 N. Senate Ave., Room N758-ES
Indianapolis, IN 46204
Email: mkennedy@indot.in.gov

Cell: 317-694-3607*

^{*}Please note new phone number!



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204 PHONE: (317) 296-0799

Eric Holcomb, Governor Joe McGuinness, Commissioner

January 8, 2021

This letter was sent to the listed parties.

RE: Dual Review Project: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Vermillion County, Indiana

Des. No. 1701589 DHPA No. 24808

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration, proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 December 19, 2019. Responses accepting the invitation to participate in the Section 106 process for this project were received from the Miami Tribe of Oklahoma, the Indiana State Historic Preservation Officer (SHPO), and the Western Regional Office of Indiana Landmarks. An email on April 2, 2020 notified consulting parties that a historic property short report (HPSR; Kennedy, March 23, 2020) was available for review and comment. A Historic Bridge Select/Non-Select Analysis was sent out on May 26, 2020 for review and comment. It was sent to all originally invited consulting parties, whether or not they responded to the December 19, 2019 invitation letter, in order to request that this project be subjected to "dual review."

INDOT Bridge No. 163-83-01393A is a single span, metal Parker through truss that was designed by the Indiana State Highway Commission, and built from 1932-1933 by the Vincennes Bridge Company. The bridge's deck and railings were replaced in 1979. The bridge was determined not to be eligible for the National Register of Historic Places (NRHP) in the Indiana Historic Bridge Inventory conducted by Mead & Hunt on INDOT's behalf (Volume 2, Section 2, page 1022). However, the HPSR recommended the bridge is now eligible for listing in the NRHP due to the fact that it is now considered a scarce type for its region, combined with the fact that it was built by a significant Indiana builder.

The proposed undertaking is on SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, in Vermillion County, Indiana. It is within Clinton Township, on the Saint Bernice and Clinton USGS Topographic Quadrangle, in Sections 10, 11, 14, and 15 of Township 14 North, Range 10 West.

The purpose of the proposed project is to address the deteriorated condition of the bridge. In the October 15, 2018 Bridge Inspection Report, the bridge was given a sufficiency rating of 49.3 (out of 100). The substructure was rated



4 (out of 9; poor condition), with cracking wingwalls and advanced spalling. The superstructure was rated 5 (fair condition) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank was noted.

In accordance with 36 CFR 800.2 (c), you were invited to become a consulting party as part of the Section 106 process, and you are hereby invited again 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 https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf.

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 results of archaeological identification and evaluation efforts for the APE will be forthcoming. 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, and the above-mentioned HPSR was prepared. As a result of the historic property identification and evaluation efforts, Bridge No. 163-83-01393A is the only resource in the APE recommended as eligible for listing in the NRHP. As mentioned, the HPSR was circulated to consulting parties for review on April 2, 2020. Only one response to the HPSR was received. A letter from the staff of the State Historic Preservation Officer (SHPO) dated April 27, 2020 stated, in part:

For the purposes of the Section 106 review of this federal undertaking, we agree with the conclusions of the HPSR that the INDOT Bridge No. 163-83-01393A is eligible for inclusion in the National Register of Historic Places under Criterion C.

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. 163-83-01393A was not recommended NRHP eligible in the original Historic Bridge Inventory results, it was not subjected to a Select/Non-Select analysis at that time.

On May 26, 2020, a Historic Bridge Select/Non-Select Analysis (Parsons, 5/20/2020) was distributed for consulting party review. The report concluded that based on Bridge No. 163-83-01393A being assigned a "Low" Eligibility Score in the HPSR, and a "Medium" Condition score (37) based on the condition analysis in the Select/Non-Select report, the bridge would be placed in Box 8 of the Selection Matrix from the Inventory (Volume 3). As defined in the *Inventory*, bridges in Boxes 6, 7, 8, and 9 are Non-Select bridges due to their low priority through a combination of Eligibility and Condition Scores.

The following comments were received regarding the Historic Bridge Select/Non-Select Analysis document. A SHPO letter, dated June 22, 2020, stated, in part:



Within the HPSR, the "System for Applying the National Register Criteria for Evaluation" (System) from the Indiana Historic Bridge Inventory, Volume 1: National Register Eligibility Results was utilized to assess the bridge's potential eligibility. The bridge received two (2) points for being a rare remaining example in the Crawfordsville District, three (3) points for its association with a master building, the Vincennes Bridge Company, while two (2) points were deducted for loss of integrity, specifically, a deck replacement in 1979 that used metal stay-in-place forms that are visible on the underside of the deck.

While our April 26 response letter agreed with the overall conclusion of the HPSR regarding the bridge's eligibility, we realize as an oversight that we did not at that time comment on the steps taken to determine that eligibility. Regarding the point system, we are curious about the two-point deduction reasoning. While the steel pan does add a non-historic element to the bridge as it was left in place, rather than the original deck been [sic] poured into a wood form that would have been later removed, is the underside of a concrete deck that integral to the overall integrity of the bridge warranting a two point deduction in this evaluation? We are curious if there are other "Select" truss bridges within the state that have a similar pan under the concrete deck. Our office has seen other bridge rehabilitation projects where components are added to reinforce the structural members or stabilize the truss without compromising its overall integrity. Without that two point deduction, the bridge's eligibility score would be five (5) points, which would assign it as a "Medium" eligibility score and thus place the bridge into Box 5 of the Selection Matrix, which would make it a "Select" Bridge.

Nathan Holth, historicbridges.org, in an email dated July 29, 2020 stated, in part:

In particular, I am confused about the deck situation. I have always been told that on metal truss bridges, the deck is not a character-defining feature and thus it is not a concern if its replacement is not in-kind. Furthermore, replacement of deck is a common maintenance procedure for any metal truss bridge. I've never heard of a deck replacement being considered a loss of integrity for a metal truss bridge. The deck simply isn't considered important to the significance [sic] of this bridge type, and moreover from your description the new deck remains concrete, with the only difference being the use of steel pans.

Paul Brandenburg, Historic Spans Task Force, in an email dated August 5, 2020 stated, in part:

After reviewing the documentation associated with this project. I am not certain that the deck replacement using metal stay-in-place forms that are visible on the underside of the deck has resulted in a loss of integrity sufficient for consideration as Non-Select during scoring as "overall the bridge maintains its original materials, workmanship, and design and its integrity of location, setting, feeling, and association" according to the report. As there has been a the [sic] loss of "Select" Bridges during the time since the completion of the Historic Bridge Inventory under the Programmatic Agreement and this may be an ideal candidate for consideration to Select status. Thus, it would be prudent to confirm the deck replacement constitutes sufficient loss of integrity to deduct the points under the evaluation methodology as indicated.

Based on the input received, INDOT reexamined the deduction of two (2) points for the deck replacement with metal stay-in-place forms on Bridge 163-83-01393A through an addendum to the HPSR. The HPSR addendum (dated December 31, 2020) now assigns a total of five (5) points to Bridge No. 163-83-01393A as its Eligibility Score, which is now "Medium." Additionally, an updated Historic Bridge Select/Non-Select Analysis (dated January 7, 2021) has been prepared. Based on the updated Eligibility Score, the bridge now has a "Medium" Eligibility and "Medium" Condition score, placing the bridge in Box 5 of the Historic Bridge Inventory Selection Matrix. As defined in *Indiana Historic Bridge Inventory, Volume 3*, bridges in Boxes 4 and 5 that have a "Medium" Eligibility Score and "High" or "Medium" Condition Score are programmatically determined Select unless they were constructed after 1944.



The addendum to the HPSR and the updated Historic Bridge Select/Non-Select Analysis are available for review in IN SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review these documents and to respond with comments. 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. For questions concerning specific project details or to provide any comments on the project, you may contact Mary Kennedy of this office at 317-232-5215 or mkennedy@indot.in.gov.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office

Environmental Services

Enclosures:

Historic Property Short Report Addendum (Kennedy, December 31, 2020) Updated Historic Bridge Select/Non-Select Analysis (Parsons, January 7, 2021)

Distribution List:

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State Historic Preservation Officer (SHPO)
Indiana Landmarks, Western Regional Office
Paul Brandenburg, Historic Spans Task Force
Historicbridges.org
Miami Tribe of Oklahoma



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



January 21, 2021

Mary Kennedy Cultural Resources Office Indiana Department of Transportation 100 N. Senate Avenue, Room N642 Indianapolis, Indiana 46204

State Agency: Indiana Department of Transportation ("INDOT"),

Federal Agency: Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Historic property short report addendum (Kennedy, 12/31/2020) and updated historic bridge analysis (1/7/2021) for INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek in Clinton Township, Vermillion County, Indiana (Des. No. 1701589; DHPA 24808)

Dear Ms. Kennedy:

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 "DNR-DHPA") has reviewed your January 8, 2021 submission with the aforementioned enclosures.

For the purposes of the Dual Review of this project, we agree with the conclusions of the historic property short report addendum ("HPSR Addendum"; Kennedy, 12/31/2020) and the accompanying updated Historic Bridge Select/Non-Select Analysis (1/7/2021) that the subject bridge is eligible for inclusion in the National Register of Historic Places ("NRHP"). We appreciate that INDOT took into consideration the comments by our office and multiple consulting parties regarding the two-point deduction for the deck replacement with metal stay-in-place forms. As a result of removing that deduction, we agree that this adjusts the Eligibility score for this bridge from a "Low" Eligibility to "Medium" Eligibility score.

Based on the HPSR Addendum and the updated Historic Bridge Select/Non-Select Analysis, we also agree that the subject bridge receives a "Medium" Condition score in addition to its "Medium" Eligibility score per the methodology in the *Indiana Historic Bridge Inventory, Volume 3.* Thus, we agree that this bridge is programmatically determined a "Select" bridge since it falls within Box 5 of the Historic Bridge Inventory Matrix.

Mary Kennedy January 21, 2021 Page 2

As INDOT's January 8 letter indicates, additional information regarding archaeological resources is forthcoming. Once the indicated information is received, the Indiana SHPO will resume identification and evaluation procedures for this project. Please keep in mind that additional information may be requested in the future.

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 Danielle Kauffmann at (317) 232-0582 or dkauffmann@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: 1701589.

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 dkauffmann@dnr.IN.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on SR 163 over Brouilletts Creek in Clinton Township, Vermillion County (Des. No. 1701589), please continue to refer to DHPA No. 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

4/ Shin

BKM:DMK:dmk

EMC to federal and state agency or consultant staff members:

Kari Carmany-George, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Wade T. Tharp, DNR-DHPA Danielle Kauffmann, DNR-DHPA

EMC to Indiana Historic Preservation Review Board Members:

J. Scott Keller, Review Board
Anne Shaw Kingery, Review Board
Daniel Kloc, AIA, Review Board
Jason Larrison, AIA, Review Board
Chandler Lighty, Review Board
Beth K. McCord, DNR-DHPA, Review Board
April Sievert, Ph.D., Review Board
Christopher Smith, Deputy Director, DNR, and Chairman, Review Board

EMC to potentially interested persons:

Eastern Shawnee Tribe of Oklahoma Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Pokagon Band of Potawatomi Indians Shawnee Tribe Delaware Tribe of Indiana, Oklahoma Forest County Potawatomi Community

Amy Tolbert, Vermillion County Commissioners Harry Crossley, Vermillion County Commissioners Tim Yocum, Vermillion County Commissioners Mary Kennedy January 21, 2021 Page 3

Tim Wilson, Vermillion County Commissioners
Vermillion County Historian
Vermillion County Historical Society
Vermillion County Highway Department
Tommy Kleckner, Indiana Landmarks, Western Regional Office
Dr. James L. Cooper, DePauw University Professor Emeritus of History
Paul Brandenburg, Indiana Historic Spans Task Force
Tony Dillon, Historic Hoosier Bridges
Nathan Holth, HistoricBridges.org
Kitty Henderson, Historic Bridge Foundation
West Central Indiana Economic Development District, Inc.

From: Kennedy, Mary

Sent: Monday, March 22, 2021 9:00 AM

To: Slider, Chad (DNR); Dhpacommentsfromcro, Dnr; Kauffmann, Danielle M; Tharp, Wade; Tommy

Kleckner; Paul Brandenburg; Nathan Holth; Diane Hunter; HLFI Western Regional Office

Cc: Patton, Melissa; Branigin, Susan; Miller, Shaun (INDOT); Carmany-George, Karstin (FHWA); Prevost,

Daniel; Porter, Sean; Wheeler, Christopher; Muellner, Kyle

Subject: FHWA Project: Des. No. 1701589, Consulting Parties Mtg Invitation, SR 163 over Brouilletts Creek,

Vermillion Co, Ind.

Attachments: SR163BrouillettsCrk_DesNo1701589_AltDiscussionMtgInvitation_2021-03-22.pdf

Des. No.: 1701589 **DHPA No.** 24808

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to proceed with proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

To aid in the examination of alternatives to be included in the forthcoming Historic Bridge Alternatives Analysis (HBAA) document, INDOT is inviting you to a consulting parties meeting. The intent of the meeting is to discuss what viable options should be examined in the HBAA document. As summarized in the attached letter, INDOT is considering some alternatives that are not specified in the Historic Bridges PA PDP or the HBAA template document, but which could provide more flexibility in preserving this Select Bridge. Consulting party input on these alternatives will help INDOT determine which ones should be pursued further in the HBAA document. The letter is also available 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 your comments. If a hard copy of the materials is needed, please respond to this email with your request as soon as possible.

The consulting parties meeting is scheduled for April 7, 2021, at 10:00 AM eastern. See the link below to log into the meeting.

Microsoft Teams meeting

Join on your computer or mobile app

Click here to join the meeting Learn More | Meeting options

Tribal contacts 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 smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Thank you in advance for your input,

Mary E. Kennedy
Historic Bridge Specialist
100 N. Senate Ave., Room N758-ES
Indianapolis, IN 46204
Email: mkennedy@indot.in.gov



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204 PHONE: (317) 296-0799

Eric Holcomb, Governor Joe McGuinness, Commissioner

March 22, 2021

This letter was sent to the listed parties.

RE: Dual Review Project: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Vermillion County, Indiana

Des. No. 1701589 DHPA No. 24808

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration, proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 December 19, 2019. Responses accepting the invitation to participate in the Section 106 process for this project were initially received from the Miami Tribe of Oklahoma, the Indiana State Historic Preservation Officer (SHPO), and the Western Regional Office of Indiana Landmarks. Representatives with the Historic Spans Task Force and Historicbridges.org subsequently joined consultation for the project. An email on April 2, 2020 notified consulting parties that a historic property short report (HPSR) was available for review and comment. A Historic Bridge Select/Non-Select Analysis was sent out on May 26, 2020 for review and comment. It was sent to all originally invited consulting parties, whether or not they responded to the December 19, 2019 invitation letter, in order to request that this project be subjected to "dual review." A HPSR Addendum and an updated Historic Bridge Select/Non-Select Analysis were sent to consulting parties on January 8, 2021.

INDOT Bridge No. 163-83-01393A is a single span, metal Parker through truss that was designed by the Indiana State Highway Commission and built from 1932-1933 by the Vincennes Bridge Company. The bridge's deck and railings were replaced in 1979. The bridge was determined not to be eligible for the National Register of Historic Places (NRHP) in the Indiana Historic Bridge Inventory conducted by Mead & Hunt on INDOT's behalf (Volume 2, Section 2, page 1022). However, the HPSR recommended the bridge is now eligible for listing in the NRHP due to the fact that it is now considered a scarce type for its region, combined with the fact that it was built by a significant Indiana builder.

The proposed undertaking is on SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, in Vermillion County, Indiana. It is within Clinton Township, on the Saint Bernice and Clinton USGS Topographic Quadrangle, in Sections 10, 11, 14, and 15 of Township 14 North, Range 10 West.

The purpose of the proposed project is to address the deteriorated condition of the bridge. In the October 15, 2018 Bridge Inspection Report, the bridge was given a sufficiency rating of 49.3 (out of 100). The substructure was rated 4 (out of 9; poor condition), with cracking wingwalls and advanced spalling. The superstructure was rated 5 (fair condition) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank was noted.



In accordance with 36 CFR 800.2 (c), you were invited to become a consulting party as part of the Section 106 process, and you are hereby invited again 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 https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf.

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. 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, and the above-mentioned HPSR was prepared. As a result of the historic property identification and evaluation efforts, Bridge No. 163-83-01393A is the only resource in the APE recommended as eligible for listing in the NRHP. The results of archaeological identification and evaluation efforts for the APE will be forthcoming.

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. 163-83-01393A was recommended as a Select Bridge in the updated Historic Bridge Select/Non-Select Analysis (Parsons, 01/07/21), the PDP in Stipulation III.A. of the Historic Bridges PA will be followed.

To aid in the examination of alternatives to be included in the forthcoming Historic Bridge Alternatives Analysis (HBAA) document, INDOT will host a consulting parties meeting, which will be conducted virtually on Microsoft Teams. The meeting is scheduled for April 7, 2021, at 10:00 AM eastern. See the link below to log into the meeting.

Microsoft Teams meeting

Join on your computer or mobile app

Click here to join the meeting

(https://teams.microsoft.com/l/meetup-

<u>join/19%3ameeting_NjM0OWI1ODktMWRkZS00YjBILTk0NjUtMDA4OTg2MWY1MjBI%40thread.v2/0?context=%7b%</u>

22Tid%22%3a%222199bfba-a409-4f13-b0c4-18b45933d88d%22%2c%22Oid%22%3a%22664cbb50-1cc4-4d96-

85f3-285ef237b5aa%22%7d)

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The intent of the meeting is to discuss what viable options should be examined in the HBAA document. As summarized below, INDOT is considering some alternatives that are not specified in the Historic Bridges PA PDP or the HBAA template document, but which could provide more flexibility in preserving this Select Bridge. Consulting party input on these alternatives will help INDOT determine which ones should be pursued further in the HBAA document.

The alternatives that INDOT would like to discuss at the consulting party meeting are as follows:

1. **Rehabilitation in place for continued vehicular use (two-way traffic).** This alternative would involve rehabilitation of the existing structure to extend the service life of the bridge while adhering to the Secretary of the Interior's

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Des. 1701589 Appendix D Appendix D-65

Standards for Rehabilitation. The proposed work for this alternative would include repairing or replacing damaged/deteriorated structural members as appropriate, along with work to the abutments and stream bank as appropriate.

- a. **Pros:** This alternative would continue the usage of the bridge as-is and retain the historic character of the bridge.
- b. **Cons:** This alternative would further narrow the already substandard lane and shoulder width, which poses increased risks to the bridge and the traveling public. The bridge roadway width is 23.9 ft., which means there are currently reduced lanes and substandard shoulders across the structure, compared to the approach roadway. The existing aluminum guardrail on the structure would be replaced with crash-tested barrier rail which meets current standards, further reducing the roadway width. The guardrail on the bridge has been struck in the past, as evidenced through visible damage to the structure and reported incidents. The narrow width of the bridge compared to current standards could make the bridge prone to continued vehicular strikes, which is the major concern with this alternative, especially since the bridge is also located on a substandard alignment between two horizontal curves making a narrowed clear roadway even more of a concern.
- 2. **Rehabilitation in place for continued vehicular use (one-way traffic).** This alternative would involve rehabilitation of the existing structure to extend the service life of the bridge while adhering to the Secretary of the Interior's Standards for Rehabilitation. The proposed work for this alternative would include repairing or replacing damaged/deteriorated structural members as appropriate, along with work to the abutments and stream bank as appropriate. Additionally, this alternative would involve the installation of traffic signals at each end of the bridge to regulate the traffic flow over the bridge in a one-way, one-lane fashion.
 - a. **Pros:** Operating in a one-lane fashion, the roadway width across the bridge would not be a concern. This alternative would retain the historic character of the bridge.
 - b. **Cons:** This alternative would change the usage of the bridge from two-way traffic to one-way traffic as regulated by traffic signals. While not perceived by the project team as a historic preservation concern, more traffic analysis is needed to ensure traffic operations issues would not arise. Driver expectation would not be for signals to control traffic at the bridge, and therefore, compliance could be an issue.
- 3. **Rehabilitation in place, including widening, for continued vehicular use.** This alternative would involve rehabilitation of the existing structure to extend the service life of the bridge, but it would not adhere to the Secretary of the Interior's Standards for Rehabilitation because widening of the bridge would occur. The proposed work for this alternative would include repairing or replacing damaged/deteriorated structural members as appropriate. It would also include disconnecting one truss from the rest of the bridge and reconnecting the truss to the rest of the bridge with new components that extend the width of the deck and overhead structural members. Work to the abutments would be needed to accommodate the new structure width, and stream bank work would occur as appropriate.
 - a. **Pros:** The width across the bridge deck would be to current standards.
 - b. **Cons:** This alternative would alter the historic character of the bridge, changing its overall appearance and adding more new material than a traditional rehabilitation. A majority of the structural members would be replaced, as they would not be strong enough to achieve the require load capacity with the configuration of a widened structure.

For an example of a widened, rehabilitated truss in Vermont, please see the following links: https://www.constructionequipmentguide.com/checkered-house-bridge-undergoes-three-year-makeover/18935; https://bridgehunter.com/vt/chittenden/200284002404112/. It is noted in the first link that the new and old steel were not "blended" in order to make the new parts of the bridge clearly discernible from the original bridge.

4. Rehabilitation in place, including widening with a new superstructure, for continued vehicular use. A new superstructure would span the creek independently of the existing trusses, which would be rehabilitated, widened with additional and replaced materials, and attached to the new structure. This alternative would not adhere to the Secretary of the Interior's Standards for Rehabilitation because the trusses would be applied to a new superstructure. The proposed work for this alternative would include repairing or replacing damaged/deteriorated structural members as appropriate, likely with less replacement members than previous alternatives due to the trusses no longer needing to carry the weight of the deck and roadway. It would also include disconnecting one truss from the rest of the bridge and reconnecting the truss to the rest of the bridge with new components that extend the width of the deck and overhead



structural members. Work to the abutments would be needed to accommodate the new superstructure, and stream bank work would occur as appropriate.

- a. **Pros:** The width across the bridge deck would be to current standards on a new superstructure. This alternative would retain more of the overall historic materials of the bridge than Alternative 3, and would likely allow the truss to stay at this location in perpetuity because it would be serving as an architectural element and would no longer be subjected to ever increasing traffic loads.
- b. **Cons:** This alternative would alter the historic character of the bridge, changing its overall appearance and function. The trusses would lose some of their engineering significance by not functioning as originally designed and built. The trusses would serve, in essence, as architectural treatments on the new structure.

For an example of a truss in New York rehabilitated in a similar manner, see the following links: https://www.roadsbridges.com/no-issues-weight; https://www.erdmananthony.com/Our-Projects/project/357.

We look forward to discussion and input on these alternatives at the consulting parties meeting, including additional pros and cons of each alternative from the consulting parties' perspectives. If you cannot attend the meeting, we would appreciate and welcome your written comments via email.

This letter is available for review in IN SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review this information and to respond with comments. If you prefer a hard copy of this material, please make your request as soon as possible.

Please review the information and comment within thirty (30) calendar days of receipt. For questions concerning specific project details or to provide any comments on the project, you may contact Mary Kennedy of this office at 317-694-3607 or mkennedy@indot.in.gov.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

We look forward to your participation in the meeting on April 7, 2021.

Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office

Environmental Services

Distribution List:

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State

Historic Preservation Officer (SHPO)

Indiana Landmarks, Western Regional Office

Paul Brandenburg, Historic Spans Task Force

Nathan Holth, Historicbridges.org

Miami Tribe of Oklahoma



www.in.gov/dot/

From: Kennedy, Mary

Sent: Tuesday, April 13, 2021 11:05 AM

To: Kauffmann, Danielle M; Tharp, Wade; Tommy Kleckner; Paul Brandenburg; Nathan Holth; Diane

Hunter; west@indianalandmarks.org; Paul Brandenburg

Cc: Patton, Melissa; Branigin, Susan; Miller, Shaun (INDOT); Carmany-George, Karstin (FHWA); Prevost,

Daniel; Porter, Sean; Wheeler, Christopher; Muellner, Kyle; Klevitsky, Gregory; Kahn, Brad

Subject: FHWA Project: Des. No. 1701589, Consulting Parties Mtg Summary, SR 163 over Brouilletts Creek,

Vermillion Co, Ind.

Attachments: SR163Brouilletts_Des1701589_CPMtqSummary_2021-04-07.pdf

Des. No.: 1701589 **DHPA No.** 24808

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

As part of Section 106 of the National Historic Preservation Act, a summary of the Consulting Parties Meeting held on April 7, 2021, has been prepared and is ready for review and comment by consulting parties. The summary is attached and is also available in IN-SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des No. is the most efficient search term, once in IN-SCOPE). If a hard copy of the materials is needed, please respond to this email with your request as soon as possible.

Comments on the information provided in the March 22, 2021 correspondence and in the April 7, 2021 meeting are requested by April 30, 2021 to the contact listed below. These comments will be taken into consideration during the development of the Historic Bridge Alternatives Analysis (HBAA) document.

Tribal contacts 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 smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Thank you in advance for your input,

Mary E. Kennedy

Historic Bridge Specialist

100 N. Senate Ave., Room N758-ES

Indianapolis, IN 46204

Email: mkennedy@indot.in.gov

Phone: 317-694-3607

Core work hours: 8:00 AM-2:45 PM Mon-Thurs





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 22, 2021



Mary Kennedy Cultural Resources Office Indiana Department of Transportation 100 N. Senate Avenue, IGCN758-ES Indianapolis, Indiana 46204

Federal Agency: Federal Highway Administration, Indiana Division ("FHWA")

State Agency: Indiana Department of Transportation ("INDOT")

Re: DUAL REVIEW: Consulting party meeting invitation and subsequent meeting

summary for INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana (Des. No. 1701589; DHPA No. 24808)

Dear Ms. Kennedy:

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 State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the 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") has reviewed your March 22, 2021 review request submittal form which enclosed INDOT's distribution letter with project information and an invitation to the April 7 Consulting Parties meeting, received by our office the same day. We also reviewed the Consulting Parties meeting summary, dated and received by our office April 13, 2021, all for this project in Vermillion County.

Danielle Kauffmann and Wade Tharp of my office virtually attended the April 7 Consulting Parties meeting. Regarding the meeting summary, we have no corrections to suggest.

Regarding Alternative 1 (rehabilitate truss for continued two-way traffic), we recognize that this may not achieve the project's purpose and need as the narrow width of the travel lanes and shoulders would still present an issue for traffic safety and protection of the historic bridge. Alternative 2 on the other hand, allows one-way traffic on the bridge that is stop-controlled on either end. As long as traffic patterns allow this, we see this alternative as a workable solution to preserve the bridge and keep it in use.

Alternative 3 would require widening the truss which would alter the aesthetics and materials of the bridge to accommodate its change in size. This alternative, while extending the life of the bridge to ~30 years, it is the same as Alternatives 1 and 2, which seems to be more work to achieve the same result, at the risk of altering the bridge and its character-defining features that warrant its eligibility for inclusion in the National Register of Historic Places.

We agree that Alternative 4 (superstructure replacement with a widened truss used as a decorative feature) and Alternative 6 (rehab truss for pedestrian use) will be eliminated from consideration after the discussion during the consulting parties meeting. Alternative 5 would rehab the bridge similar to Alternative 2, but also construct a new bridge to handle one-way traffic in

Mary Kennedy April 22, 2021 Page 2

conjunction with the historic bridge. We recognize that the major difference between Alternatives 2 and 5 will come down to the cost of the new bridge. However, the new bridge would carry a longer design life and be built to accommodate two-way traffic, should the historic bridge be taken out of service. This seems to be an alternative that accomplishes the project's goals long-term.

Regarding archaeology, it is our understanding from INDOT's January 8, 2021 distribution letter that the results of below-ground cultural resource identification and evaluation efforts will be forthcoming. Once the indicated information is received, the Indiana SHPO will resume identification and evaluation procedures for this project. Please keep in mind that additional information may be requested in the future.

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 Danielle Kauffmann at (317) 232-0582 or dkauffmann@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 on IN SCOPE at http://erms.indot.in.gov/Section106Documents/. From there, search by this project's Des. Number: 1701589.

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 dkauffmann@dnr.IN.gov and so advise us.

In all future correspondence regarding the dual review of this bridge project on SR 163 over Brouilletts Creek in Vermillion County (Des. No. 1701589), please continue to refer to DHPA 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

BKM:DMK:dmk

emc

EMC to federal and state agency or consultant staff members:

Kari Carmany-George, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Wade T. Tharp, DNR-DHPA Danielle Kauffmann, DNR-DHPA

EMC to Indiana Historic Preservation Review Board Members:

J. Scott Keller, Review Board
Anne Shaw Kingery, Review Board
Daniel Kloc, AIA, Review Board
Jason Larrison, AIA, Review Board
Chandler Lighty, Review Board
Beth K. McCord, DNR-DHPA, Review Board
April Sievert, Ph.D., Review Board
Christopher Smith, Deputy Director, DNR, and Chairman, Review Board

EMC to potentially interested persons:

Miami Tribe of Oklahoma
Miami Tribe of Oklahoma
Peoria Tribe of Indians of Oklahoma
Pokagon Band of Potawatomi Indians
Shawnee Tribe

Mary Kennedy April 22, 2021 Page 3

> Delaware Tribe of Indiana, Oklahoma Forest County Potawatomi Community

Amy Tolbert, Vermillion County Commissioners
Harry Crossley, Vermillion County Commissioners
Tim Yocum, Vermillion County Commissioners
Tim Wilson, Vermillion County Commissioners
Vermillion County Historian
Vermillion County Historial Society
Vermillion County Highway Department
Tommy Kleckner, Indiana Landmarks, Western Regional Office
Dr. James L. Cooper, DePauw University Professor Emeritus of History
Paul Brandenburg, Indiana Historic Spans Task Force
Tony Dillon, Historic Hoosier Bridges
Nathan Holth, HistoricBridges.org
Kitty Henderson, Historic Bridge Foundation
West Central Indiana Economic Development District, Inc.

From: Kennedy, Mary

Sent: Monday, November 1, 2021 10:51 AM

To: Kauffmann, Danielle M; Tharp, Wade; Tommy Kleckner; Paul Brandenburg; Nathan Holth; Diane

Hunter; west@indianalandmarks.org; Paul Brandenburg

Cc: Heck, Sara R; Branigin, Susan; Miller, Shaun (INDOT); Carmany-George, Karstin (FHWA); Prevost,

Daniel; Porter, Sean; Wheeler, Christopher; Muellner, Kyle; Klevitsky, Gregory; Kahn, Brad

Subject: FHWA Project: Des. No. 1701589, HBAA, SR 163 over Brouilletts Creek, Vermillion Co, Ind.

Des. No.: 1701589 **DHPA No.** 24808

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

As part of Section 106 of the National Historic Preservation Act, a Historic Bridge Alternatives Analysis (HBAA) has been prepared and is ready for review and comment by consulting parties. The HBAA is available in IN-SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des No. is the most efficient search term, once in IN-SCOPE). If a hard copy of the materials is needed, please respond to this email with your request as soon as possible.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment.

Tribal contacts 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 smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Thank you in advance for your input,

Mary E. Kennedy

Historic Bridge Specialist

100 N. Senate Ave., Room N758-ES

Indianapolis, IN 46204

Email: mkennedy@indot.in.gov

Phone: 317-694-3607

Core work hours: 8:00 AM-2:45 PM Mon-Thurs





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

^{**}Link to the CRO-Public Web Map App can be found here



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204 PHONE: (317) 296-0799

Eric Holcomb, Governor Joe McGuinness, Commissioner

November 1, 2021

This letter was sent to the listed parties.

RE: Dual Review Project: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Vermillion County, Indiana

Des. No. 1701589 DHPA No. 24808

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration, proposes to proceed with a project for INDOT Bridge No. 163-83-01393A (NBI No. 28420) on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 December 19, 2019. Responses accepting the invitation to participate in the Section 106 process for this project were received from the Miami Tribe of Oklahoma, the Indiana State Historic Preservation Officer (SHPO), and the Western Regional Office of Indiana Landmarks. An email on April 2, 2020 notified consulting parties that a historic property short report (HPSR; Kennedy, March 23, 2020) was available for review and comment. A Historic Bridge Select/Non-Select Analysis was sent out on May 26, 2020 for review and comment. It was sent to all originally invited consulting parties, whether or not they responded to the December 19, 2019 invitation letter, in order to request that this project be subjected to "dual review."

INDOT Bridge No. 163-83-01393A is a single span, metal Parker through truss that was designed by the Indiana State Highway Commission, and built from 1932-1933 by the Vincennes Bridge Company. The bridge's deck and railings were replaced in 1979. The bridge was determined not to be eligible for the National Register of Historic Places (NRHP) in the Indiana Historic Bridge Inventory conducted by Mead & Hunt on INDOT's behalf (Volume 2, Section 2, page 1022). However, the HPSR recommended the bridge is now eligible for listing in the NRHP due to the fact that it is now considered a scarce type for its region, combined with the fact that it was built by a significant Indiana builder.

The proposed undertaking is on SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, in Vermillion County, Indiana. It is within Clinton Township, on the Saint Bernice and Clinton USGS Topographic Quadrangle, in Sections 10, 11, 14, and 15 of Township 14 North, Range 10 West.

The purpose of the proposed project is to address the deteriorated condition of the bridge. In the October 15, 2018 Bridge Inspection Report, the bridge was given a sufficiency rating of 49.3 (out of 100). The substructure was rated 4 (out of 9; poor condition), with cracking wingwalls and advanced spalling. The superstructure was rated 5 (fair condition) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank was noted.

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In accordance with 36 CFR 800.2 (c), you were invited to become a consulting party as part of the Section 106 process, and you are hereby invited again 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 https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf.

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 14-21-18 (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 results of archaeological identification and evaluation efforts for the APE will be forthcoming. A historian who meets the Secretary of the Interior's Professional Qualification Standards identified and evaluated aboveground resources within the APE for potential eligibility for the NRHP, and the above-mentioned HPSR was prepared. As a result of the historic property identification and evaluation efforts, Bridge No. 163-83-01393A is the only resource in the APE recommended as eligible for listing in the NRHP.

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. 163-83-01393A was not recommended NRHP eligible in the original Historic Bridge Inventory results, it was not subjected to a Select/Non-Select analysis at that time.

On May 26, 2020, a Historic Bridge Select/Non-Select Analysis (Parsons, 5/20/2020) was distributed for consulting party review. The report concluded that based on Bridge No. 163-83-01393A being assigned a "Low" Eligibility Score in the HPSR, and a "Medium" Condition score (37) based on the condition analysis in the Select/Non-Select report, the bridge would be placed in Box 8 of the Selection Matrix from the Inventory (Volume 3). As defined in the *Inventory*, bridges in Boxes 6, 7, 8, and 9 are Non-Select bridges due to their low priority through a combination of Eligibility and Condition Scores.

Based on input received from consulting parties on the Select/Non-Select Analysis document, INDOT reexamined the National Register eligibility assessment for the bridge through an addendum to the HPSR. The HPSR addendum (dated December 31, 2020) assigned a total of five (5) points to Bridge No. 163-83-01393A as its Eligibility Score, which moved it to "Medium." Additionally, an updated Historic Bridge Select/Non-Select Analysis (dated January 7, 2021) was prepared. Based on the updated Eligibility Score, the bridge possessed a "Medium" Eligibility and "Medium" Condition score, placing the bridge in Box 5 of the Historic Bridge Inventory Selection Matrix. As defined in *Indiana Historic Bridge Inventory, Volume 3*, bridges in Boxes 4 and 5 that have a "Medium" Eligibility Score and "High" or "Medium" Condition Score are programmatically determined Select unless they were constructed after 1944. The HPSR addendum and updated Select/Non-Select Analysis document were distributed for consulting party review on January 8, 2021.

To aid in the examination of alternatives to be included in the Historic Bridge Alternatives Analysis (HBAA) that was under development, on March 22, 2021, INDOT invited consulting parties to a meeting to discuss what viable options should be examined in the HBAA document. The meeting was held on April 7, 2021, and a meeting summary was distributed on April 13, 2021.

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The HBAA document is now available for review in IN SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review these documents and to respond with comments. 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. For questions concerning specific project details or to provide any comments on the project, you may contact Mary Kennedy of this office at 317-694-3607 or mkennedy@indot.in.gov.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Sincerely,

Anuradha V. Kumar, Manager

Cultural Resources Office Environmental Services

Enclosures:

Historic Bridge Alternatives Analysis (HBAA)

Distribution List:

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA), Indiana State Historic Preservation Officer (SHPO)
Indiana Landmarks, Western Regional Office

Paul Brandenburg, Historic Spans Task Force

Historicbridges.org

Miami Tribe of Oklahoma



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



November 22, 2021

Mary Kennedy Cultural Resources Office Indiana Department of Transportation 100 N. Senate Avenue, IGCN 758-ES Indianapolis, Indiana 46204

State Agency: Indiana Department of Transportation ("INDOT"),

Federal Agency: Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Historic bridge alternatives analysis for the INDOT Bridge No. 163-83-01393A on

SR 163 over Brouilletts Creek, Clinton Township, Vermillion County (Des. No. 1701589; DHPA No.

24808)

Dear Ms. Kennedy:

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") has reviewed your November 1, 2021, submission which included the historic bridges alternatives analysis ("HBAA"), received by our office the same day for this project.

The subject bridge is a c. 1932 Parker thru truss built by the Vincennes Building Company. Through this review process, the bridge was re-evaluated for National Register eligibility and determined eligible for inclusion in the National Register of Historic Places ("NRHP"). Following the January 7, 2021, updated Select/Non-Select Analysis, the bridge was programmatically determined "Select" as it possessed a "Medium" eligibility and "Medium" condition score per the Historic Bridge Inventory Selection Matrix.

Based on the results of the HBAA that was previously discussed at the April 7, 2021, consulting parties meeting, we agree that Alternative 3: Rehabilitation for Continued Vehicular Use – One Way Operation & Alternative 4: Rehabilitation for Continued Vehicular Use – One Way Pair are the only alternatives that are both feasible and prudent as Alternative 1: No Build does not address the project's purpose and need, and Alternative 2: Rehabilitation for Continued Vehicle Use – Two Way Operation does not address geometric needs of the bridge rehabilitation. Both Alternatives 3 & 4 would transform the historic bridge to one-way traffic, but we recognize why Alternative 3 is preferable as it does not require the construction of an adjacent new bridge causing greater impacts and requiring a maintenance commitment. However, the feasibility of Alternative 4 may also be prudent at a future date should the structural capacity and traffic numbers warrant a need to satisfy future demand at this location.

Furthermore, while the scope of work presented in Alternatives 3 & 4 includes the replacement of numerous steel materials, we note within the HBAA that the replacement with modern steel will replicate "the dimensions of the existing members, maintaining the aesthetic and engineering integrity of replaced portions of the truss." Additionally, both Alternatives 3 & 4 would increase the lifespan of the historic bridge by approximately 30 years.

Mary Kennedy November 22, 2021 Page 2

Since Alternative 3 is the preferred alternative for this project, as part of mitigation, we request that this bridge be photographically documented. We request color, digital images that provide overviews of the resource, along with detailed shots of character-defining features. In addition to photographs, please provide a photo log that corresponds to the photographs, a photo key, and an overview thumbnail sheet. Please submit a draft copy of this documentation on a CD, flash drive, or any other previously approved storage transfer method for our review and approval. Upon approval, this documentation should be provided to a public or not-for-profit organization that is willing to accept a copy of this documentation and make it available to the public. Please inform us which local or not-for-profit organization is willing to accept this documentation.

As INDOT's November 1, 2021, distribution letter indicates, below-ground cultural resource identification and evaluation efforts will be forthcoming. Once the indicated information is received, the Indiana SHPO will resume identification and evaluation procedures for this project. Please keep in mind that additional information may be requested in the future.

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 this submission can be found online at http://erms.indot.in.gov/Section106Documents/. From there, search by this project's designation number: 1701589.

If you have questions regarding our dual review of the aforementioned project, please contact DNR-DHPA. Questions about archaeological issues should be directed to contact 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 Danielle Kauffmann at (317) 232-0582 or dkauffmann@dnr.IN.gov.

In all future correspondence regarding the dual review of this bridge rehabilitation project on SR 163 over Brouilletts Creek in Vermillion County (Des. No. 1701589), please refer to DHPA No. 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

Director, Division of Historic Preservation and Archaeology

14/ Shin

BKM:DMK:dmk

EMC to federal and state agency or consultant staff members:

Kari Carmany-George, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Wade T. Tharp, DNR-DHPA Danielle Kauffmann, DNR-DHPA

EMC to Indiana Historic Preservation Review Board Members:

J. Scott Keller, Review Board
Daniel Kloc, AIA, Review Board
Jason Larrison, AIA, Review Board
Chandler Lighty, Review Board
Beth K. McCord, DNR-DHPA, Review Board
Ryan Mueller, Deputy Director, DNR, and Chairman, Review Board
Anne Shaw, Review Board
April Sievert, Ph.D., Review Board

EMC to potentially interested persons:

Eastern Shawnee Tribe of Oklahoma Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Pokagon Band of Potawatomi Indians Shawnee Tribe Delaware Tribe of Indiana, Oklahoma Forest County Potawatomi Community

Amy Tolbert, Vermillion County Commissioners Harry Crossley, Vermillion County Commissioners Tim Yocum, Vermillion County Commissioners Mary Kennedy November 22, 2021 Page 3

Tim Wilson, Vermillion County Commissioners
Vermillion County Historian
Vermillion County Historical Society
Vermillion County Highway Department
Tommy Kleckner, Indiana Landmarks, Western Regional Office
Paul Brandenburg, Indiana Historic Spans Task Force
Tony Dillon, Historic Hoosier Bridges
Nathan Holth, HistoricBridges.org
Kitty Henderson, Historic Bridge Foundation
West Central Indiana Economic Development District, Inc.

From: Kennedy, Mary

Sent: Monday, November 29, 2021 4:12 PM

To: Kauffmann, Danielle M; Slider, Chad (DNR); McCord, Beth K; Tharp, Wade; 'Betsy Merritt ';

jhaddock@purdue.edu; Paul Brandenburg; Mark Dollase (MDollase@indianalandmarks.org);

stephanie@indianacountycommissioners.com; Diebold, Paul; Clarke, David (FHWA); Mandy Ranslow;

iaches@earthlink.net; iaches@indianacounties.org; 'Larry Smith'; info@vcihs.com; eliza@integrityred.com; tim.yocum@vermillioncounty.in.gov; timyocum2@gmail.com;

ronalddunavan@gmail.com; britton.luther@vermillioncounty.in.gov;

brenda.furry@vermillioncounty.in.gov; milisa.carty@vermillioncounty.in.gov;

west@indianalandmarks.org; Tommy Kleckner; kitty@historicbridgefoundation.com; Nathan Holth;

spansaver@hotmail.com; thpo@estoo.net; Diane Hunter; Karen Stand;

'Matthew.Bussler@pokagonband-nsn.gov'; tonya@shawnee-tribe.com; lheady@delawaretribe.org;

Michael LaRonge

Cc: Branigin, Susan; Kumar, Anuradha; Wheeler, Christopher; Heck, Sara R; Kurtz, Randy; Carmany-

George, Karstin (FHWA); Ortiz, Jose (FHWA); Port, Juliet; Porter, Sean; Muellner, Kyle; Prevost, Daniel

Subject: FHWA project: Proposed reclassification of INDOT Bridge No. 163-83-01393A (NBI No. 28420), SR

163 Brouilletts Creek, 1.18 miles east of SR 71, Owen County, Indiana

Des. No.: 1701589 **DHPA No.** 24808

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana

In 2009, the *Indiana Historic Bridge Inventory* determined Bridge No. 163-83-01393A, carrying SR 163 over Brouilletts Creek, 1.18 miles east of SR 71 in Vermillion County, was not eligible for listing in the National Register of Historic Places (National Register) under any criteria, and the Federal Highway Administration (FHWA) signed a Final Determination on National Register Eligibility on February 23, 2009. Documents related to this determination can be found here: http://www.in.gov/indot/2531.htm.

During the Section 106 consultation process for a bridge project along SR 163 involving Bridge No. 163-83-01393A (INDOT Des. No. 1701589), a Historic Properties Short Report (HPSR; Kennedy, 3-23-20) included a National Register-eligibility evaluation of Bridge No. 163-83-01393A in order to see if the determination from the *Inventory* held true with the passage of time. The HPSR recommended Bridge No. 163-83-01393A eligible for listing in the National Register under Criterion C for its engineering significance, as a rare example of its type within its region and as an example of a structure built by a significant Indiana firm, the Vincennes Bridge Company.

The HPSR and a subsequent addendum (Kennedy,12-31-20) can be downloaded by accessing INDOT's Section 106 document posting website, IN SCOPE, at http://erms.indot.in.gov/Section106Documents. Please use the identification details provided above or use the designation number, 1701589, to search for the report.

In Stipulation II.A.2, the *Programmatic Agreement on the Management and Preservation of Indiana's Historic Bridges* (Historic Bridges PA) provides the following provision regarding reclassifying a non-National Register-eligible bridge as National Register eligible:

"Bridges determined not to be NRHP eligible require no further consideration by INDOT and FHWA, unless later determined eligible for the NRHP in response to a nomination, or based on additional information or changed circumstances."

In the above stipulation, the Historic Bridge PA does not specify any procedures for reclassifying a bridge outside the National Register nomination process (i.e., based on additional information or changed circumstances). However, in

Section 5 of Volume 3 of the *Bridge Inventory,* Special Circumstances and Periodic Updates, it is explained that the FHWA, INDOT, and the Indiana Historic Preservation Officer (INSHPO) have agreed to adhere to a similar process to that outlined in Stipulation II.C of the Historic Bridge PA.

INDOT is recommending that this bridge be reclassified as a National Register eligible bridge. Additionally, INDOT is recommending that it be classified as a "Select" bridge. The proposed "Select" classification is based upon a Historic Bridge Select/Non-Select Analysis (Parsons, 5-20-20), an updated Select/Non-Select Analysis document (Parsons, 1-7-21), and a Historic Bridge Alternatives Analysis (HBAA; Parsons, 9-15-21). All three documents can be found in IN SCOPE. INDOT currently plans to rehabilitate the bridge for continued vehicular use, but would reduce the roadway to a single lane, using a signal at either end to maintain bi-directional travel, which is detailed in the HBAA. Per the Historic Bridges PA, "Select" bridges are historic bridges that are most suitable for preservation and are excellent examples of a given type of historic bridge. A copy of the Historic Bridges PA can be found here: http://www.in.gov/indot/2530.htm.

Following the process outlined in Stipulation II.C, INDOT is hereby notifying the public of the recommendation to reclassify Bridge No. 163-83-01393A to be considered a National Register eligible, Select bridge. Comments regarding this reclassification of the bridge may be sent to the contact listed below through the close of business on Friday, December 31, 2021.

INDOT will provide a copy of all comments received to FHWA and the INSHPO. FHWA and the INSHPO will consult to evaluate the request and consider the comments received. If FHWA and the INSHPO agree on the reclassification of the bridge, then FHWA will notify INDOT of the decision within 30 days after receiving the documentation. INDOT will notify the Task Group and all individuals that provided comments on the bridge of the decision, as well as report the decision in the next annual report prepared for the Historic Bridges PA.

Thank you.

Comments may be sent to:

Mary E. Kennedy

Historic Bridge Specialist

100 N. Senate Ave., Room N758-ES

Indianapolis, IN 46204

Email: mkennedy@indot.in.gov

Phone: 317-694-3607

Core work hours: 8:00 AM-2:45 PM Mon-Thurs Typically on site Tues; Remote Mon, Weds, Thurs







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

**Link to the CRO-Public Web Map App can be found here

From: Tony Dillon <spansaver@hotmail.com>
Sent: Wednesday, December 1, 2021 3:00 AM

To: Kennedy, Mary

Subject: Re: FHWA project: Proposed reclassification of INDOT Bridge No. 163-83-01393A (NBI No. 28420), SR

163 Brouilletts Creek, 1.18 miles east of SR 71, Owen County, Indiana

Follow Up Flag: Follow up Flag Status: Flagged

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

Mary,

Thank you for your work in reclassifying this structure.

As the number of historic bridges in Indiana continues to shrink, albeit much slower than in many other states, this process should move forward with other currently classified "Non-Select" spans. With the tragic situation that occurred at the US-41 Bridge in Evansville and the impending (and unnecessary) destruction of the SR-26 span in Jay County, the remaining pool of state highway design Parker trusses are especially vulnerable.

Having seen the detrimental handling of historic truss bridges in many other states firsthand, I can say that I have generally been quite happy with the way Indiana has performed in this regard. Of course there is always room for improvement.

Thanks again!

Tony

Tony Dillon Historic Hoosier Bridges 208 North 17th Street New Castle, IN 47362 (765)624-6558 spansaver@hotmail.com



EASTERN SHAWNEE CULTURAL PRESERVATION DEPARTMENT

70500 East 128 Road, Wyandotte, OK 74370

December 30, 2021 INDOT - Indiana Department of Transportation 100 N. Senate Ave. IGCN642 Indianapolis, IN 46201

RE: Des No. 1701589, DHPA No. 24808, Vermillion County, Indiana

Dear Mrs. Kennedy,

The Eastern Shawnee Tribe has received your letter regarding the above referenced project(s) within Vermillion County, Indiana. The Eastern Shawnee Tribe is committed to protecting sites important to Tribal Heritage, Culture and Religion. Furthermore, the Tribe is particularly concerned with historical sites that may contain but not limited to the burial(s) of human remains and associated funerary objects.

As described in your correspondence, and upon research of our database(s) and files, we find our people occupied these areas historically and/or prehistorically. However, the project proposes **NO Adverse Effect** or endangerment to known sites of interest to the Eastern Shawnee Tribe. Please continue project as planned. However, should this project inadvertently discover an archeological site or object(s) we request that you immediately contact the Eastern Shawnee Tribe, as well as the appropriate state agencies (within 24 hours). We also ask that all ground disturbing activity stop until the Tribe and State agencies are consulted. Please note that any future changes to this project will require additional consultation.

In accordance with the NHPA of 1966 (16 U.S.C. § 470-470w-6), federally funded, licensed, or permitted undertakings that are subject to the Section 106 review process must determine effects to significant historic properties. As clarified in Section 101(d)(6)(A-B), historic properties may have religious and/or cultural significance to Indian Tribes. Section 106 of NHPA requires Federal agencies to consider the effects of their actions on all significant historic properties (36 CFR Part 800) as does the National Environmental Policy Act of 1969 (43 U.S.C. § 4321-4347 and 40 CFR § 1501.7(a). This letter evidences NHPA and NEPA historic properties compliance pertaining to consultation with this Tribe regarding the referenced proposed projects.

Thank you, for contacting the Eastern Shawnee Tribe, we appreciate your cooperation. Should you have any further questions or comments please contact our Office.

Sincerely,

Paul Barton, Tribal Historic Preservation Officer (THPO) Eastern Shawnee Tribe of Oklahoma

(918) 666-5151 Ext:1833

From: Leah Konicki < lkonicki@ascgroup.net> Sent: Monday, January 24, 2022 8:17 AM

To: **DNR DHPAReview**

Cc: Kennedy, Mary; Miller, Shaun (INDOT); Port, Juliet; 'Jennifer.Graf@parsons.com'

Subject: DHPA submittal-FHWA Project: Des. No. 1701589; Archeology Report, SR 163 over Brouilletts Creek,

Vermillion County, Indiana

Attachments: SR 163 Brouilletts Crk_DN1701589_ASR_RDL.PDF; SR163 over BrouillettesCrk_DN1701589_ASR_

12.14.21.pdf

Follow Up Flag: Follow up Flag Status: Flagged

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Ms. Burkett,

Attached are a distribution letter and archaeological short report which are being submitted for DHPA review. A hard copy of the attached will be prepared and submitted as well.

Leah J. Konicki Principal Investigator - Architectural Historian Cultural Resources Manager

ASC Group, Inc.

9376 Castlegate Drive Indianapolis, Indiana 46256 317.915.9300 ext. 103 (office) 317.565.9100 (cell)

From: Leah Konicki

Sent: Monday, January 24, 2022 8:13 AM

To: McCord, Beth K <BMccord@dnr.IN.gov>; 'Tommy Kleckner' <tkleckner@indianalandmarks.org>; 'indianabridges@sbcglobal.net' <indianabridges@sbcglobal.net>; 'nathan@historicbridges.org' <nathan@historicbridges.org>

Cc: 'Juliet.Port@parsons.com' <Juliet.Port@parsons.com>; Keaton.Veldkamp@parsons.com;

'Jennifer.Graf@parsons.com' <Jennifer.Graf@parsons.com>; Daniel.Prevost@parsons.com; Wheeler, Christopher

<CWheeler1@indot.IN.gov>; 'Kennedy, Mary' <MKENNEDY@indot.IN.gov>; Miller, Shaun (INDOT)

<smiller@indot.IN.gov>

Subject: FHWA Project: Des. No. 1701589; Archeology Report, SR 163 over Brouilletts Creek, Vermillion County, Indiana

Des. No.: 1701589

Project Description: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Location: Vermillion County, Indiana

The Indiana Department of Transportation, with funding from the Federal Highway Administration (FHWA), proposes to proceed with a project for INDOT Bridge No. 163-83-01393 A on State Route (SR) 163 over Brouilletts Creek. The Section 106 Early Coordination Letter for this project was originally distributed on December 19, 2019.

As part of Section 106 of the National Historic Preservation Act, an Archaeology Report has been prepared and is 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 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 smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Thank you in advance for your input,

Leah J. Konicki Principal Investigator - Architectural Historian Cultural Resources Manager

ASC Group, Inc.

9376 Castlegate Drive Indianapolis, Indiana 46256 317.915.9300 ext. 103 (office) 317.565.9100 (cell)

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From: Miller, Shaun (INDOT)

Sent: Wednesday, January 26, 2022 12:29 PM

To: thpo@estoo.net; Diane Hunter; Charla EchoHawk; Matthew Bussler

(Matthew.Bussler@pokagonband-nsn.gov); tonya@shawnee-tribe.com; Larry Heady; Michael

LaRonge

Cc: Ikonicki@ascgroup.net; Kennedy, Mary; Korzeniewski, Patricia J

Subject: FHWA Project: Des. No. 1701589; Archeology Report, SR 163 over Brouilletts Creek, Vermillion

County, Indiana

Attachments: SR 163 Brouilletts Crk_DN1701589_ASR_RDL.PDF

Des. No.: 1701589

Project Description: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Location: Vermillion County, Indiana

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As part of Section 106 of the National Historic Preservation Act, an Archaeology Report has been prepared and is 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 as soon as you can.

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Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Thank you in advance for your input,

Shaun Miller INDOT, Cultural Resources Office Archaeology Team Lead (317) 416-0876



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204 PHONE: (317) 296-0799

Eric Holcomb, Governor Joe McGuinness, Commissioner

January 22, 2022

This letter was sent to the listed parties.

RE: Dual Review Project: SR 163 over Brouilletts Creek, 1.18 miles east of SR 71

Vermillion County, Indiana

Des. No. 1701589 DHPA No. 24808

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a project for INDOT Bridge No. 163-83-01393 A (NBI No. 28420) on State Route (SR) 163 over Brouilletts Creek, Clinton Township, Vermillion County, Indiana.

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 December 19, 2019. Responses accepting the invitation to participate in the Section 106 process for this project were received from the Miami Tribe of Oklahoma, the Indiana State Historic Preservation Officer (SHPO), and the Western Regional Office of Indiana Landmarks. An email on April 2, 2020, notified consulting parties that a historic property short report (HPSR) [Kennedy, March 23, 2020] was available for review and comment. A Historic Bridge Select/Non-Select Analysis was sent out on May 26, 2020 for review and comment. It was sent to all originally invited consulting parties, whether or not they responded to the December 19, 2019 invitation letter, in order to request that this project be subjected to "dual review." Responses to this document were received from the Historic Spans Task Force and Historicbridges.org. A letter was sent on January 8, 2021, distributing an addendum to the HPSR and an updated Historic Bridge Select/Non-Select Analysis.

The proposed undertaking is on SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, in Vermillion County, Indiana. It is within Clinton Township, on the Saint Bernice and Clinton USGS Topographic Quadrangles, in Sections 10, 11, 14, and 15 of Township 14 North, Range 10 West.

The purpose of the proposed project is to address the deteriorated condition of the bridge. In the October 16, 2020, INDOT Bridge Inspection Report, the bridge was given a sufficiency rating of 49.3 (out of 100). The substructure was rated 4 (out of 9; poor condition), with cracking wingwalls and advanced spalling. The superstructure was rated 5 (out of 9; fair condition) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank was noted.

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Parsons is under contract with INDOT to advance the environmental documentation for the referenced project. ASC Group, Inc. has been subcontracted to complete the archaeology component 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 https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf.

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 results of archaeological identification and evaluation efforts for the APE will be forthcoming. 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 National Register of Historic Places (NRHP), and the above-mentioned HPSR was prepared. As a result of the historic property identification and evaluation efforts, Bridge No. 163-83-01393 A is the only resource in the APE recommended as eligible for listing in the NRHP. As mentioned, the HPSR was circulated to consulting parties for review on April 2, 2020. Only one response to the HPSR was received. A letter from the staff of the SHPO dated April 27, 2020 stated, in part:

For the purposes of the Section 106 review of this federal undertaking, we agree with the conclusions of the HPSR that the INDOT Bridge No. 163-83-01393A is eligible for inclusion in the National Register of Historic Places under Criterion C.

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. 163-83-01393 A was not recommended NRHP eligible in the original Historic Bridge Inventory results, it was not subjected to a Select/Non-Select analysis at that time.

On May 26, 2020, a Historic Bridge Select/Non-Select Analysis (Parsons, May 20, 2020) was distributed for consulting party review. The report concluded that based on Bridge No. 163-83-01393 A being assigned a "Low" Eligibility Score in the HPSR, and a "Medium" Condition score (37) based on the condition analysis in the Select/Non-Select report, the bridge would be placed in Box 8 of the Selection Matrix from the Inventory (Volume 3). As defined in the *Indiana Historic Bridge Inventory*, bridges in Boxes 6, 7, 8, and 9 are Non-Select bridges due to their low priority through a combination of Eligibility and Condition Scores.

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Based on the input received from consulting parties, INDOT reexamined the deduction of two (2) points for the deck replacement with metal stay-in-place forms on Bridge 163-83-01393 A through an addendum to the HPSR. The HPSR addendum (dated December 31, 2020) now assigns a total of five (5) points to Bridge No. 163-83-01393 A as its Eligibility Score, which is now "Medium." Additionally, an updated Historic Bridge Select/Non-Select Analysis (dated January 7, 2021) has been prepared. Based on the updated Eligibility Score, the bridge now has a "Medium" Eligibility and "Medium" Condition score, placing the bridge in Box 5 of the Historic Bridge Inventory Selection Matrix. As defined in *Indiana Historic Bridge Inventory, Volume 3*, bridges in Boxes 4 and 5 that have a "Medium" Eligibility Score and "High" or "Medium" Condition Score are programmatically determined Select unless they were constructed after 1944.

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. As a result of these efforts, no sites were recommended as eligible for listing in the NRHP and no further work is recommended.

To aid in the examination of alternatives to be included in the Historic Bridge Alternatives Analysis (HBAA) that was under development, on March 22, 2021, INDOT invited consulting parties to a meeting to discuss what viable options should be examined in the HBAA document. The meeting was held on April 7, 2021, and a meeting summary was distributed on April 13, 2021. The HBAA was distributed for review on November 1, 2021. The only comments received on the HBAA were from the SHPO staff, who noted in a letter dated November 22, 2021 that both Alternatives 3 and 4 would increase the lifespan of the bridge and transform the bridge to one-way traffic. The SHPO recognized that Alternative 3 is preferable and requested photo documentation of the bridge before the project commences.

for IN The Archaeology Report (Tribes only) is available review in SCOPE http://erms.indot.in.gov/Section106Documents/ (the Des. No. is the most efficient search term, once in IN SCOPE). You are invited to review these documents and to 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 as soon as you can.

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

For questions concerning specific project details, you may contact Mary Kennedy of INDOT-CRO at 317-232-5215 or mkennedy@indot.in.gov.

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-416-0876 or Kari Carmany-George at FHWA at K.CarmanyGeorge@dot.gov or 317-226-5629.

Sincerely,

Anuradha V. Kumar, Manager Cultural Resources Office Environmental Services

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Des. 1701589 Appendix D Appendix D Appendix D-88

Distribution List:

Indiana Department of Natural Resources/Division of Historic Preservation & Archaeology (IDNR/DHPA),

Indiana State Historic Preservation Officer (SHPO)

Indiana Landmarks, Western Regional Office

Paul Brandenburg, Historic Spans Task Force

Historicbridges.org

Eastern Shawnee Tribe of Oklahoma

Miami Tribe of Oklahoma

Peoria Tribe of Indians of Oklahoma

Pokagon Band of Potawatomi Indians

Shawnee Tribe

Delaware Tribe of Indians

Forest County Potawatomi Community





EASTERN SHAWNEE CULTURAL PRESERVATION DEPARTMENT

70500 East 128 Road, Wyandotte, OK 74370

January 27, 2022 INDOT - Indiana Department of Transportation 100 N. Senate Ave. IGCN642 Indianapolis, IN 46201

RE: Des No. 1701589, DHPA No. 24808, Vermillion County, IN

Dear Mr. Miller,

The Eastern Shawnee Tribe has received your letter regarding the above referenced project(s) within Vermillion County, IN. The Eastern Shawnee Tribe is committed to protecting sites important to Tribal Heritage, Culture and Religion. Furthermore, the Tribe is particularly concerned with historical sites that may contain but not limited to the burial(s) of human remains and associated funerary objects.

As described in your correspondence, and upon research of our database(s) and files, we find our people occupied these areas historically and/or prehistorically. However, the project proposes **NO Adverse Effect** or endangerment to known sites of interest to the Eastern Shawnee Tribe. Please continue project as planned. However, should this project inadvertently discover an archeological site or object(s) we request that you immediately contact the Eastern Shawnee Tribe, as well as the appropriate state agencies (within 24 hours). We also ask that all ground disturbing activity stop until the Tribe and State agencies are consulted. Please note that any future changes to this project will require additional consultation.

In accordance with the NHPA of 1966 (16 U.S.C. § 470-470w-6), federally funded, licensed, or permitted undertakings that are subject to the Section 106 review process must determine effects to significant historic properties. As clarified in Section 101(d)(6)(A-B), historic properties may have religious and/or cultural significance to Indian Tribes. Section 106 of NHPA requires Federal agencies to consider the effects of their actions on all significant historic properties (36 CFR Part 800) as does the National Environmental Policy Act of 1969 (43 U.S.C. § 4321-4347 and 40 CFR § 1501.7(a). This letter evidences NHPA and NEPA historic properties compliance pertaining to consultation with this Tribe regarding the referenced proposed projects.

Thank you, for contacting the Eastern Shawnee Tribe, we appreciate your cooperation. Should you have any further questions or comments please contact our Office.

Sincerely,

Paul Barton, Tribal Historic Preservation Officer (THPO) Eastern Shawnee Tribe of Oklahoma

(918) 666-5151 Ext:1833



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



February 21, 2022

Mary Kennedy Cultural Resources Office Indiana Department of Transportation 100 N. Senate Avenue, IGCN 758-ES Indianapolis, Indiana 46204

State Agency: Indiana Department of Transportation ("INDOT"),

Federal Agency: Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Indiana archaeological short report (Crider and Hillard, 12/14/2021), and final reclassification memo, for the INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts

Creek, Clinton Township, Vermillion County (Des. No. 1701589; DHPA No. 24808)

Dear Ms. Kennedy:

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") has reviewed your January 21, 2022, submission which included the Indiana archaeological short report (Crider and Hillard, 12/14/2021), as well as your January 27, 2022, submission, which enclosed the final reclassification memo, for this project in Clinton Township, Vermillion County, Indiana.

As previously indicated, the subject bridge is a c. 1932 Parker thru truss built by the Vincennes Building Company. Through this review process, the bridge was re-evaluated for National Register eligibility and determined eligible for inclusion in the National Register of Historic Places ("NRHP"). Following the January 7, 2021, updated Select/Non-Select Analysis, the bridge was programmatically determined "Select" as it possessed a "Medium" eligibility and "Medium" condition score per the Historic Bridge Inventory Selection Matrix.

Thank you for distributing the final reclassification memo for this "Select" bridge. I have signed the enclosed memo, indicating our acceptance of this reclassification.

In regard to archaeological resources, 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 (Crider and Hillard, 12/14/2021)), that no further archaeological investigations appear necessary at the proposed project area.

Additionally, we note that portions of the proposed project area appear to lie immediately adjacent to Spangler Cemetery (CR-83-10 in the Indiana DHPA SHAARD database system). If ground disturbing activities will be within 100 feet of this cemetery, please

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Mary Kennedy February 21, 2022 Page 2

be aware of the cemetery development plan requirements in Indiana Code 14-21-1-26.5 (http://iga.in.gov/legislative/laws/2016/ic/titles/014/articles/021/chapters/001/#section-26.5). The aforementioned cemetery must be avoided by all project activities, and provisions of relevant state statutes regarding cemeteries (including IC 14-21-1 and IC 23-14) must be adhered to. Please also be aware of Indiana Code 23-14-44-1 and Indiana Code 23-14-44-2, regarding restrictions on roads and utility construction in cemeteries.

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 the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology 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.

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 this submission can be found online at http://erms.indot.in.gov/Section106Documents/. From there, search by this project's designation number: 1701589.

If you have questions regarding our dual review of the aforementioned project, please contact Indiana DNR-DHPA. Questions about archaeological issues should be directed to contact 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 Danielle Kauffmann at (317) 232-0582 or dkauffmann@dnr.IN.gov.

In all future correspondence regarding the dual review of this bridge rehabilitation project on SR 163 over Brouilletts Creek in Vermillion County (Des. No. 1701589), please refer to DHPA No. 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

Director, Division of Historic Preservation and Archaeology

enclosure: reclassification memo

By V. Mich

BKM:DMK:WTT:wtt

EMC to federal and state agency or consultant staff members:

Kari Carmany-George, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Matt Coon, INDOT Susan Branigin, INDOT Wade T. Tharp, Indiana DNR-DHPA Danielle Kauffmann, Indiana DNR-DHPA

EMC to Indiana Historic Preservation Review Board Members:

J. Scott Keller, Review Board
Daniel Kloc, AIA, Review Board
Jason Larrison, AIA, Review Board
Chandler Lighty, Review Board
Beth K. McCord, DNR-DHPA, Review Board
Ryan Mueller, Deputy Director, DNR, and Chairman, Review Board
Anne Shaw, Review Board
April Sievert, Ph.D., Review Board

EMC to potentially interested persons:

Eastern Shawnee Tribe of Oklahoma Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Pokagon Band of Potawatomi Indians Shawnee Tribe Delaware Tribe of Indiana, Oklahoma Forest County Potawatomi Community

Vermillion County Commissioners Vermillion County Historian Mary Kennedy February 21, 2022 Page 3

Vermillion County Historical Society
Vermillion County Highway Department
Tommy Kleckner, Indiana Landmarks, Western Regional Office
Paul Brandenburg, Indiana Historic Spans Task Force
Tony Dillon, Historic Hoosier Bridges
Nathan Holth, HistoricBridges.org
Kitty Henderson, Historic Bridge Foundation
West Central Indiana Economic Development District, Inc.



EASTERN SHAWNEE CULTURAL PRESERVATION DEPARTMENT

70500 East 128 Road, Wyandotte, OK 74370

March 3, 2022 Indiana Department of Natural Resources 402 W. Washington St., Rm W274 Indianapolis, IN 46204

RE: Des No. 1701589; DHPA No. 24808, Vermillion County, IN

Dear Mr. Tharp,

The Eastern Shawnee Tribe has received your letter regarding the above referenced project(s) within Vermillion County, IN. The Eastern Shawnee Tribe is committed to protecting sites important to Tribal Heritage, Culture and Religion. Furthermore, the Tribe is particularly concerned with historical sites that may contain but not limited to the burial(s) of human remains and associated funerary objects.

As described in your correspondence, and upon research of our database(s) and files, we find our people occupied these areas historically and/or prehistorically. However, the project proposes **NO Adverse Effect** or endangerment to known sites of interest to the Eastern Shawnee Tribe. Please continue project as planned. However, should this project inadvertently discover an archeological site or object(s) we request that you immediately contact the Eastern Shawnee Tribe, as well as the appropriate state agencies (within 24 hours). We also ask that all ground disturbing activity stop until the Tribe and State agencies are consulted. Please note that any future changes to this project will require additional consultation.

In accordance with the NHPA of 1966 (16 U.S.C. § 470-470w-6), federally funded, licensed, or permitted undertakings that are subject to the Section 106 review process must determine effects to significant historic properties. As clarified in Section 101(d)(6)(A-B), historic properties may have religious and/or cultural significance to Indian Tribes. Section 106 of NHPA requires Federal agencies to consider the effects of their actions on all significant historic properties (36 CFR Part 800) as does the National Environmental Policy Act of 1969 (43 U.S.C. § 4321-4347 and 40 CFR § 1501.7(a). This letter evidences NHPA and NEPA historic properties compliance pertaining to consultation with this Tribe regarding the referenced proposed projects.

Thank you, for contacting the Eastern Shawnee Tribe, we appreciate your cooperation. Should you have any further questions or comments please contact our Office.

Sincerely,

Paul Barton, Tribal Historic Preservation Officer (THPO)

Eastern Shawnee Tribe of Oklahoma

(918) 666-5151 Ext:1833

Sub-Appendix

APPENDIX I. Consulting Party Meeting Summary

Subject: SR 163 over Brouilletts Creek Consulting Parties Discussion

Date/Time: 4/7/2021 10:00 AM EDT

Location: Microsoft Teams Call

Attendees:

Name	Representing	Email Address	Telephone
Melissa Patton	INDOT PM	mpatton@indot.in.gov	765-361-5219
Chris Wheeler	INDOT	cwheeler@indot.in.gov	765-361-5238
Mary Kennedy	INDOT	mkennedy@indot.in.gov	317-694-3607
Danielle Kauffmann	Indiana DNR, DHPA	dkauffmann@dnr.in.gov	317-232-0582
Wade Tharp	Indiana DNR, DHPA	wtharp1@dnr.in.gov	317-232-1650
Paul Brandenburg	Historic Spans Task Force	indianabridges@sbcglobal.net; paul@prbrandy.com	
Kari Carmany-George	FHWA	k.carmanygeorge@dot.gov	317-226-5629
Sean Porter	Parsons	sean.porter@parsons.com	317-616-1001
Kyle Muellner	Parsons	kyle.muellner@parsons.com	317-616-4672
Dan Miller	Parsons	Daniel.J.Miller@parsons.com	317-616-4663
Dan Prevost	Parsons	Daniel.Prevost@parsons.com	513-552-7013
Brad Kahn	Parsons	brad.kahn@parsons.com	317-616-1030
Zachary Riley	Parsons	zachary.riley@parsons.com	317-616-4685

The purpose of the meeting was to discuss and receive input regarding the alternatives under consideration for the SR 163 over Brouilletts Creek project.

Action items are shown in bold.

- Background Presentation Mary Kennedy
 - Overview of Section 106 Process and Historic Bridges Programmatic Agreement (HBPA; see attached slides)
 - This bridge was built by the Vincennes Bridge Company in 1933
 - Well-known bridge construction company.
 - Was determined to not be eligible for historic status in 2010.
 - Re-evaluated in 2020 and considered rare (less than 6 extant examples in the Crawfordsville District), as there are 5 of this type remaining in the District, therefore it was determined to be eligible.
 - o Select/Non-Select
 - May 2020 evaluation: Low eligibility + Medium condition = Box 8 = "Non-Select"
 - Sent for review received input on deductions for previous deck replacement.
 - Original methodology had allowed for deductions due to loss of integrity associated with "not-in-kind" deck replacement.
 - No specifics were provided on their methodology, and this factor was not used in original inventory.
 - Based on coordination with consulting parties, INDOT reconsidered the deduction.
 - INDOT reviewed previous evaluations and noted that deductions had not previously been applied.

- o Consulting Parties did not feel that the new deck was a significant integrity issue due to lack of visibility of change.
- Reevaluated did not deduct for this.
- January 2021 eliminated point deduction
 - Changed to "Medium" eligibility and result was "Select"
 - "Select" bridges must be preserved in accordance with the requirements set forth by the HBPA.
- The bridge is the only historic property in APE.
- o Archaeological studies are forthcoming.
- Alternatives Presentation Kyle Muellner
 - Existing Conditions of this Parker-through truss were discussed.
 - The bridge was originally designed for a 20 ton, 2-axle truck.
 - Current trucks using this roadway are up to 36 ton, multi-axle trucks.
 - Existing clear roadway width is 24'; minimum requirement is 28'.
 - Bridge has substandard rails and clear roadway width.
 - Adding new crash tested barriers would result in 11-foot lanes and 3-inch shoulders.
 - The cross-section of this bridge, which is already narrower than the approach roadway, presents an increased risk to motorists by further restricting the width.
 - o Minimum load rating is 36 tons; and the last INDOT inspection reported a load rating of 33 tons.
 - o An in-depth inspection was performed in November 2020 and showed several truss members would require replacement or rehabilitation.
 - Lower chord, the most critical members on trusses, have seen up to 25% section loss.
 - For most rehabilitation efforts, the truss will need to be disassembled, deteriorated members will need to be replaced or repaired, and truss will need to be reassembled.
 - Deformations from collisions were noted on the portal bracings, as well as some truss members. It was noted that while clear roadway is substandard, vertical clearance meets minimum criteria.
 - Flood debris was noted on the bottom of the truss, indicating floodwaters frequently reach the truss. Tree impacts can be a destructive risk to trusses.
 - Concrete spalling (loss) was noted under the bearings, so a substantial rehabilitation would be required to continue use of these abutments.
 - The stream channel appears to be shifting westward, which poses a scour threat to the west abutment. If the abutment is undermined in a scour event, it could sink or fail.
 - o Four primary alternatives were presented for discussion, as they all appear to meet requirements of the HBPA, but each pose their own risks to driver safety and/or historic integrity.
 - Alternative 1: Rehabilitate truss for continued two-way traffic.
 - Would replace most lower members and few diagonals.
 - Narrow Lanes (11')
 - Very Narrow Shoulders (3")
 - Constricting shoulder and lanes, compared with the roadway on each approach.
 - High Cost with added risk to public.
 - Trusses are considered "Fracture Critical", meaning failure of one member in tension can lead to collapse.
 - Extends life by ~30 years
 - Alternative 2: Rehabilitate truss for one-way traffic
 - Replace some lower members
 - Stop lights at ends
 - Force traffic to center of trusses

- Road has poor alignment characteristics for signals (winding road)
- Large investment with added risk
- Still considered "Fracture Critical"
- Extends life by ~30 years

Alternative 3: Rehabilitate and widen truss

- Substantial Rehabilitation
- Widen horizontal members by 5.5'
- Would alter aesthetics, adding a panel(s) of X-bracing to the upper portals.
- Replace cross-beams under road
- Replace the majority (approx. 75%) of all members, to support added dead and live load.
 All primary members (upper chords and lower chords) would be entirely replaced.
- Would require completely new, wider abutments.
- Very large investment, while changing most material and aesthetics.
- Still considered "Fracture Critical"
- Extends life by ~30 years.

Alternative 4: Superstructure replacement with a widened truss used as decorative feature

- Substantial project, using a new bridge flanked by the repaired, widened truss.
- Widen members by about 5.5'.
- Remove cross beams underneath.
- Replace or extend portal bracing overhead.
- Would alter aesthetics.
- Large investment while changing aesthetic.
- Road has poor alignment characteristics.
- Truss is ornamental.
- Not fracture critical.
- New bridge would carry a 75-year design life.

o Alt 5: Rehab truss for one way traffic and pair with new alignment in opposite direction

- Build new roadway next to bridge
- Very high costs
- Fracture critical
- New bridge would carry a 75-year design life.
- New bridge will typically carry a full 2-lane section, for use when the truss is no longer able to be in-service.

Alt 6: Rehab truss for pedestrian use

- "Select" disposition not known yet
- Unclear whether on-site or off-site could be considered

Discussion

- Danielle Kauffmann: even if the truss is rehabilitated, does it remain "fracture critical"?
 - Kyle: Yes
- o Paul Brandenburg: one way traffic probably doesn't lend itself well to this area. Is widening an option in order to provide adequate space for shoulders?
 - Kyle: Yes
- Paul: Would we be able to replace with an existing guardrail?
 - Kyle: It's possible the existing guardrail isn't the original guardrail; however, it wouldn't be prudent to replace in-kind as it would likely make it wider.
- Chris Wheeler: We've had several bridge hits because of the narrow nature of bridge. If we keep
 the current bridge geometry, there will be a need for concrete barrier to protect truss. The district
 has indicated that if the bridge can't be widened, then the preference would be to use single lane

(Alternative 2).

- o Paul: If the bridge is widened, would you need to place a barrier to protect the truss?
 - Kyle: Yes, but the added loads change aesthetics and requires replacing members
- Paul: The intent of historic preservation is to provide continued use of bridge so using the truss as a decorative feature is not preferred (Alternative 4). Would members need to be replaced if the truss is used as a decorative feature?
 - Kyle: It's less invasive, but some lower chord members would still need to be replaced due to amount of rust in the interest of being "good stewards"
- o Paul: Ok. A new superstructure using the truss ornamentally (Alternative 4) is less attractive from a historic preservation perspective.
- o Chris: Are there any impacts to the cemeteries if the road is realigned?
 - Kyle: There are three cemeteries that have potential conflicts. One cemetery would be most susceptible to impacts but the risk may be minimal. Definitely a risk of impact. If a new roadway was taken to the south, there is risk of hitting undocumented areas of the cemetery.
- o Paul: Has there been any consideration to increasing the height of the truss?
 - Kyle: It may be possible under Alt 4, but for any other alternative all members would need to be replaced. Basically, would require a complete redesign of the truss.
- o Wade Tharp: Are there any cemeteries within 100' of the project limits?
 - Kyle: There would be one within 100' of the realigned road for the one-way pair alternative, but not the bridge.
- o Danielle: I agree that Alt 4 would be near the bottom due to impact to eligibility since it becomes an ornamental bridge. The pedestrian bridge alternative is also not preferred since there is no demand for a pedestrian trail in the area. (Mary agrees there appears little potential for pedestrian use at the current location)
- Kyle: Do any other alternatives impact risk to eligibility? Specifically, the widening option since a high percentage of members would need to be replaced.
 - Danielle: It's difficult to put a number on what percentage of members would need to remain to maintain eligibility. There will need to be a conversation with the Survey and Registration staff.
- o Danielle: What is the current status of the aforementioned SR75 Wildcat Creek bridge (shown as an example in Alternative 1 discussion)?
 - Mary: It's going to be rehabbed for continued vehicular use (Des. No. 1601029); however, that bridge is a little wider and can provide 11' lanes and 3' shoulders.
- o Mary: Is it advisable to issue a level one design exception for Alternative 1?
 - Kyle: It would need an exception for lane widths since they don't match approach lane widths and shoulder widths since they are substandard. State would be taking on risk with a level one design exception.
- o Chris: Complicating matters are the two adjacent horizontal curves which is why the district prefers a single-lane use to provide more safety and width.
- Kyle: It would certainly increase safety by forcing lower speeds. The current alignment is on an open stretch at 55 mph.
- Danielle: Does Alt 2 lead to possibly going with a one-way pair option if the implementation of a signal doesn't prove to be useful to the locals?
 - Chris: The district is ok with a signal for one-way traffic across the bridge. We could consider one-way pair at a later date, but it would not be part of this project.
- Closing items
 - Mary requests that written comments from the consulting parties be emailed to her by 4/30.
 - Parsons will prepare a historic bridge alternatives analysis (HBAA) report, for incorporation into the

- NEPA documentation for this project.
- Based on comments as to risking historic integrity, Alternative 4 will be eliminated from consideration.
- Based on comments on the potential for pedestrian use, Alternative 6 will be eliminated from consideration.
- o HBAA will be sent to the consulting parties to review.
- o Still need to formalize "Select" designation.
- o There will need to be a public hearing due to the involvement with the historic bridge. Consulting parties will be notified of the hearing date.

These minutes are the writer's best interpretation of discussions held during the meeting. Please inform Parsons within three (3) business days of any noteworthy omissions or errors as these will become part of the project record.

Minutes prepared by:

Brad Kahn, 4/8/2021

Cc: file



Welcome

Consulting Party Meeting via Microsoft Teams
April 7, 2021 at 10:00 AM Eastern
Des. No. 1701589
SR 163 over Brouilletts Creek,
Vermillion County, Indiana
Bridge No. 163-83-01393A (NBI No. 28420)

1

What is Section 106?

National Historic Preservation Act (1966):

- Federal agencies are to take into account the effects of their undertaking on properties listed in, or eligible for listing in, the National Register of Historic Places (NRHP)
- Afford the Advisory Council on Historic Preservation (ACHP) the opportunity to consult (www. achp.gov)

Section 106 Process: Steps

- Establish that there is an undertaking...
- Step 1: Initiate consultation
- Step 2: Identify historic properties
- Step 3: Assess effects of the undertaking on historic properties
- Step 4: Resolve any adverse effects

3

Indiana's Historic Bridges Programmatic Agreement

- Streamlined Section 106 process for historic bridges
- Agreement executed in 2006: FHWA, INDOT, ACHP, Indiana State Historic Preservation Officer (SHPO)
- 2010 List of historic bridges in Indiana built prior to 1965 that are listed in or eligible for the NRHP
- All bridges eligible for or listed in NRHP categorized as Select or Non-Select

4

SR 163 over Brouilletts Creek-Historic Status

- Bridge No. 163-83-01393A (NBI No. 28420)
- Built in 1933 by Vincennes Bridge Company
- Indiana State Highway Commission (ISHC) design
- Parker Thru Truss
- Originally Determined Not Eligible for NRHP



5

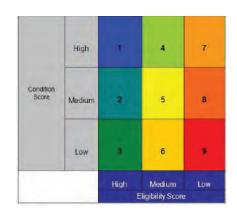
SR 163 over Brouilletts Creek-Historic Status

- Re-evaluated in 2020
- Now considered rare type in Crawfordsville District
- 2010 8 examples; 2020 5 examples
- Points for rarity
- Points for significant builder
- 2020 NRHP Eligible



SR 163 over Brouilletts Creek-Select/Non-Select Evaluation

- May 2020: "Low" Eligibility Score and "Medium" Condition Score –Box 8 of the matrix
- Boxes 6, 7, 8, and 9 are Non-Select bridges
- Consulting Party input on NRHP point deduction for deck replacement
- January 2021: "Medium" Eligibility Score and "Medium" Condition Score –Box 5 of the matrix
- Boxes 4 and 5 are Select bridges unless constructed after 1944
- Final Determination = Select Bridge



7

Indiana's Historic Bridges Programmatic Agreement

- Select: Most suitable for preservation and excellent examples of a given type of historic bridge
- Non-Select: Not considered excellent examples of a given type of historic bridge or are not suitable candidates for preservation
- FHWA will not participate in a project that would result in the demolition of a Select Bridge

Indiana's Historic Bridges Programmatic Agreement

- Streamlines steps 2-4 of the Section 106 process
- Historic bridges have already been identified
- Assessment of effects on the bridges themselves is not necessary under the HBPA
- Standard treatment for either rehabilitation or replacement is required after a preferred alternative has been selected, based on an in-depth alternative analysis
- Mitigation is streamlined as the HBPA outlines marketing of Non-Select Bridges that may be replaced, and photo-documentation of bridges as the only mitigation measures that are required

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SR 163 over Brouilletts Creek

Where are we in the process?

- Step 1: Initiate consultation
 - Early coordination letter sent December 19, 2019
 - Active Consulting parties:
 - SHPO
 - Indiana Landmarks, Western Regional Office
 - Indiana Historic Spans Task Force
 - Historicbridges.org
 - · Miami Tribe of Oklahoma

SR 163 over Brouilletts Creek

Where are we in the process?

- Step 2: Identify historic properties
- ****
- Historic Property Report sent out April 2, 2020
- Historic Property Report Addendum sent out January 8, 2021
 - Bridge No. 163-83-01393A is only historic property in APE
- Archaeological Studies Forthcoming
- Step 3: Historic Bridge Alternatives Analysis Ongoing

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SR 163 over Brouilletts Creek

Existing Conditions:

- 180'-0" Span Parker Through Truss
- Roadway Width: 24'-0"
- Built 1932
- Bridge is 89 years old
- Still serving State Road Traffic
- Daily Traffic:
 - 1,969 Veh./day
 - 67 Trucks/day (no weight restrictions)



SR 163 over Brouilletts Creek

Required Geometry:

- Minimum Roadway: 28'-0"
- With new barrier rails we would be left with 3-inch shoulders.





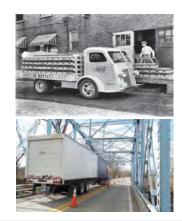
- Federal minimum Load Rating: 36 Tons
- INDOT biennial inspection report: 33 Tons
- Parsons performed in-depth inspection and found that certain main truss members require replacement to restore an adequate load rating.

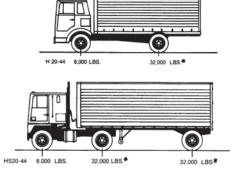
13

Need for Urgency

1932 Design Truck 20 Tons

2021 Design Truck 36 Tons





Current Load Limit: Unposted

Existing Conditions:

• Some members in serious condition (significant deterioration)





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SR 163 over Brouilletts Creek

Existing Conditions:

• Some members in serious condition (significant deterioration)





Existing Conditions:

• Some members in serious condition (significant deterioration)





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SR 163 over Brouilletts Creek

Existing Conditions:

- Multiple collisions noted overhead on truss
- Multiple collisions noted alongside traffic on truss and rails
- Modern vehicles are taller, wider, and longer than they used to be









Existing Conditions:

- Debris from flooding noted below deck
- Significant deterioration on abutments
- Stream Channel is shifted, scour is threatening western abutment





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SR 163 over Brouilletts Creek





Alternative 1

- Rehabilitation in place for continued vehicular use (two-way traffic)
 - Replace most lower members + few diagonals
 - Narrowed lanes (11')
 - Very narrow shoulders (3")



SR 75 over Wildcat Creek

- High cost with added risk to public
- "Fracture Critical"
- Extend life about 30 years



SR 163 over Brouilletts Creek





Alternative 2

- Rehabilitation in place for continued vehicular use (one-way traffic)
 - Replace some lower members
 - Stop Lights at Ends
 - Force traffic into center of trusses
 - Road has poor alignment characteristics for signals (winding road)
 - Large investment with added risk to public
 - "Fracture Critical"
 - Extend life about 30 years



SR 225 over Wabash River

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SR 163 over Brouilletts Creek

Alternative 3

- Rehabilitation in place, including widening, for continued vehicular use
 - Substantial Rehab
 - Widen horizontal members by about 5.5'
 - Replace cross-beams under road
 - Replace or extend portal bracing overhead
 - Would alter the Aesthetics
 - Replace the majority of all members to support added dead and live loads
 - Very large investment while changing material and aesthetic
 - "Fracture Critical"
 - Extend life about 30 years



SR 163 over Brouilletts Creek

Alternative 4

- · Rehabilitation in place, including widening with a new superstructure, for continued vehicular use
 - Substantial Rehab
 - Widen horizontal members by about 5.5'
 - Remove cross-beams under road
 - Replace or extend portal bracing overhead
 - Would alter the Aesthetics

- · Large investment while changing aesthetic
- Road has poor alignment characteristics
- · Truss is ornamental
- Not "Fracture Critical"
- New bridge life of 75 years



Forest Home Drive bridge, Ithaca, NY

23

SR 163 over Brouilletts Creek

Other Alternatives:

- Rehabilitation in place, one-way pair
 - Substantial Rehab plus Replacement
 - Very large cost
 - "Fracture Critical"
 - · New bridge is typically full-size and carry a 75-year life
- Rehabilitation for pedestrian use
 - "Select" disposition not known yet
 - Unclear whether on-site or off-site use could be considered



SR 163 over Brouilletts Creek

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Consulting Parties' Questions & Discussion

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Next Steps

- Meeting Summary distributed to Consulting Parties
- Consulting Party Comments Submit by April 30, 2021
 - Mary Kennedy, INDOT: mkennedy@indot.in.gov
- Preparation of Historic Bridge Alternatives Analysis
- Historic Bridge Alternatives Analysis sent to Consulting Parties for 30day review

Sub-Appendix

APPENDIX J. Reclassification Memo



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204 PHONE: (317) 296-0799 **Eric Holcomb**,

Eric Holcomb, Governor Joe McGuinness, Commissioner

MEMORANDUM January 13, 2022

To: Jermaine R. Hannon, Division Administrator, Federal Highway Administration – Indiana Division

Thru: Beth K. McCord, Deputy Indiana State Historic Preservation Officer

From: Laura Hilden, Director, Environmental Services Division, Indiana Department of Transportation

RE: Final Determination of National Register Eligibility Status and Select/Non-Select Status of INDOT

Bridge 163-83-01393A, SR 163 over Brouilletts Creek (NBI No. 028420), Vermillion County, Indiana

This memo serves as the final determination of National Register of Historic Places (National Register) eligibility of the Indiana Department of Transportation (INDOT)'s Bridge 163-83-01393A, carrying SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, Vermillion County, Indiana.

The Indiana Historic Bridge Inventory was completed by INDOT as part of the Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation (ACHP) Regarding Management and Preservation of Indiana's Historic Bridges (Historic Bridge PA). A Historic Bridge Task Group (Task Group) comprising of representatives from the ACHP, Indiana SHPO, INDOT, Indiana Local Technical Assistance Program (LTAP), Historic Landmarks Foundation of Indiana (now Indiana Landmarks), Historic Spans Task Force, Indiana Association of County Highway Engineers and Supervisors and Indiana Association of County Commissioners, assisted in the development of the Historic Bridge PA and continue to monitor its success upon implementation. A copy of the Historic Bridges PA can be found here: http://www.in.gov/indot/2530.htm.

In 2009, the *Indiana Historic Bridge Inventory* determined Bridge No. 163-83-01393A was not eligible for listing in the National Register under any criteria, and the Federal Highway Administration (FHWA) signed a Final Determination regarding National Register Eligibility on February 23, 2009.

During the Section 106 consultation process for a bridge project along SR 163 involving Bridge No. 163-83-01393A (INDOT Des. No. 1701589), a Historic Properties Short Report (HPSR; Kennedy, 3-23-20) included a National Register-eligibility evaluation of Bridge No. 163-83-01393A in order to see if the determination from the *Inventory* held true with the passage of time. The HPSR recommended Bridge No. 163-83-01393A eligible for listing in the National Register under Criterion C for its engineering significance, as a rare example of its type within its region and as an example of a structure built by a significant Indiana firm, the Vincennes Bridge Company.

The HPSR and a subsequent addendum (Kennedy,12-31-20) can be downloaded by accessing INDOT's Section 106 document posting website, IN SCOPE, at http://erms.indot.in.gov/Section106Documents. Please use the identification details provided above or use the designation number, 1701589, to search for the report.

In Stipulation II.A.2, the *Programmatic Agreement on the Management and Preservation of Indiana's Historic Bridges* (Historic Bridges PA) provides the following provision regarding reclassifying a non-National Register-eligible bridge as National Register eligible:

"Bridges determined not to be NRHP eligible require no further consideration by INDOT and FHWA, unless later determined eligible for the NRHP in response to a nomination, or based on additional information or changed circumstances."

Indiana
A State that Works
Appendix D-115

In the above stipulation, the Historic Bridge PA does not specify any procedures for reclassifying a bridge outside the National Register nomination process (i.e., based on additional information or changed circumstances). However, in Section 5 of Volume 3 of the *Bridge Inventory*, Special Circumstances and Periodic Updates, it is explained that the FHWA, INDOT, and the Indiana Historic Preservation Officer (INSHPO) have agreed to adhere to a similar process to that outlined in Stipulation II.C of the Historic Bridge PA.

INDOT is recommending that this bridge be reclassified as a National Register eligible bridge. Additionally, INDOT is recommending that it be classified as a "Select" bridge. The proposed "Select" classification is based upon a Historic Bridge Select/Non-Select Analysis (S/N-S Analysis; Parsons, 5-20-20), an updated S/N-S Analysis document (Parsons, 1-7-21), and a Historic Bridge Alternatives Analysis (HBAA; Parsons, 9-15-21). All three documents can be found in IN SCOPE. INDOT currently plans to rehabilitate the bridge for continued vehicular use, but would reduce the roadway to a single lane, using a signal at either end to maintain bi-directional travel, which is detailed in the HBAA. Per the Historic Bridges PA, "Select" bridges are historic bridges that are most suitable for preservation and are excellent examples of a given type of historic bridge.

On November 29, 2021, following the process outlined in Stipulation II.C. of the Historic Bridge PA, INDOT sent notification of the request to re-classify the bridge to the Task Group (through email) and consulting parties that would normally be invited to participate in a FHWA-sponsored project for the bridge (through email & US mail notification and as identified per the INDOT Cultural Resources Manual procedures). Comments regarding the reclassification of the bridge were requested by the close of business on December 31, 2021. A public notice in a local newspaper, *The Terre Haute Tribune Star*, ran on December 3, 2021. A public notice in a statewide newspaper, *The Indianapolis Star*, also ran on December 3, 2021. The notices requested comments by the close of business on January 3, 2022.

Comments were received from two entities as summarized below and copies of all correspondence are attached: Tony Dillon, Historic Hoosier Bridges – via an email dated December 1, 2021 Eastern Shawnee Tribe – letter dated December 30, 2021

Mr. Dillon thanked INDOT for the work to reclassify the bridge given that "the remaining pool of state highway design Parker trusses are especially vulnerable."

The Tribal Historic Preservation Officer (THPO) for the Eastern Shawnee Tribe indicated that the proposed project would have no adverse effect or endangerment to known sites of interest to the tribe.

It should be noted that the reclassification request was not formally reviewed by the Indiana SHPO staff due to previous comments indicating support for reclassifying this bridge to a National Register-eligible Select Bridge. Specifically, in a letter dated January 21, 2021 (attached), the SHPO staff stated, in part:

For the purposes of the Dual Review of this project, we agree with the conclusions of the historic property short report addendum ("HPSR Addendum"; Kennedy, 12/31/2020) and the accompanying updated Historic Bridge Select/Non-Select Analysis (1/7/2021) that the subject bridge is eligible for inclusion in the National Register of Historic Places ("NRHP"). We appreciate that INDOT took into consideration the comments by our office and multiple consulting parties regarding the two-point deduction for the deck replacement with metal stay-in-place forms. As a result of removing that deduction, we agree that this adjusts the Eligibility score for this bridge from a "Low" Eligibility to "Medium" Eligibility score.

Based on the HPSR Addendum and the updated Historic Bridge Select/Non-Select Analysis, we also agree that the subject bridge receives a "Medium" Condition score in addition to its "Medium" Eligibility score per the methodology in the *Indiana Historic Bridge Inventory, Volume 3*. Thus, we agree that this bridge is programmatically determined a "Select" bridge since it falls within Box 5 of the Historic Bridge Inventory Matrix.

In summary, after taking into consideration the March 2020 HPSR, the May 2020 S/N-S Analysis, the December 2021 HPSR Addendum, the January 2021 Updated S/N-S Analysis, and the September 2021 HBAA, along with the comments

from consulting parties, FHWA and the Indiana SHPO have agreed that Bridge 163-83-01393A should be considered a National Register eligible and Select bridge. The bridge will, therefore, be reclassified as such in the *Indiana Historic* Bridge Inventory. INDOT, in accordance of Stipulation II.C.1(d) of the Historic Bridge PA, will notify the members of the Task Group of this decision through conveyance of this memorandum. In accordance with Stipulation IV.C of the Historic Bridge PA, INDOT will include this designation change in the next annual report that includes the list of Select and Non-Select bridges that have been processed during the previous calendar year.

By signature of this memorandum, INDOT, FHWA and Indiana SHPO hereby affirm their approval of a change in designation for Bridge 163-83-01393A from a non-historic bridge to a National Register eligible and Select bridge.

Date: 1/27/2022

Director of Environmental Services Indiana Department of Transportation

Beth K. McCord

Deputy Indiana State Historic Preservation Officer

Indiana Department of Natural Resources

CARMANY-**GEORGE**

Digitally signed by KARSTIN MARIE KARSTIN MARIE **CARMANY-GEORGE** Date: 2022.02.24 13:03:20 -05'00'

Date: 2/24/22

for Jermaine R. Hannon Division Administrator

Federal Highway Administration – Indiana Division

***Appendices of this memo are repetitive of other appendices in this document & not included here. The memo with all appendices attached can be found in IN SCOPE.

The Indianapolis Star

130 South Meridian Street Indianapolis, IN 46225 Marion County, Indiana

Federal Id: 06-1032273

PARSONS

Account #:INI-61927 Order #:0005196505

of Affidavits. 2
Total Amount of Claim:\$59,94
This is not an invoice

PARSONS ATTN Alexander Lee 101 W OHIO ST STE 2121 INDIANAPOLIS, IN 46204

PUBLISHER'S AFFIDAVIT

STATE OF WISCONSIN, County Of Brown

} ss

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Public Notice DES. NO.: 1701589

INDOT is planning to undertake a bridge project, funded in part by the Federal Highway Administration (FHWA), on State Route (SR) 163 over Brouilletts Creek in Vermillion County, Indiana, The subject of this project is INDOT Bridge No. 163-83-01393A (NBI No. 28420). The project is located on SR 163 approximately 1.18 miles east of SR 71.

The bridge would be rehabilitated to address the structural condition, but the roadway would be reduced to a single lane, using a signal at either end to maintain bi-directional travel. The relatively low-volume of existing traffic provides the opportunity to adequately serve future demand via a single travel lane. A signal and stop bar would be installed at each end of the bridge, approximately 100 feet from each end of the bridge.

The bridge, which is eligible for the National Register of Historic Places (NRHP), is classified as a "Select" bridge by the Indiana Department of Transportation (INDOT) Historic Bridge Inventory and, thus, the procedures outlined in Stipulation III.A. of the Historic Bridges Programmatic Agreement (HBPA) will be followed to fulfill FHWA'S Section 106 responsibilities for the bridge. Per Stipulation III.A. of the HBPA, INDOT will hold a public hearing for the project prior to completion of National Environmental Policy Act (NEPA) studies. The hearing will be advertised at a later date.

To satisfy FHWA's Section 106 responsibilities for other historic resources that may be in the Area of Potential Effects (APE), FHWA will comply with the requirements of 36 CFR Parts 800.3-800.6. The proposed action does not impact properties listed in or eligible for the National Register of Historic Places. INDOT, on behalf of the FHWA, has issued a "No Historic Properties Affected" finding for the project due to the fact that the only historic property present within the Area of Potential Effects (APE) is the historic bridge.

In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)/(4). Pursuant to 36 CFR 800.4(d)(1), the documentation specified in 36 CFR 800. 11(d) can be viewed electronically by accessing INDOT's Section 106 document posting website IN SCOPE at http://erms.indot.in.gov/Section106Documents. This documentation serves as the basis for the "No Historic Properties Affected" finding. The views of the public on this effect finding are being sought. Please reply with any comments to Mary Kennedy at mkennedy@in dot.in.gov or 317-694-3607 no later than Monday, May 2, 2022.

In accordance with the "Americans with Disabilities Act", if you have a disability for which INDOT needs to provide accessibility to the document(s) such as interpreters or readers, please contact Sarah Heck at 765-361-5231 or SHeck@indot.in.gov. (INI - 04/02/22 - 0005196505)



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Date: April 2, 2022



Historic Bridge Alternatives Analysis

S.R. 163 over Brouilletts Creek Bridge Vermillion County, Indiana Designation Number 1701589

Prepared for the Indiana Department of Transportation September 15, 2021



Prepared by Dan Prevost, AICP CTP and Brad Kahn, PE

This bridge was evaluated by personnel from the Indiana Department of Transportation (INDOT) Bridge Design Unit, the District Office and the designer. The attached 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.



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Introduction

The Indiana Department of Transportation (INDOT) proposes a bridge project on State Route (SR) 163 over Brouilletts Creek in Vermillion County (Figures 1-3). The project is located on SR 163 approximately 1.18 miles east of SR 71. The closest community is Blanford, Indiana, approximately one mile west of the study area. SR 163 is oriented east to west, and Brouilletts Creek flows northwest to southeast through the study area.

The *Indiana Historic Bridge Inventory*, approved in January 2011, determined the bridge not eligible for listing in the National Register of Historic Places (NRHP). At the time, the bridge was not considered "rare" as it was one (1) of eight (8) extant examples of Parker thru-truss structures in the INDOT Crawfordsville District. However, since that time, two such bridges from the district have been replaced (demolished) and another has been relocated for pedestrian use at a location outside the district. Based on these changes, INDOT reevaluated the eligibility of the bridge and determined that, based on the Indiana Historic Bridge Inventory criteria, it should be considered eligible for listing in the NRHP and was identified as "Select" under the Indiana Historic Bridge Programmatic Agreement (Historic Bridge PA). The Historic Bridge PA stipulates that the Federal Highway Administration (FHWA) will not consider demolition to be a prudent alternative for any Federal-aid project involving a Select Bridge.

The purpose of this Historic Bridge Alternatives Analysis is to identify a preliminary preferred alternative for the SR 163 bridge over Brouilletts Creek in accordance with the Historic Bridge PA.

Existing Structure Data

A. Identification/History

Bridge No.: 163-83-01393A

Project Location: SR 163 over Brouilletts Creek, 1.18 Mi. east of SR 71, Vermillion County, Crawfordsville

District

Designation No.: 1701589

Year Built: 1932

Years Repaired: 1979-Bridge deck replacement, bridge railing replacement, and replaced stringers 1,7, & 8.

Most Recent Field Inspection Date: 10/16/2020

Average Daily Traffic (ADT)/Year of ADT: 1,803 (2020)

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Percentage of Commercial Vehicles: 4%

Low volume road?: No

Functional Classification: Rural Major Collector

Detour Length: 21 miles

Load Rating: H15 (15 tons)

Sufficiency Rating: 49.3 (INDOT, 2020)

¹ Historic Bridge Select/Non-Select Analysis – S.R. 163 over Brouilletts Creek Bridge, January 7, 2021, prepared by Parsons.



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National Register of Historic Places Status: Eligible

Historic Bridge Prioritization Status: Select

Historic Character-Defining Features: Parker thru truss, rare type in District, master builder (Vincennes Bridge Company)

B. Structure/Dimensions

Surface Type: Concrete

Out to Out of Copings: 25.0 feet
Out to Out of Bridge Floor: 179.25
Clear Roadway Width: 23.9 feet
Number of Lanes on Structure: 2

Skew: 0

Type of Superstructure: Parker steel thru truss

Spans: 1 span, 175.0 feet

Type of Substructure/Foundation: Abutments: Reinforced concrete wall on piles

Seismic Zone: Zone 1

C. Appurtenances

Bridge Railing: Aluminum barrier rail is mounted on steel posts connected to outside stringers and to truss vertical posts. The face of handrail is flush with curb. The face of the handrail posts has an 8-7/8-inch offset from the curb.

Curbs: Both sides, 0.5 foot high, 0.5 foot wide

Sidewalks: None

Utilities: Visible overhead electric and telecommunications lines are present along the north and south sides of

the roadway.

Railroad: None

D. Approaches

Roadway Width: 24.0 feet

Surface Type: Asphalt

Guardrail:

West approach: 225 feet of class GA guardrail on both northwest and southwest quadrants.

East approach: 190 feet of class GA guardrail on the southeast quadrant, and 205 feet of class GA guardrail on the northeast quadrant.

Guardrail End Treatment: Buried

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge



Existing Conditions

The summary of the bridge's condition below is based on a visual inspection of the superstructure by utilizing bridge rigging, physical climbing, and a boom lift conducted by Parsons in November 2020 (report forthcoming). Photos from this inspection are included in Appendix B. In each section below, the INDOT Structure Inventory & Appraisal (SI&A) condition rating is also provided, where available, for reference. The SI&A ratings are based on the Federal Highway Administration's Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges, which established a numerical rating system from 0 (Failed Condition) to 9 (Excellent Condition). A full listing of these ratings and their description is provided in Appendix C.

A. Bridge Deck

Parsons Observed Condition: Fair to Good

INDOT SI&A Report Rating: 7 (Good)

The surface of the deck is in fair condition with moderate surface wear. Minor longitudinal cracking is located along the centerline. The underside of the deck is not visible due to stay-in-place deck forms. However, some minor localized areas of corrosion are visible on the metal deck forms, and severe corrosion is present around deck drains.

The joints on this structure are in overall fair condition, with localized failures and dirt and debris present. A class SS expansion joint is located at Abutment 2 while a Class BS expansion joint is located at Abutment 1. The curb sections alongside these joints are heavily deteriorated and spalled and have allowed water to flow over the coping.

The existing railing was observed to be in fair condition and does not meet current standards. Aluminum barrier railing is mounted on steel posts connected to outside stringers and to the truss vertical posts. The front face of the railing is flush with the curb. The front face of the posts has an 8-7/8-inch offset from curb. A portion of the railing along the north side of the bridge is deflected due to a vehicle collision (see Photo 17 in Appendix B).

The existing 6-inch curbs were observed to be in fair to good condition. Several locations are experiencing minor cracking and spalling.

The existing bridge provides two 11-foot lanes with 1-foot shoulders on each side, for a total clear roadway width of 24 feet, as shown in Figure 4 in Appendix A. INDOT design criteria for 2-lane rural collector roadways that are on the state highway system² indicate that 2-foot minimum shoulders are required. Therefore, the minimum cross-section width would typically be 26-foot clear roadway. However, based on the approach roadway lane width of 12 feet, the actual minimum cross-sectional width required at this location is 28 feet.

B. Superstructure

Parsons Observed Condition: Fair.

INDOT SI&A Report Rating: 5 (Fair)

The overall condition of the truss superstructure is fair, with some lower portions experiencing significant issues, and upper portions in fair to good condition (see Photos 5-8 in Appendix B). This inspection was

² Indiana Design Manual, Figure 55-3B



performed by visual observation using a bridge rigging system and physical climbing procedures, as well as a reach-all vehicle, to provide an "arm's length" inspection of all lower truss members of the superstructure. Upper truss members were evaluated using a boom lift for an "arm's length" inspection. Hand brushes were used for debris removal to provide an accurate assessment of the condition of the members.

The majority of the truss deficiencies were observed on the lower chord members, lower chord member connections, exterior stringers, and floor beams.

Lower Chord:

The lower chord members are experiencing notable deterioration along the length of the bridge. Moderate to severe pack rust has formed between the horizontal legs of the angles that make up the lower chord members. Many lower chord splices display severe corrosion at the interface with the primary chord member. Pack rust has developed at these interfaces and has resulted in warping and prying action along the edges of the plates. In numerous locations, splice plates and angles exhibit 30-50% section loss and loss of rivet heads. Severe pitting is intermittent on splice plates and angles resulting in a similar section loss. Most batten plates along the bottom chords are in poor condition with some nearing 100% section loss. This deterioration is a result of debris and moisture collecting on the horizontal surfaces, which creates a condition favorable for corrosion. Lower chord members are the most significant members on a truss for assessment purposes. They are more sensitive to corrosion and fatigue issues, and are considered Fracture Critical, meaning that failure of one member or connection could cause collapse of the entire structure.

Lower Exterior Stringers:

Moderate to severe corrosion has occurred on nearly all exterior stringers on the top flanges near the connections to floor beams. This is the result of water that has flowed around the coping onto the floor beams and stringers. The stringers are also shaded by the deck, preventing timely drying.

Lower Lateral Bracing:

The lower lateral bracing is in fair condition, with two members having 100% section loss near the connections and several others with more than 30% section loss. Each bay contains two diagonal steel angle members that are attached to a connection plate at the floor beam and gusset plate intersection. These connection plates have moderate corrosion under the floor beams, and most are warped. Several of these connections have missing rivet heads. The lateral bracing angles are oriented so that one is facing up and the other is facing down, with the ones facing up in generally worse condition.

Gusset Plates:

During the inspection, moderate pack rust and pitting of the gusset plates located along the lower chord was observed. The gusset plates at the abutments are in the worst condition, having more widespread areas of pack rust and pitting. Portions of rivets and rivet heads are missing at several locations. Overall, the gusset plates are in fair condition.

Vertical Posts:

The vertical truss members are in good condition.

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Diagonals:

The diagonals are in fair to good condition and only exhibit minor corrosion. This corrosion is primarily at the gusset plate connections to the lower chord.



Upper Chord:

The upper chord members are in fair to good condition. Upper members show little corrosive damage with minor rust scaling (see Photo 9 in Appendix B). Several sway braces are bent from vehicular impact. Moderate corrosion near the lower joints was observed at the end diagonals. Several lacing bars near the lower joint on the end posts have deteriorated to near 100% section loss.

Damage:

Collision damage by vehicles has occurred to the east portal bracing and several sway braces of this structure (see Photos 11, 18, 19, and 20 in Appendix B). The end post and bridge railing of the truss also have been damaged due to traffic collisions (see Photos 17 and 21). Although flood debris was observed on the floor beams, there does not appear to be any drift collision damage to the lower chord.

Bearings:

All bearings are functioning as intended and are in fair condition. No bearings appear to be over-rotated or frozen. Several anchor bolts and bearing pins are experiencing moderate corrosion. Some anchor bolts have had the tops sheared off.

Abutment 1: Fixed

Abutment 2: Expansion

C. Substructures and Foundations

Parsons Observed Condition: Poor

INDOT SI&A Report Rating: 4 (Poor)

West Abutment (Abutment 1)

Minor cracks and spalls were observed along with localized delaminations. Moderate spalling is evident on the mudwall.

East Abutment (Abutment 2)

Severe spalling is evident at the south end of the abutment (see Photos 13 and 14 in Appendix B). A large crack runs from the top of the abutment to the ground line near the center of the abutment. Minor widespread cracks were observed, along with localized delaminations.

Drainage:

The existing SR 163 over Brouilletts Creek Bridge is hydraulically inadequate by modern standards. The Q_{100} flood elevation is higher than the bottom of the lower chord; INDOT's standard is to provide 2 feet of freeboard between the structure and the 100-year flood elevation (Q_{100}). The bridge abutments were constructed with no skew in relation to the roadway. However, the stream has migrated to the west and now flows under the bridge at a 30 degree skew, leading to significant erosion at the west abutment and west bank upstream of the bridge. These hydraulic deficiencies cause a backwater condition that raises the Q_{100} by 1.43 feet upstream of the bridge.

Scour:

Based on the migration of the stream, it is likely that the west abutment could become undermined and approach embankment could become unstable due to the river migration and high velocity (see Photo 12 in Appendix B). The plans indicate piles at the abutments, but the type is not legible in the existing plan notes.

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge



D. Approaches

Overall Condition: Fair.

Wedge:

The existing east and west HMA approach wedges are 90 feet in length, have been recently overlayed and are in good condition.

Approach Pavement:

The asphalt pavement on the approaches is in good condition.

Guardrail:

The current guardrail and guardrail transitions do not satisfy modern standards.

Drive or Public Road:

An intersection with CR 170W is located approximately 420 feet east of the bridge. There is a one way stop at the intersection of CR 170W and SR 163.

Traffic-Control Devices:

The existing pavement markings for lanes and shoulders are in good condition. Snowplowable raised pavement markers and milled HMA corrugations are located within the project limits. No traffic signals or lighting exist in the proposed project limits. Bridge end markers exist at each corner of the structure.

Roadway Drainage and Pipes:

SR 163 has side ditches at the base of the fill slopes on both the north and south sides of the road. The north side of the east approach has a tributary of Brouilletts Creek running along the base of the fill slope.

E. Slope walls

No slope walls are present on either the east or west ends of the bridge.

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Purpose and Need

The need for the project is due to the deteriorating condition and non-standard lane and shoulder widths of the existing structure, INDOT Structure 163-83-01393 A (National Bridge Inventory [NBI] No. 28420). This 175-foot single-span steel truss bridge on vertical abutments was originally constructed in 1932 and rehabilitated in 1979. Recent inspections have found the bridge substructure to be in poor condition (INDOT SI&A rating 4 out of 9) with cracking wingwalls and advanced spalling. The superstructure was noted to be in fair condition (INDOT SI&A rating 5 out of 9) with rusted members, section loss, and a bent bracing. Additionally, major damage to and erosion of the stream bank were noted.

The bridge was originally designed with an H20 structural capacity (20-ton truck). Based on the INDOT design standards, as a 2-lane rural collector on the state highway system, the bridge should accommodate an HS15 design vehicle (27 tons).

The existing bridge does not meet current design standards for lane width or shoulder width. The existing bridge provides two 11-foot lanes with 1-foot shoulders, for a total clear roadway width of 24 feet. INDOT design criteria for 2-lane rural collector roadways that are on the state highway system indicate a minimum 2-foot shoulder is required and based on the approach roadway width (24 feet), the minimum clear roadway



width required for two lanes of traffic is 28 feet. These geometric deficiencies have led to numerous collisions, resulting in damage to the bridge's railing and end post.

The purpose of the project is to:

- Extend the life of the structure by a minimum of 30 years,
- Provide a minimum HS-15 load rating, and
- Improve the clear roadway width of the bridge to improve safety and protect the bridge.

Alternatives

During the development of alternatives, INDOT convened a meeting on April 7, 2021 with the Indiana Department of Natural Resources' Division of Historic Preservation and Archaeology (DHPA), the State Historic Preservation Officer for Indiana, and other Section 106 consulting parties for the project. A summary of that meeting is provided in Appendix D. During that meeting the project team reviewed a range of conceptual alternatives that included those specified in the Historic Bridge PA, as well as several others based on approaches taken on similar projects around the country. Based on the feedback received and consultation with INDOT, the following alternatives have been analyzed in detail.

A. Alternative 1 - "No Build"

This alternative means that no federal funds will be expended and that no action would occur. The no build alternative requires no design or construction; therefore, it is a feasible alternative. However, the No Build Alternative would not address the deteriorating structure, load capacity, or geometric deficiencies of the SR 163 bridge over Brouilletts Creek. Therefore, the No Build Alternative does not meet the project's purpose and need and is not a prudent alternative.

B. Alternative 2 - Rehabilitation for Continued Vehicular Use - Two-Way Operation

Alternative 2 would rehabilitate the existing structure to address the structural condition and would retain twoway traffic (two lanes) on the bridge.

ALTERNATIVE DESCRIPTION

The scope of the rehabilitation described here is based on visual inspection and a two-dimensional model. Alternative 2 would require major rehabilitation of the existing bridge, including:

- Increase load capacity to HS15:
 - Replace all lower chord members
 - Replace all upper chord members except the end posts
 - Replace two vertical truss members per truss (22% of verticals)
 - Replace all floor beam gusset plates
 - Replace all lower chord gusset plates
 - Replace all splice plates and batten plates on the lower chord
- Replacement of the lattice, splice plates, and batten plates on the lower portions of the end posts
- Replacement of portions of the lower lateral cross bracing
- Replacement of nine floor beams, and the repair of two

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Replacement of the existing bridge deck



- Replacement of stringer lines 2-6 (once the deck is removed additional stringers may be identified for replacement)
- Heat straightening or replacement of portal and sway bracing at locations where collisions have occurred
- Replacement of all bridge railing with PF-1 barrier
- Replacement of rivets with round-headed bolts where members are replaced
- Crack sealing and patching of concrete on the abutments
- Removal of unsound concrete and concrete encasement on both abutments
- Placement of riprap for scour protection at both abutments
- Placement of riprap to prevent roadway and abutment degradation due to channel migration at the west abutment
- Cleaning and painting of the entire bridge

Structural members to be replaced are identified in Figure 5 in Appendix A. This alternative would be expected to extend the remaining life of the structure by approximately 30 years. Considering that the work should take place in 2023, the bridge would require substantial rehabilitation by about 2053, when original elements will be 120 years old.

COMPLIANCE WITH DESIGN STANDARDS

This alternative would be designed to meet 3R standards as defined in the *Indiana Design Manual* as shown in Table 1. Due to the nature of truss bridges, it is not possible to address deficiencies related to the width of the structure without completely reconstructing the bridge. In addition, replacement of the railing would be required to meet crash worthiness requirements (MASH TL-3); railing meeting these standards would be wider than the existing railing, reducing the shoulder width to just six inches, as shown in Figure 6. As such, design exceptions for lane, shoulder, and clear roadway widths would be required. Based on the history of collisions with the bridge and the further reduction in clear roadway width, it is expected that these design exceptions would not be granted.

The bridge was originally designed with an H20 structural capacity (20-ton truck); however, based on observed deterioration and non-destructive testing, now has an estimated capacity of H15 (15-ton). The rehabilitation would restore the truss and meet the current design standard for HS15 structural capacity (27-ton truck).

TABLE 1 - DESIGN CRITERIA FOR ALTERNATIVE 2

Design Element (Federal Level 1)	Minimum Design Criteria ⁽¹⁾	Existing Condition	Proposed Condition	Level 1 Design Exception Required	
BRIDGE FEATURES					
Travel Lane	12'	11'	11'	Yes	
Shoulder	2'	1'	0'-6"	Yes	
Structural Capacity	HS15 (27-ton)	H15 (15-ton)	HS15 (27-ton)	No	
Clear Roadway Width	28'	24'	22'-6"	Yes	
Vertical Clearance	14'-0"	14'-8"	14'-8"	No	
APPROACH ROADWAY FEATURES					
Travel Lane	12'	11'	11'	No	
Shoulder	2'	1'	1'	No	
Maximum Grade	8.5%	0.658%	0.658%	No	
Through Lane Cross Slope	2.0%	1.56%	2.0%	No	

⁽¹⁾ Indiana Design Manual, Figure 55-3B

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge



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HYDRAULICS

Alternative 2 would make no changes to the elevation of the bridge or the channel. As such, this alternative would not satisfy INDOT's 2-foot freeboard above 100-year flood criteria. The structure will continue to be at risk for impact damage from debris and trees in the creek when flooding. It will include the installation of scour countermeasures, such as riprap, at the west abutment. However, these countermeasures would require continued maintenance. While this work would protect the abutment, it would not prevent the overall meandering of Brouilletts Creek, and the stream could continue to migrate westward, causing scour issues.

UTILITIES

Overhead utility lines are located parallel to the roadway to the north. Alternative 2 would not require their relocation. High-tension transmission lines are located about 400 feet west of the bridge, but they are not anticipated to be impacted by Alternative 2.

MAINTENANCE OF TRAFFIC

Rehabilitation of the existing bridge would require the temporary closure of SR 163 during construction. In the meantime, a detour would be utilized. According to the most recent routine bridge inspection report, the estimated detour would be 21 miles long.

ENVIRONMENTAL IMPACTS

Rehabilitation of the existing bridge would require the use of heavy equipment and the placement of temporary supports as structural members are replaced. This would require clearing and grading to provide access. These impacts are anticipated to be limited to areas immediately adjacent to the existing bridge and would be temporary in nature. The site would be restored following completion of the rehabilitation.

HISTORIC BRIDGE EFFECTS

The improvements described above would meet the Secretary of the Interior's Standards for Rehabilitation. Structural materials would be replaced using modern steel that replicates the dimensions of the existing members, maintaining the aesthetic and engineering integrity of replaced portions of the truss. Rivets would be replaced with round-headed bolts or bolt caps to retain visual similarity.

COST

Alternative 2 would cost approximately \$3,400,000.00 (see Appendix E).

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

ALTERNATIVE EVALUATION

This alternative is feasible to engineer, design, and build. It would extend the service life of the bridge and provide adequate load capacity. However, shoulder and clear roadway widths would not be improved; in fact, they would be further reduced, potentially exacerbating the existing safety issues. As a result, this alternative is not prudent and has been dismissed.

C. Alternative 3 – Rehabilitation for Continued Vehicular Use – One-Way Operation

The Historic Bridge PA and INDOT's Historic Bridge Alternatives Analysis Layout do not reference the consideration of one-way operation of a historic bridge as an alternative. However, based on the relatively low



volume of existing traffic and the bridge's loading and horizontal clearance considerations, this alternative warrants consideration at this location.

Alternative 3 would rehabilitate the existing structure to address the structural condition, but would reduce the roadway to a single lane, using a signal at either end to maintain bi-directional travel. The relatively low-volume of existing traffic (1,803 vehicles per day [vpd]) and forecasted traffic (2,640 vpd in 2032 as stated in the 2020 inspection report) provides the opportunity to adequately serve future demand via a single travel lane. As shown in Figure 7, a signal and stop bar would be installed at either end, approximately 100 feet from either end of the bridge.

ALTERNATIVE DESCRIPTION

The scope of the rehabilitation described here is based on visual inspection and a two-dimensional model. This alternative would undertake a major rehabilitation of the existing bridge including primarily the following:

- Increase load capacity to HS15:
 - Replace all lower chord members
 - Replace all floor beam gusset plates
 - Replace all splice plates and batten plates on the lower chord
 - Replace the lattice, splice plates, and batten plates on the lower portions of the end posts
 - Replace all lower chord gusset plates
- Replacement of portions of the lower lateral cross bracing
- Replacement of the existing bridge deck
- Replacement of stringer lines 2-6 (once the deck is removed additional stringers may be identified for replacement)
- Heat straightening or replacement of portal and sway bracing at locations where collisions have occurred
- Repair of all floor beams
- Replacement of all bridge railing FC barrier
- Replacement of rivets with round-headed bolts where members are replaced
- Crack sealing and patching of concrete on the abutments
- Removal of unsound concrete and concrete encasement on both abutments
- Placement of riprap for scour protection at both abutments
- Placement of riprap to prevent roadway and abutment degradation due to channel migration at the west abutment
- Cleaning and painting of the entire bridge
- Adding a signal at each end for one way operation

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Structural members to be replaced are identified in Figure 8 in Appendix A. This alternative would be expected to extend the remaining life of the structure by approximately 30 years. Considering that the work should take place in 2023, the bridge would require substantial rehabilitation by about 2053, when original elements will be 120 years old.

COMPLIANCE WITH DESIGN STANDARDS

This alternative would be designed to meet 3R standards as defined in the Indiana Design Manual as shown in Table 2. By reducing the bridge to a single lane of traffic, the bridge would meet current design standards (see Figure 9 in Appendix A).

The bridge was originally designed with an H20 structural capacity (20-ton truck); however, based on observed deterioration and non-destructive testing, now has an estimated capacity of H15 (15-ton). The rehabilitation would restore the truss and meet the current design standard for HS15 structural capacity (27-ton truck).



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TABLE 2 - DESIGN CRITERIA FOR ALTERNATIVE 3

Design Element	Minimum Design Criteria ⁽¹⁾	Existing Condition	Proposed Condition	Level 1 Design Exception Required
BRIDGE FEATURES				
Travel Lane	12'	11'	12'	No
Shoulder	2'	1'	2'	No
Structural Capacity	HS15 (27-ton)	H15 (15-ton)	HS15 (27-ton)	No
Clear Roadway Width (1 Lane)	16'	24' (2 lanes)	16'	No
Vertical Clearance	14'-0"	14'-8"	14'-8"	No
ROADWAY FEATURES				
Travel Lane	12'	11'	12'	No
Shoulder	2'	1'	2'	No
Maximum Grade	8.5%	0.658%	0.658%	No
Through Lane Cross Slope	2.0%	1.56%	2.0%	No

⁽¹⁾ Indiana Design Manual, Figure 55-3B

HYDRAULICS

Alternative 3 would make no changes to the elevation of the bridge or the channel. As such, this alternative would not satisfy INDOT's 2-foot freeboard above 100-year flood criteria. The structure would continue to be at risk for impact damage from debris and trees in the creek when flooding. It would include the installation of scour countermeasures, such as riprap, at the west abutment. However, these countermeasures would require continued maintenance. While this work would protect the abutment, it would not prevent the meandering of Brouilletts Creek and associated scouring of the west bank of the stream.

UTILITIES

Overhead utility lines are located parallel to the roadway to the north. Alternative 3 would not require their relocation. High-tension transmission lines cross SR 163 about 400 feet west of the bridge and are not anticipated to be impacted by Alternative 3.

MAINTENANCE OF TRAFFIC

Rehabilitation of the existing bridge would require the temporary closure of SR 163 during construction. In the meantime, a detour would be utilized. According to the most recent routine bridge inspection report, the estimated detour would be 21 miles long.

ENVIRONMENTAL IMPACTS

Rehabilitation of the existing bridge would require the use of heavy equipment and the placement of temporary supports as structural members are replaced. This would require clearing and grading to provide access. These impacts are anticipated to be limited to areas immediately adjacent to the existing bridge and would be temporary in nature. The site would be restored following completion of the rehabilitation.

HISTORIC BRIDGE EFFECTS

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

The improvements described above would meet the Secretary of the Interior's Standards for Rehabilitation. Structural materials would be replaced using modern steel that replicates the dimensions of the existing members, maintaining the aesthetic and engineering integrity of replaced portions of the truss. Rivets would be



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replaced with round-headed bolts or bolt caps to retain visual similarity. Additionally, based on loading requirements for a single-lane bridge, this alternative would require the replacement of less steel members than Alternative 2, retaining more of the bridge's original material.

COST

Alternative 3 would cost approximately \$2,900,000.00 (see Appendix E).

ALTERNATIVE EVALUATION

This alternative is feasible to engineer, design, and build and would require no design exceptions. Therefore, this alternative is prudent.

D. Alternative 4 - Rehabilitation for Continued Vehicular Use - One-Way Pair

Based on the Historic Bridge PA and INDOT's Historic Bridge Alternatives Analysis Layout, because Alternative 3 was found to be feasible and prudent, no additional alternatives are required. However, INDOT felt it appropriate to develop a one-way pair option for comparison purposes. The effects on the historic bridge would be similar to Alternative 3, except for the introduction of a new, parallel structure, but this alternative allows for the evaluation of the impacts and costs of maintaining two-way operation at this location.

Alternative 4 would rehabilitate the existing structure to address the structural condition and construct a new parallel structure to the south (see Figure 10 in Appendix A). A parallel alignment to the north was considered but did not fit as well with the existing alignment of SR 163 and would have required relocation of an existing overhead utility line. When complete, the existing bridge would carry westbound traffic and the new bridge would carry eastbound traffic. The new bridge would be designed to carry two lanes of traffic should the existing bridge need to be taken out of service in the future.

ALTERNATIVE DESCRIPTION

The scope of the rehabilitation described here is based on visual inspection and a two-dimensional model of the truss. This alternative would include the construction of a new bridge on a new alignment adjacent to the existing truss bridge as well as a major rehabilitation of the existing bridge including primarily the following:

- Increase load capacity to HS15:
 - Replace all lower chord members
 - Replace all floor beam gusset plates
 - Replace all splice plates and batten plates on the lower chord
 - Replace the lattice and batten plates on the lower portions of the end posts
 - Replace all lower chord gusset plates
- Replacement of portions of the lower lateral cross bracing
- Replacement of the existing bridge deck
- Replacement of stringer lines 2-6 (once the deck is removed additional stringers may be identified for replacement)
- Heat straightening or replacement of portal and sway bracing at locations where collisions have occurred
- Pad welding repair of all floor beams
- Replacement of all bridge railing with FC barrier
- Replacement of rivets with round-headed bolts where members are replaced
- Removal of unsound concrete and concrete encasement on both abutments
- Crack sealing and patching of concrete on the abutments

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Placement of riprap for scour protection at both abutments



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- Placement of riprap to prevent roadway and abutment degradation due to channel migration at the west abutment
- Cleaning and painting of the entire bridge

Structural members of the existing bridge to be replaced are identified in Figure 8 in Appendix A. This alternative would be expected to extend the remaining life of the existing structure by approximately 30 years. At that point, original elements will be 120 years old.

COMPLIANCE WITH DESIGN STANDARDS

This alternative would be designed to meet 3R standards as defined in the *Indiana Design Manual* as shown in Table 3. By reducing the bridge to a single lane of traffic, the existing bridge would meet current design standards (see Figure 9 in Appendix A).

While the new structure would initially carry a single lane, it would be constructed to accept two-way traffic in the future, meeting current design criteria, including two 12-foot lanes and 4'-8" shoulders on either side for a clear roadway width of 33'-4" (see Figure 11 in Appendix A for typical section for 2-lane configuration). It is cost-prohibitive to widen a structure by a small amount, as the cost per square foot of widening is higher than that of a complete bridge. It would also permit temporary two-lane use of the structure during truss reconstruction. The new structure would be designed to provide a minimum 75-year design life.

The bridge was originally designed with an H20 structural capacity (20-ton truck); however, based on observed deterioration and non-destructive testing, now has an estimated capacity of H15 (15-ton). The rehabilitation would restore the truss and meet the current design standard for HS15 structural capacity (27-ton truck). The new bridge would be designed using HL93 (36-ton truck plus lane loading) structural capacity in accordance with current standards.

TABLE 3 - DESIGN CRITERIA FOR EXISTING TRUSS FOR ALTERNATIVE 4

Design Element	Minimum Design Criteria (1)	Existing Condition	Proposed Condition	Level 1 Design Exception Required
		BRIDGE FEATURES		
Travel Lane	12'	11'	12'	No
Shoulder	2'	1'	2' (Truss) 4' (New Bridge)	No
Structural Capacity	Existing: HS15 (27-ton) New: HL93 (36- ton)	H15 (15-Ton)	Truss: HS15 (27-ton) New: HL93 (36-ton)	No
Clear Roadway Width (1 Lane Exist. 2 Lanes New)	16' (Truss) 30' (New Bridge)	24' (2 lanes)	16' (Truss) 32' (New Bridge)	No
Vertical Clearance	14'-0"	14'-8"	14'-8"	No
		ROADWAY FEATURES		
Travel Lane	12'	11'	12'	No
Shoulder	2'	1'	2'	No
Maximum Grade	8.5%	0.658%	0.658%	No
Through Lane Cross Slope	2.0%	1.56%	2.0%	No

⁽¹⁾ Indiana Design Manual, Figure 55-3B

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge



HYDRAULICS

Alternative 4 would make no changes to the elevation of the existing bridge or the channel. As such, the existing bridge would not satisfy INDOT's 2-foot freeboard above 100-year flood criteria. The new adjacent structure would be designed to meet current criteria for both freeboard and backwater.

The existing truss bridge would continue to be at risk for impact damage from debris and trees in the creek when flooding. It would include the installation of scour countermeasures, such as riprap, at the west abutment. However, these countermeasures would require continued maintenance. While this work would protect the abutment, it would not prevent the overall meandering of Brouilletts Creek and the stream could continue to migrate westward, causing scour issues.

UTILITIES

Overhead utility lines are located parallel to the roadway to the north. Alternative 4 would not require their relocation. High-tension transmission lines cross SR 163 about 400 feet west of the bridge, but they are not anticipated to be impacted by Alternative 4.

MAINTENANCE OF TRAFFIC

The construction would be sequenced to construct the new alignment and bridge first, thereby utilizing it during the repair of the existing truss, avoiding the use of a detour.

ENVIRONMENTAL IMPACTS

The new alignment for this alternative, which would be located to the south of the existing SR163 alignment, would include tie-in points that would pose a risk of impacting the Spangler Cemetery located approximately 0.22 mile to the east of the existing truss bridge.

Parsons completed field investigations on October 22 and 25, 2019 to identify jurisdictional resources within and adjacent to the areas of all potential alternatives. This alternative would impact additional wetlands, streams, forested floodway, and likely habitat for the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*), requiring additional mitigation measures.

HISTORIC BRIDGE EFFECTS

The improvements described above would meet the Secretary of the Interior's Standards for Rehabilitation. Structural materials would be replaced using modern steel that replicates the dimensions of the existing members, maintaining the aesthetic and engineering integrity of replaced portions of the truss. Rivets would be replaced with round-headed bolts or bolt caps to retain visual similarity. Similar to Alternative 3, based on loading requirements for a single-lane bridge, this alternative would require the replacement of less steel members than Alternative 2, retaining more of the bridge's original material.

COST

Alternative 4 would cost approximately \$7,000,000.00 (\$2,900,000 for the repair of the existing truss, \$4,100,000 for the construction of the proposed alignment and adjacent structure; see Appendix E).

ALTERNATIVE EVALUATION

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

This alternative is feasible to engineer, design, and build and would require no design exceptions. Therefore, this alternative is prudent.



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Minimization and Mitigation

As noted in the descriptions of the build alternatives, structural materials would be replaced using modern steel that replicates the dimensions of the existing members, maintaining the aesthetic and engineering integrity of replaced portions of the truss. Rivets would be replaced with round-headed bolts to retain visual similarity.

The only mitigation outlined for a rehabilitated bridge per the Historic Bridge PA is photo documentation. The Indiana SHPO will be consulted to determine if photo documentation of the bridge is needed before commencement of construction activities.

Per the "Standard Treatment Approach for Historic Bridges" from the Historic Bridge PA, INDOT will provide rehabilitation plans to the Indiana SHPO when the design is approximately 30% complete, 60% complete, and when final design plans are complete. The purpose of these reviews is to ensure compliance with the Secretary of Interior's Standards for Rehabilitation, and to incorporate context sensitive design features, where practicable.

Preliminary Preferred Alternative

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Table 4 provides a summary of the four alternatives described above.

TABLE 4: ALTERNATIVES SUMMARY

Alternative	Meets Project Purpose & Need	Construction Cost	Other Factors	Feasible and Prudent
Alt1: No Build	No	\$0	Does not address structural or geometric needs	No
Alt 2: Rehabilitation for Two- Way Operation	No	\$3.4M	Does not address geometric needs	No
Alt 3: Rehabilitation for One- Way Operation	Yes	\$2.9M	None	Yes
Alt 4: One-Way Pair	Yes	\$7.0M	Right-of way, wetland, stream, floodway, and endangered species impacts and mitigation	Yes

The No Build Alternative would not address the structural condition, load capacity or safety of the existing bridge and would, therefore, not meet the project's purpose and need.

Alternative 2 would address the structural condition of the existing bridge but would potentially exacerbate the existing safety issues due to the reduction in shoulder width required to accommodate a railing that meets crash worthiness standards. Therefore, Alternative 2 would not meet the project's purpose and need.

Alternatives 3 and 4 would both address the project's purpose and need, by providing a bridge (or bridges) that meets the structural condition and load capacity needs of the corridor and addresses the existing bridge's safety issues (clear roadway and shoulder width). Construction of a new parallel bridge would increase the project's cost by more than \$4 million more than Alternative 3 and would have greater impacts to environmental resources. In addition, Alternative 4 would require the commitment of maintenance funds for the new bridge, in addition to those required for the existing truss.



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Based on the ability of the single lane bridge to adequately carry the traffic forecast for the corridor with lower construction and maintenance costs and lower environmental impacts, INDOT has identified Alternative 3 as the preliminary preferred alternative.

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APPENDIX A: FIGURES

Intentionally omitted refer to Appendix B.

Des. 1701589 Appendix D Appendix D Appendix D-148



APPENDIX B: PHOTOGRAPHS

Intentionally omitted refer to Appendix B.

All photographs taken November 9-11, 2020



APPENDIX C: BRIDGE CONDITION RATINGS



Excerpt from Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges, U.S. Dept. of Transportation, Federal Highway Administration, 1995.

Code Description NOT APPLICABLE EXCELLENT CONDITION 9 VERY GOOD CONDITION - no problems noted. 8 GOOD CONDITION - some minor problems. 7 SATISFACTORY CONDITION - structural elements show some minor 6 deteri orati on. FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour. 5 POOR CONDITION - advanced section loss, deterioration, spalling SERIOUS CONDITION - loss of section, deterioration, spalling or 3 scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. CRITICAL CONDITION - advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in 2 elements. Fatigue cracks in steel or sheal cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close corrective action is taken. "IMMINENT" FAILURE CONDITION - major deterioration or section 1 present in critical structural components or obvious horizontal movement affecting structure Bridge is closed to traffic but corrective action stability. may put back in light service. FAILED CONDITION - out of service - beyond corrective action.



APPENDIX D: CONSULTING PARTY MEETING SUMMARY

Intentionally omitted refer to Appendix D-

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Subject: SR 163 over Brouilletts Creek Consulting Party Discussion

Date/Time: 4/7/2021 10:00 AM EDT

Location: Microsoft Teams Call

Attendees:

Name	Representing	Email Address	Telephone
Melissa Patton	INDOT PM	mpatton@indot.in.gov	765-361-5219
Chris Wheeler	INDOT	cwheeler@indot.in.gov	765-361-5238
Mary Kennedy	INDOT	mkennedy@indot.in.gov	317-694-3607
Danielle Kauffman	Indiana DNR, DHPA	dkauffmann@dnr.in.gov	317-232-0582
Wade Tharp	Indiana DNR, DHPA	wtharp1@dnr.in.gov	317-232-1650
Paul Brandenburg	Historic Spans Task Force	indianabridges@sbcglobal.net	
Kari Carmany-George	FHWA	k.carmanygeorge@dot.gov	317-226-5629
Sean Porter	Parsons	sean.porter@parsons.com	317-616-1001
Kyle Muellner	Parsons	kyle.muellner@parsons.com	317-616-4672
Dan Miller	Parsons	Daniel.J.Miller@parsons.com	317-616-4663
Dan Prevost	Parsons	Daniel.Prevost@parsons.com	513-552-7013
Brad Kahn	Parsons	brad.kahn@parsons.com	317-616-1030
Zachary Riley	Parsons	zachary.riley@parsons.com	317-616-4685

The purpose of the meeting was to discuss and receive input regarding the alternatives under consideration for the SR 163 over Brouilletts Creek project.

Action items are shown in bold.

- Background Presentation Mary Kennedy
 - Overview of Section 106 Process

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

- This bridge was built by the Vincennes Bridge Company in 1933
 - Well-known bridge construction company.
 - Was determined to not be eligible for historic status in 2010.
 - Re-evaluated in 2020 and considered rare (less than 6 extant examples in the Crawfordsville District), as there are 5 of this type remaining in the District, therefore it was determined to be eligible.
- Select/Non-Select
 - May 2020 evaluation: Low eligibility + Medium condition = Box 8 = "Non-Select"
 - Sent for review received input on deductions for previous deck replacement.
 - Original methodology had allowed for deductions due to loss of integrity associated with "not-in-kind" deck replacement.
 - No specifics were provided on their methodology, and this factor was not used in original inventory.
 - Based on coordination with consulting parties, INDOT reconsidered the deduction.
 - INDOT reviewed previous evaluations and noted that deductions had not previously been applied.

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Consulting Parties did not feel that the new deck was a significant integrity issue due to lack of visibility of change.

- o Reevaluated did not deduct for this.
- January 2021 eliminated point deduction
 - Changed to "Medium" eligibility and result was "Select"
 - "Select" bridges must be preserved in accordance with the requirements set forth by the HBPA.
- o The bridge is the only historic property in APE.
- Archaeological studies are forthcoming.
- Alternatives Presentation Kyle Muellner
 - Existing Conditions of this Parker-through truss were discussed.
 - The bridge was originally designed for a 20 ton, 2-axle truck.
 - o Current trucks using this roadway are up to 36 ton, multi-axle trucks.
 - Required clear roadway width is 28'.
 - Bridge has substandard rails and clear roadway width.
 - Adding new crash tested barriers would result in 11-foot lanes and 3 inch shoulders
 - The cross-section of this bridge, which is already narrower than the approach roadway, presents an increased risk to motorists by further restricting the width.
 - o Minimum load rating is 36 tons; and the last INDOT inspection reported a load rating of 33 tons
 - o An in-depth inspection was performed in November 2020 and showed several truss members would require replacement or rehabilitation.
 - Lower chord, the most critical members on trusses, have seen up to 25% section loss.
 - For most rehabilitation efforts, the truss will need to be disassembled, deteriorated members will need to be replaced or repaired, and truss will need to be reassembled.
 - Deformations from collisions were noted on the portal bracings, as well as some truss members. It was noted that while clear roadway is substandard, vertical clearance meets minimum criteria.
 - Flood debris was noted on the truss, indicating floodwaters frequently reach the truss.
 Tree impacts can be a destructive risk to trusses.
 - Concrete spalling (loss) was noted under the bearings, so a substantial rehabilitation would be required to continue use of these abutments.
 - The stream channel appears to be shifting westward, which poses a scour threat to the west abutment. If the abutment is undermined in a scour event, it could sink or fail.
 - Four primary alternatives were presented for discussion, as they all appear to meet requirements of the HBPA, but each pose their own risks to driver safety and/or historic integrity.
 - Alternative 1: Rehabilitate truss for continued two-way traffic.
 - Would replace most lower members and few diagonals.
 - Narrow Lanes (11')
 - Very Narrow Shoulders (3")
 - Constricting shoulder and lanes, compared with the roadway on each approach.
 - High Cost with added risk to public.
 - Trusses are considered "Fracture Critical", meaning failure of one member in tension can lead to collapse.
 - Extends life by ~30 years
 - Alternative 2: Rehabilitate truss for one-way traffic
 - Replace some lower members
 - Stop lights at ends

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

- Force traffic to center of trusses
- Road has poor alignment characteristics for signals (winding road)
- Large investment with added risk

- Still considered "Fracture Critical"
- Extends life by ~30 years

Alternative 3: Rehabilitate and widen truss

- Substantial Rehabilitation
- Widen horizontal members by 5.5'
- Would alter aesthetics, adding a panel(s) of X-bracing to the upper portals.
- Replace cross-beams under road
- Replace the majority (approx. 75%) of all members, to support added dead and live load.
 All primary members (upper chords and lower chords) would be entirely replaced.
- Would require completely new, wider abutments.
- Very large investment, while changing most material and aesthetics.
- Still considered "Fracture Critical"
- Extends life by ~30 years.

Alternative 4: Superstructure replacement with a widened truss used as decorative feature

- Substantial project, using a new bridge flanked by the repaired, widened truss.
- Widen members by about 5.5'.
- Remove cross beams underneath.
- Replace or extend portal bracing overhead.
- Would alter aesthetics.
- Large investment while changing aesthetic.
- Road has poor alignment characteristics.
- Truss is ornamental.
- Not fracture critical.
- New bridge would carry a 75-year design life.
- Alt 5: Rehab truss for one way traffic and pair with new alignment in opposite direction
 - Build new roadway next to bridge
 - Very high costs
 - Fracture critical
 - New bridge would carry a 75-year design life.
 - New bridge will typically carry a full 2-lane section, for use when the truss is no longer able to be in-service.
- Alt 6: Rehab truss for pedestrian use

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

- "Select" disposition not known yet
- Unclear whether on-site or off-site could be considered

Discussion

- Danielle: even if the truss is rehabilitated, does it remain "fracture critical"?
 - Kyle: Yes
- Paul: one way traffic probably doesn't lend itself well to this area. Is widening an option in order to provide adequate space for shoulders?
 - Kvle: Yes
- o Paul: Would we be able to replace with an existing guardrail?
 - Kyle: It's possible the existing guardrail isn't the original guardrail; however, it wouldn't be prudent to replace in-kind as it would likely make it wider.
- Chris: We've had several bridge hits because of the narrow nature of bridge. If we keep the current bridge geometry, there will be a need for concrete barrier to protect truss. The district has indicated that if the bridge can't be widened, then the preference would be to use single lane (Alternative 2).
- o Paul: If the bridge is widened, would you need to place a barrier to protect the truss?

- Kyle: Yes, but the added loads change aesthetics and requires replacing members
- Paul: The intent of historic preservation is to provide continued use of bridge so using the truss as a decorative feature is not preferred. Would members need to be replaced if the truss is used as a decorative feature?
 - Kyle: It's less invasive, but some lower chord members would still need to be replaced due to amount of rust in the interest of being "good stewards"
- Paul: Ok. A new superstructure using the truss ornamentally (Alternative 4) is less attractive from a historic preservation perspective.
- Chris: Are there any impacts to the cemeteries if the road is realigned?
 - Kyle: There are three cemeteries that have potential conflicts. One cemetery would be most susceptible to impacts but the risk may be minimal. Definitely a risk of impact. If a new roadway was taken to the south, there is risk of hitting undocumented areas of the cemetery.
- Paul: Has there been any consideration to increasing the height of the truss?
 - Kyle: It may be possible under Alt 4, but for any other alternative all members would need to be replaced. Basically, would require a complete redesign of the truss.
- Wade: Are there any cemeteries within 100' of the project limits?
 - Kyle: There would be one within 100' of the realigned road for the one-way pair alternative, but not the bridge.
- Danielle: I agree that Alt 4 would be near the bottom due to impact to eligibility since it becomes an ornamental bridge. The pedestrian bridge alternative is also not preferred since there is no demand for a pedestrian trail in the area. (Mary agrees)
- Kyle: Do any other alternatives impact risk to eligibility? Specifically, the widening option since a high percentage of members would need to be replaced.
 - Danielle: It's difficult to put a number on what percentage of members would need to remain to maintain eligibility. There will need to be a conversation with the Survey and Registry office.
- Danielle: What is the current status of the aforementioned SR75 Wildcat Creek bridge?
 - Mary: It's going to be rehabbed for continued vehicular use, however that bridge is a little wider and can provide 11' lanes and 3' shoulders.
- Mary: Is it advisable to issue a level one design exception for Alternative 1?
 - Kyle: It would need an exception for lane widths since they don't match approach lane widths and shoulder widths since they are substandard. State would be taking on risk with a level one design exception.
- o Chris: Complicating matters are the two adjacent horizontal curves which is why the district prefers a single-lane use to provide more safety and width.
- Kyle: It would certainly increase safety by forcing lower speeds. The current alignment is on an open stretch at 55 mph.
- Danielle: Does Alt 2 lead to possibly going with a one-way pair option if the implementation of a signal doesn't prove to be useful to the locals?
 - Chris: The district is ok with a signal for one-way traffic across the bridge. We could consider one-way pair at a later date but it would not be part of this project.
- Closing items
 - Mary requests that written comments from the consulting parties be emailed to her by 4/30.
 - Parsons will prepare an alternatives analysis report, for incorporation into the NEPA documentation for this project.
 - Based on comments as to risking historic integrity, Alternative 4 will be eliminated from consideration.
 - Based on comments on the potential for pedestrian use, Alternative 6 will be eliminated from

D-5

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

consideration.

- o HBAA will be sent to the consulting parties to review.
- Still need to formalize "Select" designation.
- o There will need to be a public hearing due to the involvement with the historic bridge.

These minutes are the writer's best interpretation of discussions held during the meeting. Please inform Parsons within three (3) business days of any noteworthy omissions or errors as these will become part of the project record.

Minutes prepared by:

Brad Kahn, 4/8/2021

Cc: file

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge



APPENDIX E: COST ESTIMATES

Date: 05/26/2021 Time: 03:28:54 **PRICING REPORT**

Project: SR 163 Alternative 1

Location:

County: **VERMILLION** District: Crawfordsville Project ID: 1701589

Bid Date: // State: IN

Route:

Project Setting	gs		
Primary County:	VERMILLION	Urban/Rural:	
Addl Counties:		Work Type:	
District:	Crawfordsville	Function Class:	
Longitude:	89° 00' 00"	Season:	
Latitude:	35° 00' 00"	Estimator:	p009508D
Log Mile:	Beg:	Constr Eng:	0.00 %
	End:	Priced Date:	11
Station:	Beg:	Create Date:	04/13/2021
	End:	Fed Projec No:	1701589
Project Length:	0.0000 miles		

Major Categories		
MISC.	854,966.39	31.8%
GRADE/DRAIN	36,922.19	1.4%
BRIDGE	1,764,022.98	65.7%
PAVEMENT/BASE	29,420.48	1.1%
TOTALS:	2,685,332.04	100.0%

+25% Contingency +\$671,333.01 **Total Cost:** \$3,356,665.05

STIP Information		
Construction Cost	2,685,332.04	100.0%
PE	0.00	0.0%
CE	0.00	0.0%
R/W	0.00	0.0%
R/W Incidentals	0.00	0.0%
Utilities	0.00	0.0%
Incentive	0.00	0.0%
TOTAL:	2,685,332.04	100.0%

E-2

Date: 05/26/2021 Time: 03:29:05 **PRICING REPORT**

Project: SR 163 Alternative 1

Location: County: District:

Des. 1701589

VERMILLION Crawfordsville

Project ID: **1701589**Bid Date: //

Route:

State: IN

SortCo	d Pay Item	Description	Quantity Unit	Bid Price	Extension	Comparison #1	Comparison #2	Comparison #3 Alt
1	105-06845	construction engineering	1.000 L.S.	50,146.26	50,146.26	31,417.47	33,286.75	32,363.27
2	110-01001	mobilization and demobilization	1.000 L.S.	127,872.96	127,872.96	129,624.29	136,940.58	147,240.70
3	201-52370	clearing right of way	1.000 L.S.	24,824.88	24,824.88	47,169.14	45,171.31	47,888.90
4	202-02240	pavement removal	92.000 S.Y.	50.48	4,644.16	40.01	46.54	50.48
5	202-51328	present structure, remove portions	1.000 L.S.	100,000.00	100,000.00	146,174.99	94,086.13	124,744.80
6	214-12244	geotextile for subgrade type 2b	119.000 SYS	7.16	852.04	4.86	6.79	7.16
7	302-06464	subbase for pccp	31.000 C.Y.	128.10	3,971.10	128.10	110.26	114.04
8	306-08043	milling, transition	294.000 S.Y.	14.80	4,351.20	12.87	14.80	11.49
9	401-07322	qc/qa-hma, 3, 64, surface, 9.5 mm	26.000 TON	749.62	19,490.12	749.62	314.53	297.75
10	401-10258	joint adhesive, surface	120.000 L.F.	7.13	855.60	7.13	2.82	2.79
11	401-11785	liquid asphalt sealant	120.000 L.F.	3.11	373.20	3.11	1.81	1.93
12	406-05521	asphalt for tack coat	294.000 S.Y.	1.29	379.26	0.96	1.29	1.21
13	601-02241	guardrail, remove	845.000 L.F.	5.34	4,512.30	3.86	5.07	5.34
14	601-12281	guardrail mgs w-beam, 6 ft 3 in spacing	845.000 L.F.	18.87	15,945.15	18.87	18.69	18.82
15	601-12292	guardrail mgs transition without curb	4.000 EACH	2,739.39	10,957.56	2,669.73	2,726.56	2,739.39
16	601-94689	guardrail end treatment, os	4.000 EACH	3,019.19	12,076.76	2,846.15	2,962.77	3,019.19
17	602-06729	barrier delineator	16.000 EACH	30.75	492.00	30.75	24.95	23.89
18	609-06259	reinforced concrete bridge approach 12 in	119.000 S.Y.	200.24	23,828.56	158.71	200.24	190.54
19	616-05688	riprap, class 1	680.000 TON	92.41	62,838.80	92.41	85.76	89.20
20	616-06401	riprap, dumped	59.000 TON	84.67	4,995.53	0.00	80.00	84.67
21	616-12246	geotextile for riprap type 1a	680.000 SYS	4.05	2,754.00	3.69	4.05	3.98
22	619-11052	clean steel bridge, qp-2, br. no. {1}	1.000 L.S.	230,000.00	230,000.00	173,114.67	123,494.08	155,562.02
23	619-51859	paint steel bridge, br. no. {1}	1.000 L.S.	120,000.00	120,000.00	50,052.77	34,925.36	51,213.31
24	702-51005	concrete, a, substructure	65.200 C.Y.	1,524.92	99,424.78	1,393.75	1,524.92	1,487.84
25	702-51110	grates, basins, and fittings, cast iron	1,152.000 LBS	14.38	16,565.76	0.00	0.00	14.38
26	703-06028	reinforcing bars	9,780.000 LBS	1.20	11,736.00	1.11	1.17	1.20
27	703-06029	reinforcing bars, epoxy coated	43,849.000 LBS	1.30	57,003.70	1.22	1.30	1.27
28	704-51002	concrete, c, superstructure	113.200 C.Y.	1,482.28	167,794.10	1,469.30	1,482.28	1,397.54
29	706-06351	concrete bridge railing transition, tpf-1	4.000 EACH	3,741.62	14,966.48	3,603.33	3,741.62	3,591.78
30	706-09962	railing, concrete, pf-1	354.000 L.F.	97.76	34,607.04	0.00	97.76	93.23
31	706-11404	railing, steel, pf-1	354.000 L.F.	66.47	23,530.38	0.00	66.26	66.47
32	708-05394	repair {dissassembly and reassembly}	1.000 L.S.	400,000.00	400,000.00	0.00	39,777.78	54,514.50
33	708-05394 {1}	repair {historic trusses}	1.000 L.S.	90,000.00	90,000.00	0.00	39,777.78	54,514.50
34	709-51821	surface seal	1.000 L.S.	3,000.00	3,000.00	4,631.79	7,176.47	7,135.54

Indiana Dot BidTabs Professional - PLUS PAGE: 2 of 3

PRICING REPORT Date: 05/26/2021 Time: 03:29:05

Project: SR 163 Alternative 1

Location:

CartCd Day Itam

Project ID: 1701589 Bid Date: //

County: **VERMILLION**

Crawfordsville District:

Description

State: IN Route:

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SortC	Cd Pay Item	Description	Quantity Unit	Bid Price	Extension	Comparison #1	Comparison #2	Comparison #3 P
				=				
35	710-09158	patching concrete structures	268.000 S.F.	147.68	39,578.24	143.91	141.66	147.68
36	711-51038	structural steel	1.000 L.S.	740,000.00	740,000.00	315,921.27	552,409.17	479,295.09
37	712-11618	environmental control, bridge number	1.000 L.S.	50,000.00	50,000.00	0.00	0.00	50,000.00
38	724-51925	structural expansion joint, ss	50.000 L.F.	316.33	15,816.50	0.00	316.33	240.49
39	727-90308	epoxy injection, crack preparation	25.000 L.F.	131.45	3,286.25	0.00	131.45	119.46
40	727-90309	epoxy injection, epoxy material	2.000 GAL	259.25	518.50	0.00	134.43	259.25
41	727-93560	epoxy injection, furnishing equipment	1.000 L.S.	1,000.00	1,000.00	919.17	1,255.80	1,655.58
42	731-03133	concrete facing	1,070.000 S.F.	29.22	31,265.40	0.00	0.00	29.22
43	801-06625	detour route marker assembly	34.000 EACH	110.11	3,743.74	110.09	110.11	109.86
44	801-06640	construction sign, a	10.000 EACH	189.26	1,892.60	166.60	182.71	189.26
45	801-06775	maintaining traffic	1.000 L.S.	50,000.00	50,000.00	89,765.58	99,959.28	115,202.82
46	801-07118	barricade, iii-a	48.000 L.F.	14.33	687.84	13.22	14.01	14.33
47	801-07119	barricade, iii-b	48.000 L.F.	15.03	721.44	13.50	14.59	15.03
48	808-06713	line, paint, solid, white, 4 in	500.000 L.F.	1.56	780.00	0.65	1.56	1.51
49	808-06714	line, paint, solid, yellow, 4 in	500.000 L.F.	1.35	675.00	0.58	1.35	1.31
50	808-75996	snowplowable raised pavement marker, remove	5.000 EACH	115.37	576.85	62.15	107.37	115.37

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TOTALS 2,685,332.04 1,529,950.71 1,838,051.88 1,982,764.84

LOADED PRICES

Alternate #1: DOT District 1/Low 3 Prices/from:03/04/2020 TO:03/10/2021

Quantity Range from 50.00% under to 100.00% over and job size from \$1,250,000.00 up to \$5,000,000.00/Project Prefix: Multiple

Alternate #2: State Averages/Low 3 Prices/from:03/04/2020 TO:03/10/2021

Quantity Range from 50.00% under to 100.00% over and job size from \$1,250,000.00 up to \$5,000,000.00/Project Prefix: Multiple

Alternate #3: State Averages/from:03/06/2019 TO:03/10/2021

Quantity Range from 50.00% under to 100.00% over and job size from \$1,250,000.00 up to \$5,000,000.00

+25% Contingency +\$671,333.01

> **Total Cost:** \$3,356,665.05

Indiana Dot BidTabs Professional - PLUS PAGE: 3 of 3

Date: 05/26/2021 Time: 03:32:03 **PRICING REPORT**

Project: SR 163 Alternative 2

Location:

County: **VERMILLION** District: Crawfordsville Project ID: 1701589

Bid Date: // State: IN

Route:

Project Setting	gs	
Primary County:	VERMILLION	Urban/Rural:
Addl Counties:		Work Type:
District:	Crawfordsville	Function Class:
Longitude:	89° 00' 00"	Season:
Latitude:	35° 00' 00"	Estimator: p009508D
Log Mile:	Beg:	Constr Eng: 0.00 %
	End:	Priced Date: / /
Station:	Beg:	Create Date: 04/13/2021
	End:	Fed Projec No: 1701589
Project Length:	0.0000 miles	

Major Categories		
MISC.	813,354.38	36.6%
GRADE/DRAIN	36,678.75	1.6%
BRIDGE	1,346,155.63	60.5%
PAVEMENT/BASE	28,395.68	1.3%
TOTALS:	2,224,584.44	100.0%

+\$50,000 Signal +25% Contingency +\$568,646.11 **Total Cost:** \$2,843,230.55

STIP Information		
Construction Cost	2,224,584.44	100.0%
PE	0.00	0.0%
CE	0.00	0.0%
R/W	0.00	0.0%
R/W Incidentals	0.00	0.0%
Utilities	0.00	0.0%
Incentive	0.00	0.0%
TOTAL:	2,224,584.44	100.0%

E-5

Date: 05/26/2021 Time: 03:32:06 **PRICING REPORT**

Project: SR 163 Alternative 2

Location:

Des. 1701589

County: **VERMILLION** District: Crawfordsville Project ID: **1701589**Bid Date: //

Route:

State: IN

2 110-01001 mobilization and demobilization 1.000 L.S. 105,932.60 105,932.60 129,824.29 136,940.58 147,240.73 3 201-52370 clearing right of way 1.000 L.S. 20,565.45 20,566.45 47,169.14 45,171.31 47,888.4 4 202-02240 pawment removal 92,000 S.Y. 50.48 4,644.16 40.01 46.54 50.4 5 202-51328 present structure, remove portions 1.000 L.S. 100,000.00 100,000.00 146,174.99 94,086.13 124,744.6 6 214-12244 geotextile for subgrade type 2b 85.000 SYS 7.16 608.60 4.86 6.79 7.71 7 302-06464 subbase for pccp 23.000 CY. 128.10 2,946.30 128.10 110.26 114.6 8 306-98043 milling, translition 294.000 S.Y. 14.80 4,351.20 12.87 14.80 114.2 4 401-10258 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82	SortCd	Pay Item	Description	Quantity Unit	Bid Price	Extension	Comparison #1	Comparison #2	Comparison #3 Alt
3 201-52370 clearing right of way 1.000 L.S. 20,565.45 20,565.45 47,169.14 45,171.31 47,888.64 4 202-02240 pavement removal 92,000 S.Y. 50.48 4,644.16 40.01 46.54 50.4 5 202-51328 present structure, remove portions 1.000 L.S. 100,000.00 100,000.00 14,174.99 49,086.13 124,744.66 6 214-12244 geotextile for subgrade type 2b 85,000 SVS 7.16 60.86.0 4.86 6.79 7.7 302-06464 subbase for pocp 23,000 CV. 128.10 2,96.30 121.81 110.26 114.40 9 401-07322 qc/qa-hma, 3, 64, surface 120.000 L.F. 7.13 855.60 7.13 2.82 22.71 10 401-107825 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82 22.7 11 401-11785 liquid asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2	1	105-06845	construction engineering	1.000 L.S.	41,542.20	41,542.20	31,417.47	33,286.75	32,363.27
4 202-02240 pavement removal 92.000 S.Y. 50.48 4,644.16 40.01 46.54 50.45 5 2025-1328 present structure, remove portions 1.000 L.S. 100,000.00 100,000.00 146,174.99 94,086.13 124,744.8 6 214-12244 geotextile for subgrade type 2b 85.000 SVS 7.16 608.60 4.86 6.79 7.17 7 302-06464 subbase for pccp 23.000 C.Y. 128.10 2.946.30 128.10 110.26 114.0 8 306-08043 milling, transition 294.000 S.Y. 14.80 4,351.20 12.87 14.80 114.9 9 401-07322 cycla-hma, 3, 64, surface, 9.5 mm 26.000 TON 749.62 19,490.12 749.62 314.53 297.7 10 401-10258 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82 2.7 11 401-17281 liquid asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2	2	110-01001	mobilization and demobilization	1.000 L.S.	105,932.60	105,932.60	129,624.29	136,940.58	147,240.70
5 202-51328 present structure, remove portions 1.000 L.S. 100,000.00 100,000.00 146,174.99 94,086.13 124,744.86 6 214-12244 geotextile for subgrade type 2b 85,000 SYS 7.16 608.60 4.86 6.79 7.1 3 302-06464 subbase for pcp 23,000 C.Y. 128.10 2,946.30 128.10 110.26 114.0 8 306-08043 milling, transition 294.000 S.Y. 14.80 4,351.20 12.87 14.80 11.4 9 401-07252 cycla-ma, 3, 64, surface, 9.5 mm 26.000 TON 749.62 19,490.12 749.62 314.53 297.7 11 401-17285 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82 297.7 11 401-17285 joint adhesive, surface 120,000 L.F. 3.11 373.20 3.11 1.81 1.5 12 406-05521 asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2	3	201-52370	clearing right of way	1.000 L.S.	20,565.45	20,565.45	47,169.14	45,171.31	47,888.90
6 214-12244 geotextile for subgrade type 2b 85.000 SYS 7.16 608.60 4.86 6.79 7.17 7 302-08644 subbase for pccp 23.000 C.Y. 128.10 2.946.30 128.10 110.26 114.80 8 308-08043 milling, transition 294.000 S.Y. 14.80 4,351.20 12.87 14.80 114.90 9 401-07322 qc/qa-hma, 3, 64, surface, 9.5 mm 26.000 TON 749.62 19,490.12 749.62 314.53 297.7 10 401-10258 joint adhesive, surface 120.000 L.F. 3.11 373.20 3.11 181 11.11 11 401-11785 liquid asphalt sealant 120.000 L.F. 3.11 373.20 3.11 181 11.11 12 406-05521 asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2 13 601-02241 guardrail mgs webam, 6 ft 3 in spacing 845.000 L.F. 5.34 4,512.30 3.86 5.07 5.3	4	202-02240	pavement removal	92.000 S.Y.	50.48	4,644.16	40.01	46.54	50.48
7 302-06464 subbase for pccp 23.000 C.Y. 128.10 2,946.30 128.10 110.26 114.03 306-08043 milling, transition 294.000 S.Y. 14.80 4,351.20 12.87 14.80 114.04 11-07322 qc/qa-hma, 3, 64, surface, 9.5 mm 26.000 TON 749.62 19,490.12 749.62 314.53 297.7 10 401-10258 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82 2.7 11 401-11785 liquid asphalt sealant 120.000 L.F. 3.11 373.20 3.11 1.81 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.	5	202-51328	present structure, remove portions	1.000 L.S.	100,000.00	100,000.00	146,174.99	94,086.13	124,744.80
8 306-08043 milling, transition 294.000 S.Y. 14.80 4,351.20 12.87 14.80 11.4 9 401-07322 qc/qa-hma, 3, 64, surface, 9.5 mm 26.000 TON 749.62 19,490.12 749.62 314.53 297.7 11 401-10258 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82 2.7 11 401-11785 liquid asphalt sealant 120.000 L.F. 3.11 373.20 3.11 1.81 1.52 12 406-05521 asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2 14 601-12281 guardrail mgs w-beam, 6 ft 3 in spacing 845.000 L.F. 18.87 15.945.15 18.87 18.69 18.8 15 601-12281 guardrail mgs transition without curb 4.000 EACH 2,739.39 10,967.56 2,689.73 2,726.56 2,739.3 16 601-2289 guardrail end treatment, os 4.000 EACH 2,739.39 10,967.56 2,861.51 2,962.77	6	214-12244	geotextile for subgrade type 2b	85.000 SYS	7.16	608.60	4.86	6.79	7.16
9 401-07322 qc/qa-hma, 3, 64, surface, 9.5 mm 26.000 TON 749.62 19,490.12 749.62 314.53 297.7 10 401-10258 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82 2.7 11 401-11785 liquid asphalt sealant 120.000 L.F. 3.11 373.20 3.11 1.81 1.9 12 406-05521 asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2 13 601-02241 guardrail mgs w-beam, 6 ft 3 in spacing 845.000 L.F. 5.34 4.512.30 3.86 5.07 5.3 14 601-12281 guardrail mgs w-beam, 6 ft 3 in spacing 845.000 L.F. 18.87 15,945.15 18.87 18.69 18.8 601-12292 guardrail mgs transition without curb 4.000 EACH 2,739.39 10.957.56 2,669.73 2,726.56 2,739.3 16 601-94689 guardrail end treatment, os 4.000 EACH 3,019.19 12,076.76 2,846.15 2,962.77 3,019.1 17 602-06729 barrier delineator 16.000 EACH 30,75 492.00 30.75 24.95 23.8 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 18 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 19 616-056401 riprap dumped 59.000 TON 84.67 4,995.53 0.00 80.00 84.6 161-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.9 14.05 14	7 :	302-06464	subbase for pccp	23.000 C.Y.	128.10	2,946.30	128.10	110.26	114.04
10 401-10258 joint adhesive, surface 120.000 L.F. 7.13 855.60 7.13 2.82 2.7 11 401-11785 liquid asphalt sealant 120.000 L.F. 3.11 373.20 3.11 1.81 1.5 12 406-05521 asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2 13 601-02241 guardrail, remove 845.000 L.F. 5.34 4.512.30 3.86 5.07 5.3 14 601-12281 guardrail mgs w-beam, 6 ft 3 in spacing 845.000 L.F. 18.87 15.945.15 18.87 18.69 18.8 15 601-12282 guardrail mgs transition without curb 4.000 EACH 2,739.39 10,957.56 2,669.73 2,726.56 2,739.3 16 601-94889 guardrail end treatment, os 4.000 EACH 3,019.19 12,076.76 2,846.15 2,962.77 3,019.1 17 602-06729 barrier delineator 16.000 EACH 3,075 492.00 30.75 24.95 23.8	8	306-08043	milling, transition	294.000 S.Y.	14.80	4,351.20	12.87	14.80	11.49
11 401-11785 İquid asphalt sealant 120,000 L.F. 3.11 373.20 3.11 1.81 1.9 12 406-05521 asphalt for tack coat 294,000 S.Y. 1.29 379.26 0.96 1.29 1.2 13 601-02241 guardrail, remove 845,000 L.F. 5.34 4,512.30 3.86 5.07 5.3 14 601-12281 guardrail mgs w-beam, 6 ft 3 in spacing 845,000 L.F. 18.87 15,945.15 18.87 18.69 18.8 15 601-12292 guardrail mgs transition without curb 4,000 EACH 2,739.39 10,957.56 2,669.73 2,726.56 2,739.3 16 601-94689 guardrail end treatment, os 4,000 EACH 3,019.19 12,076.76 2,846.15 2,962.77 3,019.19 18 609-06259 barrier delineator 16.000 EACH 30.75 492.00 30.75 24.95 23.8 18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24	9 4	401-07322	qc/qa-hma, 3, 64, surface, 9.5 mm	26.000 TON	749.62	19,490.12	749.62	314.53	297.75
12 406-05521 asphalt for tack coat 294.000 S.Y. 1.29 379.26 0.96 1.29 1.2 13 601-02241 guardrail, remove 845.000 L.F. 5.34 4,512.30 3.86 5.07 5.3 14 601-12281 guardrail mgs w-beam, 6 ft 3 in spacing 845.000 L.F. 18.87 15,945.15 18.87 18.69 18.8 15 601-12292 guardrail mgt transition without curb 4.000 EACH 2,739.39 10,957.56 2,669.73 2,726.56 2,739.3 16 601-94689 guardrail end treatment, os 4.000 EACH 3.019.19 12,076.76 2,846.15 2,962.77 3,019.1 17 602-06729 barrier delineator 16.000 EACH 30.75 492.00 30.75 24.95 23.8 18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 20 616-12246 geotextitie for riprap type 1a	10	401-10258	joint adhesive, surface	120.000 L.F.	7.13	855.60	7.13	2.82	2.79
13 601-02241 guardrail, remove 845.000 L.F. 5.34 4,512.30 3.86 5.07 5.3 14 601-12281 guardrail mgs w-beam, 6 ft 3 in spacing 845.000 L.F. 18.87 15,945.15 18.87 18.69 18.8 15 601-12292 guardrail mgs transition without curb 4.000 EACH 2,739.39 10,957.56 2,669.73 2,726.56 2,739.3 16 601-94689 guardrail end treatment, os 4.000 EACH 3,019.19 12,076.76 2,846.15 2,962.77 3,019.1 17 602-06729 barrier delineator 16.000 EACH 30.75 492.00 30.75 24.95 23.8 18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 20 616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00	11 4	401-11785	liquid asphalt sealant	120.000 L.F.	3.11	373.20	3.11	1.81	1.93
14 601-12281 guardrail mgs w-beam, 6 ft 3 in spacing 845.000 L.F. 18.87 15,945.15 18.87 18.89 18.85 15 601-12292 guardrail mgs transition without curb 4.000 EACH 2,739.39 10,957.56 2,669.73 2,726.56 2,739.39 16 601-94689 guardrail end treatment, os 4.000 EACH 3,019.19 12,076.76 2,846.15 2,962.77 3,019.19 17 602-06729 barrier delineator 16.000 EACH 30.75 492.00 30.75 24.95 23.8 18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 20 616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00 80.00 84.6 21 616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 <	12	406-05521	asphalt for tack coat	294.000 S.Y.	1.29	379.26	0.96	1.29	1.21
15 601-12292 guardrail mgs transition without curb 4.000 EACH 2,739.39 10,957.56 2,669.73 2,726.56 2,739.31 6 601-94689 guardrail end treatment, os 4.000 EACH 3,019.19 12,076.76 2,846.15 2,962.77 3,019.11 602-06729 barrier delineator 16.000 EACH 30.75 492.00 30.75 24.95 23.8 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 1616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00 84.6 1616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.9 1616-1052 clean steel bridge, qp-2, br. no. 1.000 L.S. 230,000.00 230,000.00 173,114.67 123,494.08 155,562.0 1619-51859 paint steel bridge, br. no. 1.000 L.S. 120,000.00 120,000.00 50,052.77 34,925.36 51,213.3 16,705-51005 concrete, a, substructure 65.200 C.Y. 1,524.92 99,424.78 1,393.75 1,524.92 1,487.8 170,206.00 1,411 1,117 1.2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,	13	601-02241	guardrail, remove	845.000 L.F.	5.34	4,512.30	3.86	5.07	5.34
16 601-94689 guardrail end treatment, os 4.000 EACH 3,019.19 12,076.76 2,846.15 2,962.77 3,019.1 17 602-06729 barrier delineator 16.000 EACH 30.75 492.00 30.75 24.95 23.8 18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 20 616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00 84.6 21 616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.8 22 619-11052 clean steel bridge, qp-2, br. no. 1.000 L.S. 230,000.00 230,000.00 173,114.67 123,494.08 155,562.0 23 619-51859 paint steel bridge, pr. no. 1.000 L.S. 120,000.00 50,052.77 34,925.36 51,	14	601-12281	guardrail mgs w-beam, 6 ft 3 in spacing	845.000 L.F.	18.87	15,945.15	18.87	18.69	18.82
17 602-06729 barrier delineator 16.000 EACH 30.75 492.00 30.75 24.95 23.8 18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.5 19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 20 616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00 84.6 21 616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.9 22 619-11052 clean steel bridge, qp-2, br. no. 1.000 L.S. 230,000.00 230,000.00 173,114.67 123,494.08 155,562.0 23 619-51859 paint steel bridge, pr. no. 1.000 L.S. 120,000.00 120,000.00 50,052.77 34,925.36 51,213.3 24 702-51005 concrete, a, substructure 65.200 C.Y. 1,524.92 99,424.78 1,393.75 1	15	601-12292	guardrail mgs transition without curb	4.000 EACH	2,739.39	10,957.56	2,669.73	2,726.56	2,739.39
18 609-06259 reinforced concrete bridge approach 12 in 85.000 S.Y. 200.24 17,020.40 158.71 200.24 190.52 19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 20 616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00 84.6 21 616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.9 22 619-11052 clean steel bridge, qp-2, br. no. 1.000 L.S. 230,000.00 230,000.00 173,114.67 123,494.08 155,562.0 23 619-51859 paint steel bridge, br. no. 1.000 L.S. 120,000.00 120,000.00 50,052.77 34,925.36 51,213.3 24 702-51005 concrete, a, substructure 65.200 C.Y. 1,524.92 99,424.78 1,393.75 1,524.92 1,487.8 25 702-51110 grates, basins, and fittings, cast iron 1,152.000 LBS 14.38 16,565.76	16	601-94689	guardrail end treatment, os	4.000 EACH	3,019.19	12,076.76	2,846.15	2,962.77	3,019.19
19 616-05688 riprap, class 1 680.000 TON 92.41 62,838.80 92.41 85.76 89.2 20 616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00 84.6 21 616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.9 22 619-11052 clean steel bridge, qp-2, br. no. 1.000 L.S. 230,000.00 230,000.00 173,114.67 123,494.08 155,562.0 23 619-51859 paint steel bridge, br. no. 1.000 L.S. 120,000.00 120,000.00 50,052.77 34,925.36 51,213.3 24 702-51005 concrete, a, substructure 65.200 C.Y. 1,524.92 99,424.78 1,393.75 1,524.92 1,487.8 25 702-51110 grates, basins, and fittings, cast iron 1,152.000 LBS 14.38 16,565.76 0.00 0.00 14.3 26 703-06028 reinforcing bars 9,780.000 LBS 1.20 11,736.00 1.11 1.17 1.2 27 703-06029 reinforcing bars, epoxy coated 32,221.000 LBS 1.30 41,887.30 1.22 1.30 1.2 28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	17	602-06729	barrier delineator	16.000 EACH	30.75	492.00	30.75	24.95	23.89
20 616-06401 riprap, dumped 59.000 TON 84.67 4,995.53 0.00 80.00 84.62 1 616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.9	18	609-06259	reinforced concrete bridge approach 12 in	85.000 S.Y.	200.24	17,020.40	158.71	200.24	190.54
21 616-12246 geotextile for riprap type 1a 680.000 SYS 4.05 2,754.00 3.69 4.05 3.9 22 619-11052 clean steel bridge, qp-2, br. no. 1.000 L.S. 230,000.00 230,000.00 173,114.67 123,494.08 155,562.0 23 619-51859 paint steel bridge, br. no. 1.000 L.S. 120,000.00 120,000.00 50,052.77 34,925.36 51,213.3 24 702-51005 concrete, a, substructure 65.200 C.Y. 1,524.92 99,424.78 1,393.75 1,524.92 1,487.8 25 702-51110 grates, basins, and fittings, cast iron 1,152.000 LBS 14.38 16,565.76 0.00 0.00 14.3 26 703-06028 reinforcing bars 9,780.000 LBS 1.20 11,736.00 1.11 1.17 1.2 27 703-06029 reinforcing bars, epoxy coated 32,221.000 LBS 1.30 41,887.30 1.22 1.30 1.2 28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	19	616-05688	riprap, class 1	680.000 TON	92.41	62,838.80	92.41	85.76	89.20
22 619-11052 clean steel bridge, qp-2, br. no. 1.000 L.S. 230,000.00 230,000.00 173,114.67 123,494.08 155,562.02 120,000.00 120,000.	20	616-06401	riprap, dumped	59.000 TON	84.67	4,995.53	0.00	80.00	84.67
23 619-51859 paint steel bridge, br. no. 1.000 L.S. 120,000.00 120,000.00 50,052.77 34,925.36 51,213.3 24 702-51005 concrete, a, substructure 65.200 C.Y. 1,524.92 99,424.78 1,393.75 1,524.92 1,487.8 25 702-51110 grates, basins, and fittings, cast iron 1,152.000 LBS 14.38 16,565.76 0.00 0.00 14.3 26 703-06028 reinforcing bars 9,780.000 LBS 1.20 11,736.00 1.11 1.17 1.2 27 703-06029 reinforcing bars, epoxy coated 32,221.000 LBS 1.30 41,887.30 1.22 1.30 1.2 28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	21	616-12246	geotextile for riprap type 1a	680.000 SYS	4.05	2,754.00	3.69	4.05	3.98
24 702-51005 concrete, a, substructure 65.200 C.Y. 1,524.92 99,424.78 1,393.75 1,524.92 1,487.82 702-51110 grates, basins, and fittings, cast iron 1,152.000 LBS 14.38 16,565.76 0.00 0.00 14.3 26 703-06028 reinforcing bars 9,780.000 LBS 1.20 11,736.00 1.11 1.17 1.2 27 703-06029 reinforcing bars, epoxy coated 32,221.000 LBS 1.30 41,887.30 1.22 1.30 1.2 28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	22	619-11052	clean steel bridge, qp-2, br. no.	1.000 L.S.	230,000.00	230,000.00	173,114.67	123,494.08	155,562.02
25 702-51110 grates, basins, and fittings, cast iron 1,152.000 LBS 14.38 16,565.76 0.00 0.00 14.3 26 703-06028 reinforcing bars 9,780.000 LBS 1.20 11,736.00 1.11 1.17 1.2 27 703-06029 reinforcing bars, epoxy coated 32,221.000 LBS 1.30 41,887.30 1.22 1.30 1.2 28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	23	619-51859	paint steel bridge, br. no.	1.000 L.S.	120,000.00	120,000.00	50,052.77	34,925.36	51,213.31
26 703-06028 reinforcing bars 9,780.000 LBS 1.20 11,736.00 1.11 1.17 1.2 27 703-06029 reinforcing bars, epoxy coated 32,221.000 LBS 1.30 41,887.30 1.22 1.30 1.2 28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	24	702-51005	concrete, a, substructure	65.200 C.Y.	1,524.92	99,424.78	1,393.75	1,524.92	1,487.84
27 703-06029 reinforcing bars, epoxy coated 32,221.000 LBS 1.30 41,887.30 1.22 1.30 1.2 28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	25	702-51110	grates, basins, and fittings, cast iron	1,152.000 LBS	14.38	16,565.76	0.00	0.00	14.38
28 704-51002 concrete, c, superstructure 80.600 C.Y. 1,482.28 119,471.77 1,469.30 1,482.28 1,397.5 29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	26	703-06028	reinforcing bars	9,780.000 LBS	1.20	11,736.00	1.11	1.17	1.20
29 706-06351 concrete bridge railing transition, tpf-1 4.000 EACH 3,741.62 14,966.48 3,603.33 3,741.62 3,591.7 30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	27	703-06029	reinforcing bars, epoxy coated	32,221.000 LBS	1.30	41,887.30	1.22	1.30	1.27
30 706-09962 railing, concrete, pf-1 354.000 L.F. 97.76 34,607.04 0.00 97.76 93.2 31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	28	704-51002	concrete, c, superstructure	80.600 C.Y.	1,482.28	119,471.77	1,469.30	1,482.28	1,397.54
31 706-11404 railing, steel, pf-1 354.000 L.F. 66.47 23,530.38 0.00 66.26 66.4	29	706-06351	concrete bridge railing transition, tpf-1	4.000 EACH	3,741.62	14,966.48	3,603.33	3,741.62	3,591.78
3, 71	30	706-09962	railing, concrete, pf-1	354.000 L.F.	97.76	34,607.04	0.00	97.76	93.23
	31	706-11404	railing, steel, pf-1	354.000 L.F.	66.47	23,530.38	0.00	66.26	66.47
32 708-05394 repair 1.000 L.S. 400,000.00 400,000.00 0.00 39,777.78 54,514.5	32	708-05394	repair	1.000 L.S.	400,000.00	400,000.00	0.00	39,777.78	54,514.50
33 708-05394 {1} repair 1.000 L.S. 100,000.00 100,000.00 0.00 39,777.78 54,514.5	33	708-05394 {1}	repair	1.000 L.S.	100,000.00	100,000.00	0.00	39,777.78	54,514.50
34 709-51821 surface seal 1.000 L.S. 3,000.00 3,000.00 4,631.79 7,176.47 7,135.5	34	709-51821	surface seal	1.000 L.S.	3,000.00	3,000.00	4,631.79	7,176.47	7,135.54

Indiana Dot BidTabs Professional - PLUS PAGE: 2 of 3

Date: 05/26/2021 PRICING REPORT Time: 03:32:06

Project: SR 163 Alternative 2

Location:

VERMILLION

County: District: Crawfordsville Project ID: 1701589

Bid Date: //

Route:

State: IN

Sort	Cd Pay Item	Description	Quantity Unit	Bid Price	Extension	Comparison #1	Comparison #2	Comparison #3 Al
35	710-09158	patching concrete structures	268.000 S.F.	147.68	39,578.24	143.91	141.66	147.68
36	711-51038	structural steel	1.000 L.S.	380,000.00	380,000.00	315,921.27	552,409.17	479,295.09
37	712-11618	environmental control, bridge number	1.000 L.S.	50,000.00	50,000.00	0.00	0.00	0.00
38	724-51925	structural expansion joint, ss	36.000 L.F.	316.33	11,387.88	0.00	316.33	240.49
39	727-90308	epoxy injection, crack preparation	25.000 L.F.	131.45	3,286.25	0.00	131.45	119.46
40	727-90309	epoxy injection, epoxy material	2.000 GAL	259.25	518.50	0.00	134.43	259.25
41	727-93560	epoxy injection, furnishing equipment	1.000 L.S.	1,000.00	1,000.00	919.17	1,255.80	1,655.58
42	731-03133	concrete facing	1,070.000 S.F.	29.22	31,265.40	0.00	0.00	29.22
43	801-06625	detour route marker assembly	34.000 EACH	110.11	3,743.74	110.09	110.11	109.86
44	801-06640	construction sign, a	10.000 EACH	189.26	1,892.60	166.60	182.71	189.26
45	801-06775	maintaining traffic	1.000 L.S.	50,000.00	50,000.00	89,765.58	99,959.28	115,202.82
46	801-07118	barricade, iii-a	48.000 L.F.	14.33	687.84	13.22	14.01	14.33
47	801-07119	barricade, iii-b	48.000 L.F.	15.03	721.44	13.50	14.59	15.03
48	808-06713	line, paint, solid, white, 4 in	500.000 L.F.	1.56	780.00	0.65	1.56	1.51
49	808-06714	line, paint, solid, yellow, 4 in	500.000 L.F.	1.35	675.00	0.58	1.35	1.31
50	808-75996	snowplowable raised pavement marker, remove	5.000 EACH	115.37	576.85	62.15	107.37	115.37

TOTALS 2,224,584.44 1,461,279.19 1,762,263.43 1,861,436.49

LOADED PRICES

Alternate #1: User Entered Prices Alternate #2: User Entered Prices Alternate #3: User Entered Prices +\$50,000 Signal

+25% Contingency +\$568,646.11

> **Total Cost:** \$2,843,230.55

BidTabs Professional - PLUS Indiana Dot PAGE: 3 of 3

E-7

Date: 06/02/2021 Time: 01:44:37 **PRICING REPORT**

Project: SR 163 over Brouillett's Creek - Alt. 3 Off Alignment

Location:

VERMILLION

County: District: Crawfordsville Project ID: 1701589-1

Bid Date: // State: IN

Route:

Project Settings			
Primary County:	VERMILLION	Urban/Rural:	
Addl Counties:		Work Type:	
District:	Crawfordsville	Function Class:	
Longitude:	89° 00' 00"	Season:	
Latitude:	35° 00' 00"	Estimator: p00936	60D
Log Mile:	Beg:	Constr Eng: 0.00 %	
	End:	Priced Date: / /	
Station:	Beg:	Create Date: 07/12/2	019
	End:	Fed Projec No: 170158	9
Project Length:	0.0000 miles		

Major Categories		
MISC.	768,501.82	22.4%
GRADE/DRAIN	682,393.35	19.9%
BRIDGE	1,692,288.85	49.3%
PAVEMENT/BASE	290,295.80	8.5%
TOTALS:	3,433,479.82	100.0%

+20% Contingency +\$686,695.96 **Total Cost:** \$4,120,175.79

STIP Information		
Construction Cost	3,433,479.82	100.0%
PE	0.00	0.0%
CE	0.00	0.0%
R/W	0.00	0.0%
R/W Incidentals	0.00	0.0%
Utilities	0.00	0.0%
Incentive	0.00	0.0%
TOTAL:	3,433,479.82	100.0%

Date: 06/02/2021 Time: 01:44:48 **PRICING REPORT**

Project: SR 163 over Brouillett's Creek - Alt. 3 Off Alignment

Location:

Project ID: **1701589-1**Bid Date: // State: IN **VERMILLION** Route:

County: District: Crawfordsville

SortC	d Pay Item	Description	Quantity Unit	Bid Price	Extension	district: crawfordsville	state averages	state averages_Alt
1	105-06845	construction engineering	1.000 L.S.	64.117.28	64.117.28	16,764.68	22,549.91	20,363.22
2	110-01001	mobilization and demobilization	1.000 L.S.	163,499.04	163,499.04	78,893.46	91,878.46	91,437.19
3	201-52370	clearing right of way	1.000 L.S.	31,741.23	31,741.23	30,209.04	34,679.29	34,891.64
4	202-02240	pavement removal	4,314.000 S.Y.	17.44	75,236.16	14.50	17.44	16.02
4 5	202-02240	paved side ditch, remove	4,314.000 S.T. 157.000 L.F.	14.74	2,314.18	12.35	12.35	14.74
5 7	203-02000	excavation, common	1,315.000 C.Y.	39.34	51,732.10	38.99	39.34	37.74
<i>i</i> 8	203-02000	borrow	19,630.000 C.Y.	15.00	294,450.00	5.40	8.93	10.35
9	205-02070	storm water management budget	30,000.000 \$	1.00	30,000.00	1.00	1.00	1.00
3 10	205-12100	swqcp preparation and implementation,	1.000 L.S.	40,000.00	40,000.00	8,766.67	37,381.79	28,665.15
11	206-51220	excavation, wet	320.000 C.Y.	74.06	23,699.20	37.90	64.15	74.06
12	207-08264	subgrade treatment, type ii	5,700.000 S.Y.	36.50	208,050.00	36.50	17.75	16.79
13	207-09935	subgrade treatment, type in	263.000 SYS	40.23	10,580.49	40.23	37.19	37.37
14	211-06467	aggregate for end bent backfill	46.000 C.Y.	102.02	4,692.92	102.02	100.69	97.50
15	214-12244	geotextile for subgrade type 2b	263.000 SYS	5.28	1,388.64	4.96	5.11	5.28
16	301-12234	compacted aggregate no 53	10.000 C.Y.	111.20	1,112.00	103.65	103.65	111.20
17	302-06464	subbase for pccp	66.000 C.Y.	110.07	7,264.62	93.24	93.24	110.07
18	303-01180	compacted aggregate, no. 53	925.000 TON	37.51	34,696.75	37.51	36.43	35.06
19	401-06264	profilograph, hma	1.000 L.S.	4,652.24	4,652.24	1,500.50	3,460.67	4,652.24
20	401-07321	qc/qa-hma, 2, 64, surface, 9.5 mm	475.000 TON	100.08	47,538.00	98.89	100.08	95.55
21	401-07407	qc/qa-hma, 2, 64, base, 25.0 mm	1,743.000 TON	74.56	129,958.08	70.75	74.56	71.92
22	401-10258	ioint adhesive, surface	4,905.000 L.F.	0.82	4,022.10	0.51	0.82	0.76
23	401-10259	joint adhesive, surface	4,905.000 L.F.	0.76	3,727.80	0.48	0.74	0.76
23 24	401-10239	liquid asphalt sealant	4,905.000 L.F.	0.73	2,599.65	0.53	0.42	0.38
25	401-11897	qc/qa-hma, 2, 64, intermediate, 25.0 mm	950.000 TON	54.76	52,022.00	54.76	54.76	54.76
26	406-05520	asphalt for tack coat	4.000 TON	675.64	2,702.56	354.66	675.64	660.81
27	601-02241	quardrail, remove	749.000 L.F.	6.35	4,756.15	6.35	6.24	6.34
28	601-12281	guardrail mgs w-beam, 6 ft 3 in spacing	25.000 L.F.	24.37	609.25	20.57	20.57	24.37
29	601-12291	guardrail mgs transition with curb	2.000 EACH	3,127.77	6,255.54	2,830.00	2,871.10	3,127.77
30	601-12292	guardrail mgs transition without curb	2.000 EACH	2,958.23	5,916.46	2,884.29	2,856.20	2,958.23
31	601-94689	guardrail end treatment, os {, 31"}	4.000 EACH	3,126.63	12,506.52	2,972.84	3,052.30	3,126.63
32	602-06729	barrier delineator	18.000 EACH	21.37	384.66	21.37	17.99	17.82
33	605-09137	curb, turnout	80.000 LACIT	222.50	17,800.00	222.50	200.81	154.81
34	606-12399	milled hma corrugations, conventional	2,578.000 L.F.	2.87	7,398.86	2.31	2.87	2.75
35	607-06335	paved side ditch, a	198.000 L.F.	70.88	14,034.24	48.39	48.39	70.88

Indiana Dot BidTabs Professional - PLUS PAGE: 2 of 4

Des. 1701589

Date: 06/02/2021 Time: 01:44:48 **PRICING REPORT**

Route:

State: IN

E-10

Project ID: **1701589-1**Bid Date: // Project: SR 163 over Brouillett's Creek - Alt. 3 Off Alignment

Location:

Historic Bridge Alternatives Analysis – S.R. 163 over Brouilletts Creek Bridge

VERMILLION

County: District: Crawfordsville

SortC	d Pay Item	Description	Quantity Unit	Bid Price	Extension	district:	state averages	state averages Alt
30110	u ray itelli	Description	Quantity Offic	Did Frice	Exterision	Clawiolusville	state averages	State averages Ait
36	609-06259	reinforced concrete bridge approach 12 in	263.000 S.Y.	140.51	36,954.13	138.65	140.51	136.49
37	615-01469	monument, section corner, install	1.000 EACH	1,165.43	1,165.43	723.50	723.50	1,165.43
38	615-06490	right of way marker	17.000 EACH	186.17	3,164.89	170.58	186.17	180.90
39	615-06505	monument, b	10.000 EACH	796.04	7,960.40	784.98	782.48	796.04
40	616-05689	riprap, class 2	624.000 TON	73.74	46,013.76	62.33	71.13	73.74
41	616-06405	riprap, revetment	3,782.000 TON	50.08	189,402.56	46.34	50.08	48.82
42	616-12246	geotextile for riprap type 1a	3,760.000 SYS	2.82	10,603.20	2.71	2.79	2.82
43	616-12251	geotextile for riprap type 3	1,694.000 SYS	4.20	7,114.80	3.31	4.06	4.20
44	621-01004	mobilization and demobilization for seeding	1.000 EACH	671.62	671.62	478.91	671.62	611.14
45	621-06545	fertilizer {, for permanent seeding}	1.000 TON	806.91	806.91	596.06	790.62	806.91
46	621-06553	seed mixture, r	348.000 LBS	5.19	1,806.12	3.92	4.55	5.19
47	621-06565	mulching material	4.000 TON	552.32	2,209.28	441.42	505.01	552.32
48	621-06574	sodding	553.000 S.Y.	9.55	5,281.15	5.00	9.55	8.95
49	701-09557	test pile, dynamic, production	280.000 L.F.	59.95	16,786.00	50.52	50.31	59.95
50	701-09559	test pile, dynamic, restrike	4.000 EACH	2,292.56	9,170.24	1,511.75	2,267.70	2,292.56
51	701-09663	pile, steel pipe, 0.312 in, 14 in	1,680.000 L.F.	64.40	108,192.00	64.40	64.40	61.42
52	701-09679	conical pile tip, 14 in	36.000 EACH	255.56	9,200.16	252.87	252.87	255.56
53	702-51005	concrete, a, substructure	221.000 C.Y.	861.30	190,347.30	675.00	794.21	861.30
54	702-51015	concrete, b, footings	214.000 C.Y.	429.06	91,818.84	429.06	400.07	415.95
55	702-92857	concrete, c, substructure	51.600 C.Y.	1,055.19	54,447.80	883.88	1,055.19	1,015.86
56	703-06029	reinforcing bars, epoxy coated	210,767.000 LBS	1.11	233,951.37	1.03	1.11	1.10
57	703-97936	threaded tie bar assembly, epoxy coated	44.000 EACH	34.67	1,525.48	32.64	34.67	32.02
58	704-51002	concrete, c, superstructure	390.000 C.Y.	857.65	334,483.50	782.21	857.65	857.19
59	706-11600	railing, concrete, fc	52.600 C.Y.	560.40	29,477.04	473.00	560.40	552.35
60	706-11620	concrete bridge railing transition, tfc	4.000 EACH	2,612.54	10,450.16	2,612.54	2,259.89	2,185.15
61	707-08158	structural member, concrete bulb-t beam, 42 in x 49 in	1,088.000 L.F.	468.21	509,412.48	468.21	468.21	468.21
62	709-51821	surface seal	1.000 L.S.	18,000.00	18,000.00	4,544.39	5,541.46	5,908.40
63	714-11076	structure, reinforced concrete box sections, 9 ft \times 8 ft	56.000 L.F.	1,291.53	72,325.68	1,291.53	1,291.53	1,291.53
64	715-05407	pipe, end bent drain, 6 in	114.000 L.F.	16.54	1,885.56	16.54	16.39	15.26
65	718-12306	geotextile for underdrain, type 1b	89.000 SYS	9.16	815.24	9.16	9.16	7.48
66	801-04308	road closure sign assembly	4.000 EACH	292.23	1,168.92	292.23	248.35	251.51
67	801-06625	detour route marker assembly	34.000 EACH	121.05	4,115.70	107.56	109.16	121.05

Indiana Dot BidTabs Professional - PLUS PAGE: 3 of 4

PRICING REPORT

Date: 06/02/2021
Time: 01:44:48

Project: SR 163 over Brouillett's Creek - Alt. 3 Off Alignment

Location:
County: VERMILLION

Bid Date: // State: IN

3,433,479.82 2,900,051.43

Project ID: 1701589-1

Route:

District: Crawfordsville

Sort	Cd Pay Item	Description	Quantity Unit	Bid Price	Extension	district: crawfordsville	state averages	state averages_Alt
68	004 00040		40.000 FACIL	475.40	4 754 00	140.40	475.40	470.00
68	801-06640	construction sign, a	10.000 EACH	175.19	1,751.90	149.16	175.19	172.99
69	801-06775	maintaining traffic	1.000 L.S.	50,000.00	50,000.00	71,913.22	67,163.29	70,648.85
70	801-07118	barricade, iii-a	48.000 L.F.	14.70	705.60	13.71	14.70	13.88
71	801-07119	barricade, iii-b	48.000 L.F.	16.38	786.24	16.38	15.45	14.70
72	802-05704	sign post, square, type 1, unreinforced anchor base	16.000 L.F.	28.19	451.04	19.33	28.19	20.60
73	802-09838	sign, sheet, with legend 0.080"	7.000 S.F.	30.00	210.00	25.11	29.72	30.00
74	808-06712	line, paint, broken, yellow, 4 in	90.000 L.F.	2.13	191.70	0.62	2.13	1.72
75	808-06713	line, paint, solid, white, 4 in	3,752.000 L.F.	1.18	4,427.36	0.46	1.18	0.80
76	808-06714	line, paint, solid, yellow, 4 in	2,978.000 L.F.	0.93	2,769.54	0.41	0.93	0.71

LOADED PRICES

TOTALS

Alternate #1: DOT District 1/Low 3 Prices/from:02/06/2019 TO:02/05/2020

Quantity Range from 50.00% under to 100.00% over and job size from \$500,000.00 up to \$4,000,000.00/Project Prefix: Multiple

Alternate #2: State Averages/Low 3 Prices/from:02/06/2019 TO:02/05/2020

Quantity Range from 50.00% under to 100.00% over and job size from \$500,000.00 up to \$4,000,000.00/Project Prefix: Multiple

Alternate #3: State Averages/Low 3 Prices/from:02/07/2018 TO:02/05/2020

Historic Bridge Alternatives Analysis - S.R. 163 over Brouilletts Creek Bridge

Quantity Range from 50.00% under to 100.00% over and job size from \$500,000.00 up to \$4,000,000.00

+20% Contingency +\$686,695.96

3,054,415.17 3,065,793.35

Total Cost: \$4,120,175.79

E-11

Indiana Dot PAGE: 4 of 4 BidTabs Professional - PLUS



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 ·



April 14, 2022

Mary Kennedy Cultural Resources Office Indiana Department of Transportation 100 N. Senate Avenue, IGCN 758-ES Indianapolis, Indiana 46204

State Agency: Indiana Department of Transportation ("INDOT"),

Federal Agency: Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Indiana Department of Transportation's finding of "No Historic Properties Affected" on behalf of the Federal Highway Administration for the INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek, Clinton Township, Vermillion County (Des. No. 1701589; DHPA No. 24808)

Dear Ms. Kennedy:

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") has reviewed your March 28, 2022, submission which enclosed INDOT's finding and supporting documentation for the aforementioned project in Clinton Township, Vermillion County, Indiana.

For the benefit of the Indiana Historic Preservation Review Board ("Review Board") members and other recipients of this letter who are not Section 106 consulting parties, please be aware that documents submitted for review of this project can be found online at IN SCOPE (http://www.erms.indot.in.gov/Section106Documents/). From there, search by this project's designation number: 1701589.

As previously indicated, the subject bridge is a c. 1932 Parker thru truss built by the Vincennes Building Company. Through this review process, the bridge was re-evaluated for National Register eligibility and determined eligible for inclusion in the National Register of Historic Places ("NRHP"). Following the January 7, 2021, updated Select/Non-Select Analysis, the bridge was programmatically determined "Select" as it possessed a "Medium" eligibility and "Medium" condition score per the Historic Bridge Inventory Selection Matrix. The subject bridge is the only historic property located within the project's area of potential effects.

Also as previously indicated, in regard to archaeological resources, 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 (Crider and Hillard, 12/14/2021), that no further archaeological investigations appear necessary at the proposed project area.

Additionally, we note that portions of the proposed project area appear to lie immediately adjacent to Spangler Cemetery (CR-83-10). If ground disturbing activities will be within 100 feet of this cemetery, please be aware of the cemetery development plan requirements in Indiana Code 14-21-1-26.5 (http://iga.in.gov/legislative/laws/2016/ic/titles/014/articles/021/chapters/001/#section-26.5). The aforementioned cemetery must be avoided by all project activities, and provisions of relevant state statutes regarding cemeteries

(including IC 14-21-1 and IC 23-14) must be adhered to. Please also be aware of Indiana Code 23-14-44-1 and Indiana Code 23-14-44-2, regarding restrictions on roads and utility construction in cemeteries.

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 the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology 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.

Because the Indiana Historic Bridges PA takes into account the effects of projects on all historic, "Select" and "Non-Select" bridges in Indiana, a Section 106 finding in a bridge project applies only to historic properties within the APE, other than the bridge. Accordingly, we concur with INDOT's March 28, 2022, Section 106 finding of "No Historic Properties Affected" on behalf of FHWA, for this federal undertaking.

We look forward to receiving the 30%, 60%, and 90% final bridge plans for this rehabilitation, after which we will decide whether it is appropriate to issue a Director's Letter of Clearance for this project, indicating compliance with Indiana Code 14-21-1-18.

If you have questions regarding our dual review of the aforementioned project, please contact DNR-DHPA. Questions about archaeological issues should be directed to contact 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 Danielle Kauffmann at (317) 232-0582 or dkauffmann@dnr.IN.gov.

In all future correspondence regarding the dual review of this bridge rehabilitation project on SR 163 over Brouilletts Creek in Vermillion County (Des. No. 1701589), please refer to DHPA No. 24808.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

Director, Division of Historic Preservation and Archaeology

W Shin

BKM:DMK:dmk

EMC to federal and state agency or consultant staff members:

Kari Carmany-George, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Matt Coon, INDOT Susan Branigin, INDOT Wade T. Tharp, Indiana DNR-DHPA

Danielle Kauffmann, Indiana DNR-DHPA

EMC to Indiana Historic Preservation Review Board Members:

J. Scott Keller, Review Board Daniel Kloc, AIA, Review Board Jason Larrison, AIA, Review Board Chandler Lighty, Review Board Beth K. McCord, DNR-DHPA, Review Board Ryan Mueller, Deputy Director, DNR, and Chairman, Review Board Anne Shaw, Review Board April Sievert, Ph.D., Review Board

EMC to potentially interested persons:

Vermillion County Commissioners Vermillion County Historian Vermillion County Historical Society Vermillion County Highway Department Tommy Kleckner, Indiana Landmarks, Western Regional Office Paul Brandenburg, Indiana Historic Spans Task Force Tony Dillon, Historic Hoosier Bridges Nathan Holth, HistoricBridges.org Kitty Henderson, Historic Bridge Foundation West Central Indiana Economic Development District, Inc.



EASTERN SHAWNEE CULTURAL PRESERVATION DEPARTMENT

70500 East 128 Road, Wyandotte, OK 74370

March 31, 2022 INDOT - Indiana Department of Transportation 100 N. Senate Ave. IGCN642 Indianapolis, IN 46201

RE: Des No. 1701589, Vermillion County, Indiana

Dear Mrs. Kennedy,

The Eastern Shawnee Tribe has received your letter regarding the above referenced project(s) within Vermillion County, Indiana. The Eastern Shawnee Tribe is committed to protecting sites important to Tribal Heritage, Culture and Religion. Furthermore, the Tribe is particularly concerned with historical sites that may contain but not limited to the burial(s) of human remains and associated funerary objects.

As described in your correspondence, and upon research of our database(s) and files, we find our people occupied these areas historically and/or prehistorically. However, the project proposes **NO Adverse Effect** or endangerment to known sites of interest to the Eastern Shawnee Tribe. Please continue project as planned. However, should this project inadvertently discover an archeological site or object(s) we request that you immediately contact the Eastern Shawnee Tribe, as well as the appropriate state agencies (within 24 hours). We also ask that all ground disturbing activity stop until the Tribe and State agencies are consulted. Please note that any future changes to this project will require additional consultation.

In accordance with the NHPA of 1966 (16 U.S.C. § 470-470w-6), federally funded, licensed, or permitted undertakings that are subject to the Section 106 review process must determine effects to significant historic properties. As clarified in Section 101(d)(6)(A-B), historic properties may have religious and/or cultural significance to Indian Tribes. Section 106 of NHPA requires Federal agencies to consider the effects of their actions on all significant historic properties (36 CFR Part 800) as does the National Environmental Policy Act of 1969 (43 U.S.C. § 4321-4347 and 40 CFR § 1501.7(a). This letter evidences NHPA and NEPA historic properties compliance pertaining to consultation with this Tribe regarding the referenced proposed projects.

Thank you, for contacting the Eastern Shawnee Tribe, we appreciate your cooperation. Should you have any further questions or comments please contact our Office.

Sincerely,

Paul Barton, Tribal Historic Preservation Officer (THPO)

Eastern Shawnee Tribe of Oklahoma

(918) 666-5151 Ext:1833

THPO@estoo.net

Kennedy, Mary

From: Tony Dillon <spansaver@hotmail.com>
Sent: Thursday, March 31, 2022 10:12 AM

To: Kennedy, Mary

Subject: Tony Dillon Response: Des. No. 1701589, NHPA Finding, SR 163 over Brouilletts Creek, Vermillion Co,

Ind.

Follow Up Flag: Follow up Flag Status: Flagged

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

Mary,

I applaud the effort to reclassify this span to the "Select" category, and to elevate it's NRHP status. Given the loss of several state highway Parker truss bridges since the M&H survey was conducted, I feel like this is the correct course of action. Looking over the alternative proposals, and given the modest ADT count, I don't feel like anything other than a routine rehabilitation is warranted. The consideration of widening the structure, and thus destroying it's historic integrity, is rather disturbing to me.

Thanks, Tony

Tony Dillon Historic Hoosier Bridges 208 North 17th Street New Castle, IN 47362 (765)624-6558 spansaver@hotmail.com

From: Kennedy, Mary < MKENNEDY@indot.IN.gov>

Sent: Monday, March 28, 2022 1:33 PM

To: Kauffmann, Danielle M < DKauffmann@dnr.IN.gov>; Tharp, Wade < WTharp1@dnr.IN.gov>; Tommy Kleckner < TKleckner@indianalandmarks.org>; Paul Brandenburg < indianabridges@sbcglobal.net>; Nathan Holth < nathan@historicbridges.org>; Diane Hunter < dhunter@miamination.com>; west@indianalandmarks.org < west@indianalandmarks.org>; Paul Brandenburg < Paul@prbrandy.com>; thpo@estoo.net < thpo@estoo.net>; Tony Dillon < spansaver@hotmail.com>

Cc: Heck, Sara R <SHeck@indot.IN.gov>; Branigin, Susan <SBranigin@indot.IN.gov>; Carmany-George, Karstin (FHWA) <k.carmanygeorge@dot.gov>; Korzeniewski, Patricia J <PKorzeniewski@indot.IN.gov>

Subject: FHWA Project: Des. No. 1701589, NHPA Finding, SR 163 over Brouilletts Creek, Vermillion Co, Ind.

Des. No.: 1701589 **DHPA No.** 24808

Project Description: SR 163 over Brouilletts Creek Bridge Project **Location:** 1.18 miles east of SR 71, Vermillion County, Indiana





Division of Historic Preservation and Archaeology, Indiana State Historic Preservation Office (SHPO)

Please complete this form and attach it to the front of all submittals, along with any reports or supplemental materials you are providing to the Indiana DHPA for review. Please note that archaeological and structural information can be submitted together but should be separate documents since archaeological site locations are confidential and not for public disclosure.

Date (month, day, year): 06-09-2022					
 ☐ This is a new submittal. ☑ This is revised/additional information relating to DHPA number 24808 ☐ This project is being undertaken pursuant to the terms and conditions of a programmatic or other interagency agreement. Title of Agreement: ☐ This project will also be applying for Federal Rehabilitation Investment Tax Credit. ☐ This project includes work on a property that is under a preservation covenant held by DHPA. 					
THIS REVIEW REQUEST SUBMITTED BY:					
Name: Mary Kennedy					
Company/Organization: INDOT					
Address (number and street): 100 N. Senate Av	e., Rm N748	-ES			
City: Indianapolis	_ State: IN_	ZIP: <u>46204</u>			
Telephone number: 317-694-3607		E-mail address: mkenedy@indot.in.gov			
PROJECT NAME & LOCATION [Please attach	a map with lo	cation(s) marked]			
Project Name/Reference: SR 163 over Brouillett	s Creek	Project/Des Number: 1701589			
Project Address/Location: 1.18 miles east of SR	₹ 71				
City:	т	ownship(s): Clinton			
County/Counties: Vermillion					
Section/Township/Range: <u>Section 11, Township</u>	o 14 North, F	Range 10 West			
Latitude/Longitude:					
STATE OR FEDERAL AGENCY INVOLVEMEN	<u>1T</u>				
Agency: INDOT/FHWA Program: FHWA - federal aid					
Type of funds, license, or permit to be obtained (if applicable):					
Name of Agency Contact: See above					
Address (number and street):					
City:	_ State:	ZIP:			
Telephone number:		F-mail address:			

APPLICANT (if different than Federal Agency) If available, please attach copy of authorization letter from federal agency. Name of Contact: Address (number and street): City: _____ State: ____ ZIP: ____ Telephone number: _____ E-mail address: ADDITIONAL CONTACT (IF APPLICABLE) Name of Contact: _____ Organization/Agency: Address (number and street): City: _____ State: ____ ZIP: ____ Telephone number: _____ E-mail address: _____ Project Description - This should include a detailed scope of work, including any actions to be taken in relation to the project, such as all aspects of new construction, replacement/repair, demolition, ground disturbance, and all ancillary work (temporary roads, etc.), as applicable. Attach report or additional pages if necessary. If a detailed scope of work is not available yet, please explain and include all preliminary information. The proposed undertaking is on SR 163 over Brouilletts Creek, 1.18 miles east of SR 71, in Vermillion County, Indiana. It is within Clinton Township, on the Saint Bernice and Clinton USGS Topographic Quadrangle, in Sections 10, 11, 14, and 15 of Township 14 North, Range 10 West. Photo documentation of the bridge, per the Historic Bridges PA, is attached.

Ground Disturbing Activity – This should include a detailed description of all horizontal and vertical ground disturbance in relation to the project as well as any known previous and current land use, condition, and disturbances. Attach report or additional pages if necessary. Indicate if the project does not include any ground disturbing activities. Please note that agricultural tilling generally does not have a serious enough impact on archaeological sites to constitute a disturbance of the ground for this purpose.
FINDINGS – Please note that a finding should only be submitted when the agency/delegatee believes it is appropriate or one has been requested by our office. Only those who represent the Federal Agency or an official delegatee of the federal agency are authorized to make findings of effect for an undertaking.
□ No Historic Properties Affected – (i.e., none are present or there are historic properties present but the project will have no effect upon them). Attach necessary documentation, as described at 36 CFR 800.11.
■ No Adverse Effect – The proposed undertaking will have no adverse effect on one or more historic properties located within the project APE under 36 CFR 800.5. Attach necessary documentation, as described at 36 CFR 800.11.
Adverse Effect – The proposed undertaking will result in an adverse effect to one or more historic properties and the applicant, or other federally authorized representative, will consult with the SHPO and other consulting parties to resolve the adverse effect per 36 CFR 800.6. Attach necessary documentation, as described at 36 CFR 800.11, with a proposed plan to resolve adverse effect(s).
Please explain the basis for your determination.
Authorized Signature: Mary E. Kennedy Date (month, day, year): 06-09-2022
Type or print name: Mary Kennedy
Organization/Agency: INDOT

ease note that incomplete submissions may result in delays. To ensure an expeditious review, please be sure that e following has been provided:
Completed Review Request Submittal Form
Letter of authorization from Federal agency/agencies (if applicable)
Consulting Parties – List of all consulting parties that have been invited to participate and copies of any responses received. Typical consulting parties would include the county historian, local historical society, the appropriate regional office of Indiana Landmarks, other local, state or national preservation organizations, tribes, local government and the general public.
Map of project location with project area(s) and Area of Potential Effects (APE) clearly marked, streets labeled and a north arrow, aerial maps are preferable and areas of previous ground disturbance within the project area should be shown. Please indicate if any of the project area is located on state or federal property.
Clear, current color photographs of project area and APE, including any buildings or structures fifty (50) years or older within the APE. (No more than two (2) photographs per page, for large project areas/APEs photographs can be provided digitally on a CD but must be clearly labeled.)
Architectural/Engineering Drawings (<i>if applicable</i>) – Must be labeled with north arrow, clearly indicate proposed changes to existing buildings and locations of any ground disturbance on site plans. When possible include both existing and proposed drawings. Hard copies should be provided at no smaller than 11" x 17" and font must be legible; if the drawings are large scale reduced to 11" x 17", please also provide a CD with a PDF copy of the drawings.
Identification of any known historic resources – All projects should consult the SHAARD database (access available on the DHPA home page) to locate known historic resources in the project area and APE. For any identified resources, the submission should include (in summary form) a list of the properties identified, including address, the site/reference number from SHAARD, the rating (IHSSI, Bridge Inventory) or status (National Register) of each property, and a current photograph. Please do not submit print outs of the individual SHAARD records.

Return this Form and Attachments to:

Please note that at this time we are unable to accept electronic submissions. The thirty (30) day review period, as specified in 36 CFR part 800.3(c)(4), begins from the date that we receive the hard copy of the submission.

Indiana Department of Natural Resources
Division of Historic Preservation and Archaeology
402 W. Washington Street, Room W274
Indianapolis, Indiana 46204

http://www.in.gov/dnr/historic

Page 4 of 4



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758 Indianapolis, Indiana 46204 PHONE: (855) 463-6848

Eric Holcomb, Governor Michael Smith, Commissioner

June 9, 2022

Chad Slider Assistant Director, Environmental Review Indiana Department of Natural Resources Division of Historic Preservation and Archaeology Indiana Government Center South, Rm. W274 Indianapolis, IN 46204

Excerpts

RE: DUAL REVIEW: Photographic Documentation, INDOT Bridge No. 163-83-01393A (NBI No. 028420), Vermillion County, Indiana; Lead Des. No. 1701589; DHPA No. 24808

Dear Mr. Slider,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with the SR 163 over Brouilletts Creek project (Des. No. 1701589). 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. This project is following the terms of the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA) to fulfill FHWA's Section 106 responsibilities. A Section 106 early coordination letter was distributed on December 19, 2019. A finding of No Historic Properties Affected was distributed on March 28, 2022.

Your November 22, 2021 letter requested that per the Historic Bridges PA, the bridge be photographically documented prior to construction activities through color, digital images that provide overviews of the resource, along with detailed shots of character-defining features. In addition to photographs, you requested a photo log that corresponds to the photographs, a photo key, and an overview thumbnail sheet. Upon approval of the documentation, you asked us to provide a copy to a public or not-for-profit organization that is willing to accept a copy and make it available to the public.

Per agreed upon procedures between our staffs regarding the transmittal of photo documentation, at the SharePoint link below, please find fourteen (14) JPEG files and one (1) PDF file for download. Note that in addition to the items listed above, a copy of the original plans for the bridge is included in the PDF document. This additional information should be beneficial for researchers and help bolster the SHAARD record for this bridge.

 $Share Point\ site: \ \underline{https://ingov.sharepoint.com/:f:/s/INDOTCROHiPriPro/EgBu8KnDi7tEprWIuU0Qly4Bz-\underline{i1K1HdOUZFbeiXA3S4qQ?e=Z0VnoN}$

If you find the documentation satisfactory, please forward the images to the Indiana State Archives for incorporation into their collection. Please note that per your request to provide a local public or not-for-profit organization a copy of the documentation, we have reached out to the Clinton Public Library (CPL). We anticipate the CPL will accept the photos to add them to its Local History Collection, as the library did with another historic INDOT bridge in Vermillion County. Once your office has approved the documentation, we will forward it to the CPL.

Please note that this letter and a copy of the documentation can be found in IN SCOPE at http://erms.indot.in.gov/Section106Documents/ (the Des. No. is the most efficient search term, once in IN SCOPE).

www.in.gov/dot/
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Please review the information and respond within thirty (30) calendar days of receipt. If you have any questions regarding this matter, please contact Mary Kennedy of this section at (317) 694-3607 or mkennedy@indot.in.gov. Thank you in advance for your cooperation.

Sincerely,

Matt Coon, Acting Manager Cultural Resources Office

Environmental Services

MC/MEK/mek Enclosures

emc: INDOT CRO project files

Sara Heck, INDOT Crawfordsville District Zane Kurtz, INDOT Crawfordsville District

Juliet Port, Parsons Jennifer Graf, Parsons Maps intentionally omitted, refer to Appendix B.

Historic Bridge Plans intentionally omitted, refer to IN SCOPE: http://erms.indot.in.gov/Section106Documents (the Des. No. is the most efficient search term).

Bridge No. 163-83-01393A SR 163 over Brouilletts Creek Clinton Township, Vermillion County, Indiana INDOT Des. No. 1701589 Photo Key











IN_VermillionCo_Str#163-83-01393A_01



IN_VermillionCo_Str#163-83-01393A_02



IN_VermillionCo_Str#163-83-01393A_03



IN_VEITIIIIIOIICO_3ti#103-83-01393A_0



IN VermillionCo Str#163-83-01393A 05



IN_VermillionCo_Str#163-83-01393A_06



IN_VermillionCo_Str#163-83-01393A_07



IN_VEITIIIIIOIICO_3ti#103-83-01393A_0



IN VermillionCo Str#163-83-01393A 09



IN_VermillionCo_Str#163-83-01393A_10



IN_VermillionCo_Str#163-83-01393A_11





IN_VermillionCo_Str#163-83-01393A_13



Bridge No. 163-83-01393A
SR 163 over Brouilletts Creek
Clinton Township, Vermillion County, Indiana
INDOT Des. No. 1701589
Photographs 1-2 & 12 Taken August 25, 2007 by Mead & Hunt, Inc. Staff
Photographs 3-5, 8, 10-11 taken January 9, 2020 by INDOT Cultural Resources Office Staff
Photographs 6 & 13 Taken October 14, 2021 by INDOT Bridge Inspection Staff
Photograph 7 Taken July 15, 2020 by INDOT Bridge Inspection Staff
Photograph 9 Taken May 26, 2020 by INDOT Bridge Inspection Staff
Photograph 9 Taken May 26, 2020 by INDOT Bridge Inspection Staff

Photo No.	Image File Name	Description of View
1	IN_VermillionCo_Str#163-83-01393A_01	Looking west at bridge from S CR 170 N.
2	IN_VermillionCo_Str#163-83-01393A_02	Looking west at bridge.
3	IN_VermillionCo_Str#163-83-01393A_03	Looking northwest through bridge.
4	IN_VermillionCo_Str#163-83-01393A_04	Looking southwest at bridge.
5	IN_VermillionCo_Str#163-83-01393A_05	Looking east at bridge.
6	IN_VermillionCo_Str#163-83-01393A_06	Looking east through bridge.
7	IN_VermillionCo_Str#163-83-01393A_07	Looking north at bridge.
8	IN_VermillionCo_Str#163-83-01393A_08	Looking northwest at bridge.
9	IN_VermillionCo_Str#163-83-01393A_09	Looking south at bridge.
10	IN_VermillionCo_Str#163-83-01393A_10	Looking southwest at underside of bridge.
11	IN_VermillionCo_Str#163-83-01393A_11	Looking west at underside of bridge.
12	IN_VermillionCo_Str#163-83-01393A_12	Looking northeast at fixed rocker bearing.
13	IN_VermillionCo_Str#163-83-01393A_13	Looking southeast at expansion rocker bearing.
14	IN_VermillionCo_Str#163-83-01393A_14	Looking north at detail of gusset plate.



IN_VermillionCo_Str#163-83-01393A_01



IN_VermillionCo_Str#163-83-01393A_02



IN_VermillionCo_Str#163-83-01393A_03



IN_VermillionCo_Str#163-83-01393A_04



IN_VermillionCo_Str#163-83-01393A_05



IN_VermillionCo_Str#163-83-01393A_06



IN_VermillionCo_Str#163-83-01393A_07



IN_VermillionCo_Str#163-83-01393A_08



IN_VermillionCo_Str#163-83-01393A_09



IN_VermillionCo_Str#163-83-01393A_10



IN_VermillionCo_Str#163-83-01393A_11



IN_VermillionCo_Str#163-83-01393A_12



IN_VermillionCo_Str#163-83-01393A_13



IN_VermillionCo_Str#163-83-01393A_14



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



June 20, 2022

Mary Kennedy Cultural Resources Office Indiana Department of Transportation 100 N. Senate Avenue, IGCN 758-ES Indianapolis, Indiana 46204

State Agency: Indiana Department of Transportation ("INDOT"),

Federal Agency: Federal Highway Administration, Indiana Division ("FHWA")

Re: DUAL REVIEW: Photographic documentation for the INDOT Bridge No. 163-83-01393A on SR 163 over Brouilletts Creek (Des. No. 1701589; DHPA No. 24808)

Dear Ms. Kennedy:

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") has reviewed your June 9, 2022, submission which enclosed photographic documentation for the aforementioned project in Clinton Township, Vermillion County, Indiana.

Thank you for providing photographic documentation. We have no comments or edits and find this documentation to be acceptable. We will add this information to SHAARD and submit a copy to the Indiana State Archives. We note in email correspondence from June 13, 2022, that the Clinton Public Library has agreed to accept a copy of this documentation for the c. 1932 Parker thru truss bridge on SR 163 over Brouilletts Creek.

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 DNR-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.

The Indiana SHPO staff's archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Danielle Kauffmann. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

In any future correspondence about the bridge project in Vermillion County (Des. No. 1701589), please continue to refer to DHPA No. 24808. For the benefit of the Indiana Historic Preservation Review Board ("Review Board") members and other recipients of this letter who are not Section 106 consulting parties, please be aware that submitted for review of this project can be found online IN **SCOPE** (http://www.erms.indot.in.gov/Section106Documents/). From there, search by this project's designation number: 1701589.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

W. Shin

BKM:DMK:dmk

EMC to federal and state agency or consultant staff members:

Kari Carmany-George, FHWA Anuradha Kumar, INDOT Mary Kennedy, INDOT Matt Coon, INDOT Susan Branigin, INDOT Wade T. Tharp, Indiana DNR-DHPA Danielle Kauffmann, Indiana DNR-DHPA

EMC to Indiana Historic Preservation Review Board Members:

J. Scott Keller, Review Board
Daniel Kloc, AIA, Review Board
Jason Larrison, AIA, Review Board
Chandler Lighty, Review Board
Beth K. McCord, DNR-DHPA, Review Board
Ryan Mueller, Deputy Director, DNR, and Chairman, Review Board
Anne Shaw, Review Board
April Sievert, Ph.D., Review Board

EMC to potentially interested persons:

Vermillion County Commissioners
Vermillion County Historian
Vermillion County Historical Society
Vermillion County Highway Department
Tommy Kleckner, Indiana Landmarks, Western Regional Office
Paul Brandenburg, Indiana Historic Spans Task Force
Tony Dillon, Historic Hoosier Bridges
Nathan Holth, HistoricBridges.org
Kitty Henderson, Historic Bridge Foundation
West Central Indiana Economic Development District, Inc.



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758 Indianapolis, Indiana 46204 PHONE: (855) 463-6848

Eric Holcomb, Governor Michael Smith, Commissioner

June 24, 2022

Ashley Wolfe Head of Adult & Teen Services Clinton Public Library 313 S 4th St. Clinton, IN 47842

RE: Photographic Documentation, INDOT Bridge No. 163-83-01393A (NBI No. 028420), SR 163 over Brouilletts

Creek, Vermillion County, Indiana; Des. No. 1701589; DHPA No. 24808

Dear Ms. Wolfe,

Under Attachment B of the Indiana Historic Bridges Programmatic Agreement (HBPA), the bridge owner will complete any photo documentation in accordance with the specifications provided by the Indiana State Historic Preservation Officer (SHPO). The SHPO asked us to reach out to a local, public or non-for-profit institution in Vermillion County to retain the photos permanently and make them available to the public after we prepared them. In an email dated June 9, 2022, you indicated that the Clinton Public Library would take possession of the photos of the bridge and would add the photos to the library's Local History Collection.

Enclosed you will find an archival gold DVD that contains fourteen (14) TIF files and one (1) PDF file. The TIF files are the individual photos of the bridge. The PDF file contains copies of project location maps, photos of the bridge, and the original plans for the bridge.

Thank you very much for your organization's willingness to accept these materials, retain them permanently, and make them available to the public.

If you have any questions, please contact Mary Kennedy of this section at 317-694-3607 or mkennedy@indot.in.gov.

Sincerely,

Matt Coon, Acting Manager Cultural Resources Office Environmental Services

MC/MEK/mek Enclosures

emc: INDOT CRO project files

Jennifer Graf, Parsons

cc: Indiana SHPO

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