

Categorical Exclusion

Appendix C

Early Coordination



June 20, 2018

«AgencyCompany»

Sample Early Coordination Letter

«Name», «Title»

«Address_1»

«Address_2»

«City», «State» «Zip»

Re: Des. No. 1600931
Marshall County Bridge No. 73 over Yellow River
Bridge Replacement Project
0.54 mile east of US-31
Center Township, Marshall County, Indiana

Dear «Salu»:

Marshall County proposes to proceed with a bridge replacement project on King Road in Marshall County, Indiana (Des. No. 1600931). The proposed project will replace the existing bridge identified as Bridge #50-00073 which carries King Road over Yellow River.

This letter is written to describe the proposed project and to seek your comments regarding those resources under your jurisdiction as part of early coordination. The proposed improvements are described in more detail herein. In addition, various maps and aerial photographs are enclosed showing the location of the proposed project. Please use the referenced Des. No. and project description in your reply to ensure your comments are incorporated into the formal environmental study that is to be prepared. Your cooperation in this endeavor is appreciated.

Project Location and Existing Conditions

The proposed project is located in Marshall County, approximately 0.54 mile east of US-31. Specifically, the project is located in Section 26, Township 34 North, and Range 2 East of Center Township as depicted on the Plymouth U.S. Geological Survey (USGS) Quadrangle. Please see the attached maps and photographs of the proposed project area.

Purpose and Need

The need for the project stems from the deteriorating condition of the existing structure. During routine inspections in October 2017, heavy seepage and leaching between beams were identified. Several beams were also cracked and spalled with exposed strands. Several strands were severed and bent caps were cracked. Some piles were completely rusted through. The bridge had a sufficiency rating of 49.6. Sufficiency Ratings range from 0 to 100 with 0 being a failed bridge and 100 being a bridge in excellent condition.

3502 Woodview Trace, Suite 150
Indianapolis, Indiana 46268
PHONE: 317.222.3878 • TOLL FREE: 800.423.7422

The purpose of the project is to improve the structural integrity and extend the lifespan of this bridge to allow safe passage for motorists on this stretch of King Road.

Proposed Project

The existing structure is a four span bridge built in 1966 and is 152 feet long with a 24.3 foot clear roadway width. The construction of the new structure will include embankment widening, benching the sideslopes, the removal of an existing private drive, and the removal of an existing overflow pipe. The new structure will be longer, taller, and slightly wider than the existing structure. Excavation within the Yellow River will occur in order to install the substructure units. The design for the proposed project is on-going. The MOT for this project will require full closure of King Road and a detour route will be determined. MOT design will follow the criteria outlined in the *Indiana Design Manual*.

Right-of-Way

The proposed project will require the acquisition of approximately 4.7 acres of permanent right-of-way. Tree clearing is anticipated.

Environmental Resources

A Red Flag Investigation (RFI) was performed for a 0.5-mile radius for the project area. Several "Red Flags" were identified within the 0.5-mile search radius; however, not all will be impacted. A pipeline crosses through the project area. One petroleum well is located within the project area. Yellow River as well as a NWI-wetland are mapped in the project area. Due to these water resources in the project area, a *Waters of the U.S. Determination Report* will be completed as a part of the project.

Section 106

The *National Register of Historic Places* (NRHP) and the *Indiana Register of Historic Sites and Structures* (State Register) were reviewed using the *State Historic Architectural and Archaeological Research Database* (SHAARD) and the *Indiana Historic Buildings, Bridges, and Cemeteries Map* (IHBBC). No properties on either list were identified within a quarter-mile of the project. The *Marshall County Interim Report* (1990) was examined, and it was determined that no resources are within the vicinity of the project area. *The Indiana Historic Bridge Inventory Volume 2: Listing of Historic and Non-Historic Bridges* (February 2009) by Mead & Hunt was reviewed. No bridges listed in or eligible for listing in the NRHP are located within the project area. Aerial views show seven previously unidentified properties within a quarter-mile of the project. Further review will be needed to determine the eligibility of the properties. This project appears to qualify for Minor Projects Programmatic Agreement Category B-12.

Range-wide Informal Programmatic Consultation

Land use in the vicinity of the project is primarily rural with farm fields and forested areas surrounding the project area. INDOT, or their agent, will perform a waters and wetlands investigation and an ecological assessment to identify any pertinent resources that may be present. The project appears to fall under the Range-wide Programmatic Informal Consultation

process. Completion of the appropriate determination key through the USFWS Information for Planning and Consultation (IPaC) portal will occur. If a determination of “Not Likely to Adversely Affect,” or “Likely to Adversely Affect” is reached then additional consultation with the USFWS will occur through INDOT.

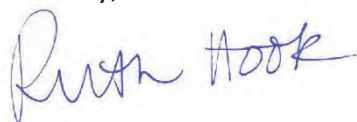
Early Coordination

This letter is part of the early coordination review process. You are asked to review this information and provide any comments you may have relative to anticipated impacts of the project on areas in which you have jurisdiction or special expertise. We will incorporate your comments into a study of the project’s environmental impacts. To facilitate the development of this project, you are asked to reply within **30 days** of receipt of this letter. If no response is received by that date, it will be assumed you have no comments at the present time.

If you have any questions regarding this project, please feel free to contact me at (317) 222-3880 or at rhook@lochgroup.com. Additionally, should you want to contact the sponsor of this project, Marshall County, please contact the Project Manager, Mr. Jason Peters, at (574) 936-2181 or at jasonp@co.marshall.in.us.

Thank you in advance for your input.

Sincerely,



Ruth Hook
Environmental Biologist
Lochmueller Group, Inc.

Attachments:

• General Location Map	Removed to avoid duplication; see Appendix B
• USGS Quadrangle Map	
• Red Flag Investigation Maps	Removed to avoid duplication; see Appendix E
• Photographs	Removed to avoid duplication; see Appendix B

Distribution List:

- USFWS, Northern Indiana Suboffice (electronic submission)
- National Resources Conservation Service, Indianapolis Office
- U.S. Army Corps of Engineers, Detroit District
- U.S. Housing and Urban Development
- National Park Service

- Indiana Department of Natural Resources, Division of Fish and Wildlife (electronic submission)
- Indiana Department of Environmental Management (electronic submission)
- INDOT, Office of Public Involvement (electronic submission)
- INDOT, Office of Aviation (electronic submission)
- INDOT, Environmental Services
- INDOT, LaPorte District
- Indiana Geological Survey (electronic submission)
- Marshall County Board of Commissioners
- Marshall County Council
- Marshall County Highway Department
- Marshall County Drainage Board
- Marshall County Surveyor
- Marshall County Emergency Management
- Marshall County Sheriff's Department
- Marshall County, Center Township Trustee
- Plymouth Fire Department
- Plymouth Community School Corporation
- Michiana Area Council of Governments



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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

Marshall County
Jason Peters
9675 King Road
Plymouth , IN 46563

Lochmueller Group, Inc.
Ruth Hook
3502 Woodview Trace
Suite 150
Indianapolis , IN 46268

Date

Dear Grant Administrator or Other Finance Approval Authority:

RE: Marshall County proposes to proceed with a bridge replacement project on King Road in Marshall County, Indiana (Des. No. 1600931). The proposed project will replace the existing bridge identified as Bridge #50-00073 which carries King Road over Yellow River. The proposed project is located in Marshall County, approximately 0.54 mile east of US-31. Specifically, the project is located in Section 26, Township 34 North, and Range 2 East of Center Township as depicted on the Plymouth U.S. Geological Survey (USGS) Quadrangle. Please see the attached maps and photographs of the proposed project area. The need for the project stems from the deteriorating condition of the existing structure. During routine inspections in October 2017, heavy seepage and leaching between beams were identified. Several beams were also cracked and spalled with exposed strands. Several strands were severed and bent caps were cracked. Some piles were completely rusted through. The bridge had a sufficiency rating of 49.6. Sufficiency Ratings range from 0 to 100 with 0 being a failed bridge and 100 being a bridge in excellent condition. The purpose of the project is to improve the structural integrity and extend the lifespan of this bridge to allow safe passage for motorists on this stretch of King Road. The existing structure is a four span bridge built in 1966 and is 152 feet long with a 24.3 foot clear roadway width. The construction of the new structure will include embankment widening, benching the sideslopes, the removal of an existing private drive, and the removal of an existing overflow pipe. The new structure will be longer, taller, and slightly wider than the existing structure. Excavation within the Yellow River will occur in order to install the substructure units. The design for the proposed project is on-going. The MOT for this project will require full closure of King Road and a detour route will be determined. MOT design will follow the criteria outlined in the Indiana Design Manual. The proposed project will require the acquisition of approximately 4.7 acres of permanent right-of-way. Tree clearing is anticipated. A Red Flag Investigation (RFI) was performed for a 0.5-mile radius for the project area. Several "Red Flags" were identified within the 0.5-mile search radius; however, not all will be impacted. A pipeline crosses through the project area. One petroleum well is located within the project area. Yellow River as well as a NWI-wetland are mapped in the project area. Due to these water resources in the project area, a Waters of the U.S. Determination Report will be completed as a part of the project. The National Register of Historic Places (NRHP) and the Indiana Register of Historic Sites and Structures (State Register) were reviewed using the State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBC). No properties on either list were identified within a quarter-mile of the project. The Marshall County Interim Report (1990) was examined, and it was determined that no resources are within the vicinity of the project area. The Indiana Historic Bridge Inventory Volume 2: Listing of Historic and Non-Historic Bridges (February 2009) by Mead & Hunt was reviewed. No bridges listed in or eligible for listing in the NRHP are located within the project area. Aerial views show seven previously unidentified properties within a quarter-mile of the project. Further review will be needed to determine the eligibility of the properties. This project appears to qualify for Minor Projects Programmatic Agreement Category B-12. Land use in the vicinity of the project is primarily rural with farm fields and forested areas surrounding the project area. INDOT, or their agent, will perform a waters and wetlands investigation and an ecological assessment to identify any pertinent resources that may be present. The project appears to fall under the Range-wide Programmatic Informal Consultation process. Completion of the appropriate determination key through the USFWS Information for Planning and Consultation (IPaC) portal will occur. If a determination of "Not Likely to Adversely Affect," or "Likely to Adversely Affect" is reached then additional consultation with the USFWS will occur through INDOT.

The Indiana Department of Environmental Management (IDEM) is aware that many local government or not-for-profit entities are seeking grant monies, a bond issuance, or another public funding mechanism to cover some portion of the cost of a public works, infrastructure, or community development project. IDEM also is aware that in order to be eligible for such funding assistance, applicants are required to first evaluate the potential impacts that their particular project may have on the environment. In order to assist applicants

seeking such financial assistance and to ensure that such projects do not have an adverse impact on the environment, IDEM has prepared the following list of environmental issues that each applicant must consider in order to minimize environmental impacts in compliance with all relevant state laws.

IDEM recommends that each applicant consider the following issues when moving forward with their project. IDEM also requests that, in addition to submitting the information requested above, each applicant also sign the attached certification, attesting to the fact that they have read the letter in its entirety, agree to abide by the recommendations of the letter, and to apply for any permits required from IDEM for the completion of their project.

IDEM recommends that any person(s) intending to complete a public works, infrastructure, or community development project using any public funding consider each of the following applicable recommendations and requirements:

WATER AND BIOTIC QUALITY

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

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

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

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

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality. To learn more about the water quality certification program, visit: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>).
3. If the USACE determines that a wetland or other body of water is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A state isolated wetland permit from IDEM's Office of Water Quality is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the Office of Water Quality at 317-233-8488.
4. If your project will impact more than 0.5 acres of wetland, stream relocation, or other large-scale alterations to bodies of water such as the creation of a dam or a water diversion, you should seek additional input from the Office of Water Quality, Wetlands staff at 317-233-8488.
5. Work within the one-hundred year floodway of a given body of water is regulated by the Department of Natural Resources, Division of Water. Contact this agency at 317-232-4160 for further information.
6. The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.
7. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
 - <http://www.in.gov/idem/4902.htm> (<http://www.in.gov/idem/4902.htm>)

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

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

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm> (<http://www.in.gov/idem/4900.htm>).

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

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

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

AIR QUALITY

The above-noted project (see page 1) should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

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

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

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

If construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for three to five years, precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is

caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for three to five years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at 317-233-7272.

3. The U.S. EPA and the U.S. Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. For a county-by-county map of predicted radon levels in Indiana, visit <http://www.in.gov/idem/4267.htm> (<http://www.in.gov/idem/4267.htm>).

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

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

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

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

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

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

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

components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. Billings will occur on a quarterly basis.

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

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

LAND QUALITY

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

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

5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes. (Asbestos removal is addressed above, under Air Quality.)
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317-308-3039(<http://www.in.gov/idem/4999.htm> (<http://www.in.gov/idem/4999.htm>)).

FINAL REMARKS

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

Please note that this letter does not constitutes a permit, license, endorsement, or any other form of approval on the part of either the Indiana Department of Environmental Management or any other Indiana state agency.

Should you have any questions relating to the content or recommendations of this letter, or if you have additional questions about whether a more complete environmental review of your project should be conducted, please feel free to contact Steve Howell at (317) 232-8587, snhowell@idem.in.gov.

Signature(s) of the Applicant

I acknowledge that I am seeking grant monies, a bond issuance, or other public funding mechanism to cover some portion of the cost of the public works, infrastructure, or community development project as described herein, which I am working (possibly with others) to complete.


Project Description

Marshall County proposes to proceed with a bridge replacement project on King Road in Marshall County, Indiana (Des. No. 1600931). The proposed project will replace the existing bridge identified as Bridge #50-00073 which carries King Road over Yellow River. The proposed project is located in Marshall County, approximately 0.54 mile east of US-31. Specifically, the project is located in Section 26, Township 34 North, and Range 2 East of Center Township as depicted on the Plymouth U.S. Geological Survey (USGS) Quadrangle. Please see the attached maps and photographs of the proposed project area. The need for the project stems from the deteriorating condition of the existing structure. During routine inspections in October 2017, heavy seepage and leaching between beams were identified. Several beams were also cracked and spalled with exposed strands. Several strands were severed and bent caps were cracked. Some piles were completely rusted through. The bridge had a sufficiency rating of 49.6. Sufficiency Ratings range from 0 to 100 with 0 being a failed bridge and 100 being a bridge in excellent condition. The purpose of the project is to improve the structural integrity and extend the lifespan of this bridge to allow safe passage for motorists on this stretch of King Road. The existing structure is a four span bridge built in 1966 and is 152 feet long with a 24.3 foot clear roadway width. The construction of the new structure will include embankment widening, benching the sideslopes, the removal of an existing private drive, and the removal of

an existing overflow pipe. The new structure will be longer, taller, and slightly wider than the existing structure. Excavation within the Yellow River will occur in order to install the substructure units. The design for the proposed project is on-going. The MOT for this project will require full closure of King Road and a detour route will be determined. MOT design will follow the criteria outlined in the Indiana Design Manual. The proposed project will require the acquisition of approximately 4.7 acres of permanent right-of-way. Tree clearing is anticipated. A Red Flag Investigation (RFI) was performed for a 0.5-mile radius for the project area. Several "Red Flags" were identified within the 0.5-mile search radius; however, not all will be impacted. A pipeline crosses through the project area. One petroleum well is located within the project area. Yellow River as well as a NWI-wetland are mapped in the project area. Due to these water resources in the project area, a Waters of the U.S. Determination Report will be completed as a part of the project. The National Register of Historic Places (NRHP) and the Indiana Register of Historic Sites and Structures (State Register) were reviewed using the State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBC). No properties on either list were identified within a quarter-mile of the project. The Marshall County Interim Report (1990) was examined, and it was determined that no resources are within the vicinity of the project area. The Indiana Historic Bridge Inventory Volume 2: Listing of Historic and Non-Historic Bridges (February 2009) by Mead & Hunt was reviewed. No bridges listed in or eligible for listing in the NRHP are located within the project area. Aerial views show seven previously unidentified properties within a quarter-mile of the project. Further review will be needed to determine the eligibility of the properties. This project appears to qualify for Minor Projects Programmatic Agreement Category B-12. Land use in the vicinity of the project is primarily rural with farm fields and forested areas surrounding the project area. INDOT, or their agent, will perform a waters and wetlands investigation and an ecological assessment to identify any pertinent resources that may be present. The project appears to fall under the Range-wide Programmatic Informal Consultation process. Completion of the appropriate determination key through the USFWS Information for Planning and Consultation (IPaC) portal will occur. If a determination of "Not Likely to Adversely Affect," or "Likely to Adversely Affect" is reached then additional consultation with the USFWS will occur through INDOT.

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

Dated Signature of the Public Owner
Contact/Responsible Elected Official

 12/30/19

Jason Peters

Dated Signature of the Project
Planner/Consultant Contact Person

 12/30/2019

Ruth Hook



Organization and Project Information

Project ID:
Des. ID: 1600931
Project Title: Marshall County
Name of Organization: Lochmueller Group, Inc.
Requested by: Samantha Beaupre

Environmental Assessment Report

1. Geological Hazards:

- High liquefaction potential
- 1% Annual Chance Flood Hazard

2. Mineral Resources:

- Bedrock Resource: Moderate Potential
- Sand and Gravel Resource: High Potential

3. Active or abandoned mineral resources extraction sites:

- Petroleum Exploration Wells

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

DISCLAIMER:

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

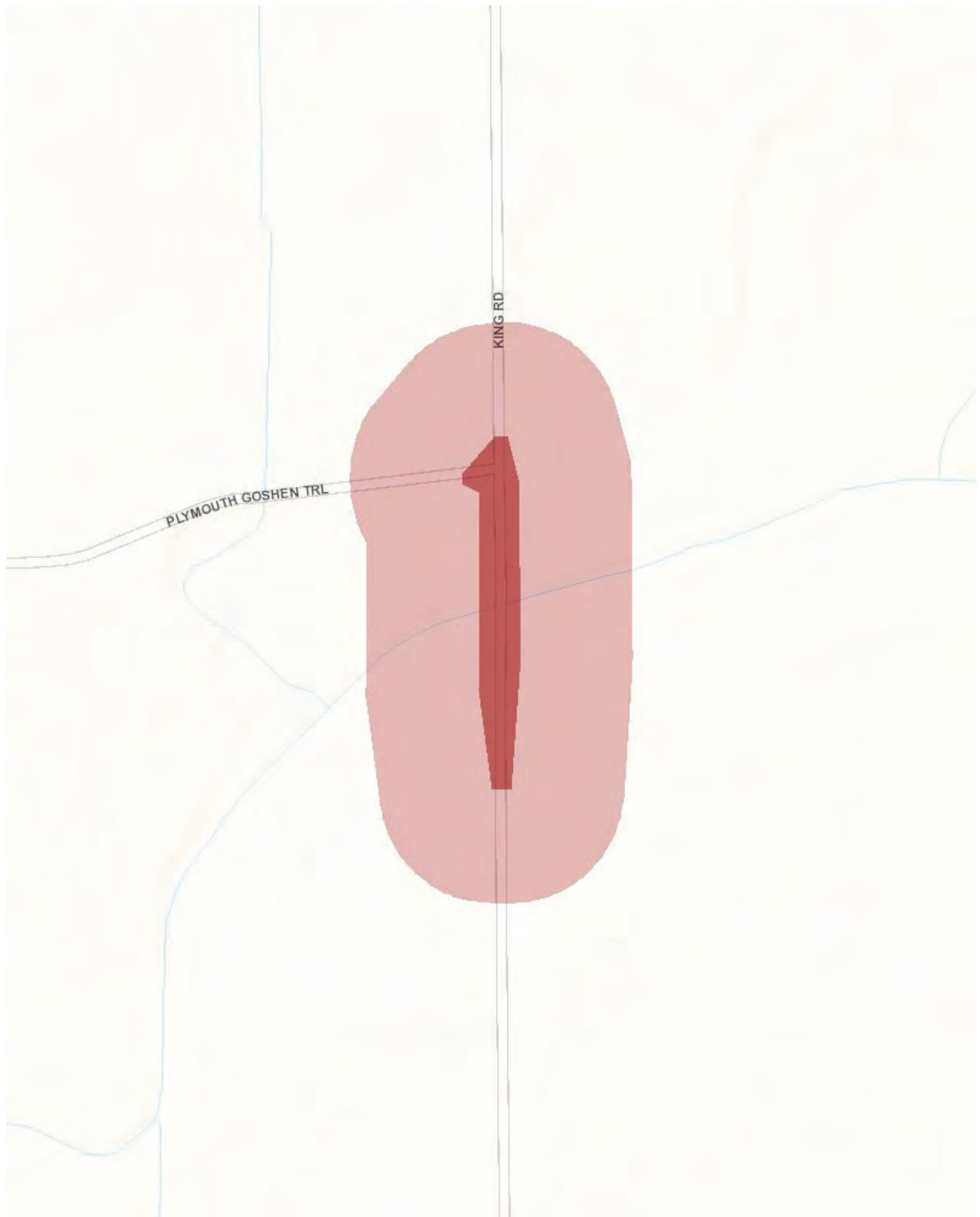
This information was furnished by Indiana Geological Survey

Address: 611 N. Walnut Grove Avenue, Bloomington, IN 47405-2208

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: June 20, 2018



Metadata:

- https://maps.indiana.edu/metadata/Geology/Petroleum_Wells.html
- https://maps.indiana.edu/metadata/Geology/Seismic_Earthquake_Liquefaction_Potential.html
- https://maps.indiana.edu/metadata/Geology/Industrial_Minerals_Sand_Gravel_Resources.html
- https://maps.indiana.edu/metadata/Hydrology/Floodplains_FIRM.html
- https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html

From: Wright, Mary
To: [Beaupre, Samantha](#)
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination
Date: Wednesday, June 20, 2018 9:32:08 AM

Early Coordination and Creating a Public Involvement Plan (PIP)

We have received your early coordination notification packet for the above referenced project(s). Our office prefers to be notified at the early coordination stage in order to encourage early and ongoing public involvement aside from the specific legal requirements as outlined in our Public Involvement Manual <http://www.in.gov/indot/2366.htm>. Seeking the public's understanding of transportation improvement projects early in the project development stage can allow the opportunity for the public to express their concerns, comments, and to seek buy-in. Early coordination is the perfect opportunity to examine the proposed project and its impacts to the community along with the many ways and or tools to inform the public of the improvements and seek engagement. A good public involvement plan, or PIP, should consider the type, scope, impacts, and the level of public awareness that should, or could, be implemented. In other words, although there are cases where no public involvement is legally required, sometimes it is simply the right thing to do in order to keep the public informed.

The public involvement office is always available to provide support and resources to bolster any public involvement activities you may wish to implement or discuss. Please feel free to contact our office anytime should you have any questions or concerns. Thank you for notifying our office about your proposed project. We trust you will not only analyze the appropriate public involvement required, but also consider the opportunity to do go above and beyond those requirements in creating a good PIP.

Rickie Clark, Manager
100 North Senate Avenue, Room N642
Indianapolis, IN 46204
Phone: 317-232-6601
Email: rclark@indot.in.gov

Mary Wright, Hearing Examiner
Phone: 317-234-0796
Email: mwright@indot.in.gov

From: Beaupre, Samantha [mailto:SBeaupre@lochgroup.com]
Sent: Wednesday, June 20, 2018 9:24 AM
To: Clark, Rickie <RCLARK@indot.IN.gov>
Cc: Wright, Mary <MWRIGHT@indot.IN.gov>; Hook, Ruth <RHook@lochgroup.com>
Subject: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination

Mr. Clark,

Please see the attached early coordination letter and attachments for the Marshall County Bridge #73 Bridge Replacement project (Des. No. 1600931). Please contact myself or Ruth Hook at RHook@lochgroup.com with any questions.

Thank you,

Samantha Beaupre
Environmental Biologist
Lochmueller Group

3502 Woodview Trace
Suite 150, Indianapolis, IN 46268

SBeaupre@lochgroup.com
<http://lochgroup.com>

This e-mail message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient(s), please contact the sender by reply e-mail and destroy all copies of the original message. Thank you!



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N955
Indianapolis, Indiana 46204

PHONE: (317) 232-1477
FAX: (317) 232-1499

Eric Holcomb, Governor
Joe McGuinness, Commissioner

July 9, 2018

Ms. Ruth Hook, Environmental Biologist
Lochmueller Group
3502 Woodview Trace, Suite 150
Indianapolis, IN 46268

Subject: Early Coordination Review (Des. No. 1600931)

Dear Ms. Hook,

In response to your request on June 19, 2018 for early coordination review of a bridge replacement project along King Road in Marshall County, Indiana; the Indiana Department of Transportation, Office of Aviation has reviewed the information and provides the following:

Are there any existing or proposed public-use airports within 5 nautical miles of the project limits (IC 8-21-10-6)?

The Plymouth Municipal Airport is located 1.4 nautical miles west-southwest of the proposed project site.

Will an Indiana Tall Structure permit (IC 8-21-10-3-a) and/or Noise Sensitive (IC 8-21-10-3-b) permit be required?

Based upon the provided information and approximate ground elevations, an Indiana Tall Structure permit may be required if the project involves the construction of a temporary (e.g., crane) or permanent structure greater than 70 feet above ground level.

When additional project details involving the heights of construction equipment are available, please contact James Kinder at (317) 232-1485 or jkinder2@indot.in.gov to determine if an Indiana tall structure permit is required.

Sincerely,

Adam French, MPA
Chief Airport Inspector, Office of Aviation
Indiana Department of Transportation



United States Department of the Interior

Fish and Wildlife Service



Indiana Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

July 13, 2018

Ms. Ruth Hook
Lochmueller Group, Inc.
3502 Woodview Trace, Suite 150
Indianapolis, Indiana 46268

Project No.: Des. 1600931
Project: Replacement of Bridge No. 73 over Yellow River
Location: Near Plymouth, Marshall County

Dear Ms. Hook:

This responds to your letter dated June 19, 2018, requesting our comments on the aforementioned project.

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

The proposed project consists of the replacement of the existing 4-span bridge with a new bridge at the same location; your letter does not indicate the number of spans for the new bridge. All aspects of the bridge will be replaced, including the piles within the river. It is proposed to widen the permanent right-of-way by an unstated amount in order to raise the elevation of the new bridge. An estimated 4.7 acres of new permanent right-of-way would be required.

The current bridge has 3 sets of piles within Yellow River, which means there are piles within the approximate center of the river. Debris often accumulates on these center piles. Therefore, we believe that a 3-span bridge with piles or piers away from the center of the river would be more appropriate. Your letter does not indicate what type of pier system would be utilized and whether or not cofferdams or temporary work causeways or bridges would be required. The

approach roadways through the Yellow River floodplain would apparently also be reconstructed, including being widened and elevated to meet the height of the new bridge. The amount of encroachment into the adjacent floodplain is not described in your letter.

Both of the northern quadrants of the project area are forested wetlands, although it appears that the northeastern quadrant has been pastured periodically. The southwestern quadrant is a mix of forested wetland and forested upland, while the southeastern quadrant contains a forested riparian area along the river and a plant nursery on the adjacent upland. The woodlands in the western quadrants extend close to the pavement, but there is a powerline parallel to the east side of King Road, so the trees in the eastern quadrants are east of this line. Therefore, most of the tree clearing associated with this project would be within the western quadrants, although some clearing may be needed to the east in order to relocate the powerline. We request that tree clearing be limited to the minimum needed to construct the project and that a huge bur oak at the base of the roadway fill within the northeastern quadrant be left in place if at all possible.

The Indiana Department of Natural Resources, Wildlife Science Unit, has recognized this reach of the Yellow River as an Other Important Mussel Stream – Yellow River from Starke/Marshall county line upstream to Isaac Sells Ditch mouth (the outlet stream of Lake of the Woods south of Bremen). Although no Federal or State listed mussel species are found in the river, it does support important mussel beds and contains quality instream habitat. Therefore, preservation of the existing riparian corridor, enhancement/restoration of the corridor, erosion control, and other activities to maintain this high quality reach of the Yellow River are important and need to be recognized during any construction projects affecting this portion of the river.

Impacts to the forested wetlands and the loss of riparian trees will require mitigation. We support the mitigation guidelines of the Indiana Department of Natural Resources contained in their Information Bulletin #17 (<http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf>) which states that the standard minimum mitigation ratio for forested wetland losses is 4:1; mitigation is also required for the loss of non-wetland riparian woodlands.

ENDANGERED SPECIES

The proposed project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*), clubshell mussel (*Pleurobema clava*), rayed bean mussel (*Villosa fabalis*), and sheepnose mussel (*Plethobasus cyphus*), and the threatened northern long-eared bat (*Myotis septentrionalis*) and eastern massasauga rattlesnake (*Sistrurus catenatus*). The mussels are not found in the Yellow River and there is no known habitat for the eastern massasauga within the proposed project area. Therefore we agree that the proposed project is not likely to adversely affect these endangered and threatened species. Impacts on the 2 bat species need to be evaluated utilizing the Range-wide Programmatic Informal Consultation process.

This precludes the need for further consultation on this project for the mussels and eastern massasauga as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

We appreciate the opportunity to comment on this proposed project. Please keep us informed about project plans as they are developed, particularly concerning impacts to Yellow River and wetlands. For further discussion, please contact Elizabeth McCloskey at (219) 983-9753 or elizabeth_mccloskey@fws.gov.

Sincerely yours,

/s/ *Elizabeth S. McCloskey*

for Scott E. Pruitt
Supervisor

Sent via email July 13, 2018; no hard copy to follow.

cc: Christie Stanifer, Environmental Coordinator, Division of Fish and Wildlife, Indianapolis, IN
Jason Randolph, IDEM, Office of Water Quality, Indianapolis, IN



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

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

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



In Reply Refer To:

December 30, 2019

Consultation Code: 03E12000-2018-SLI-0955

Event Code: 03E12000-2020-E-02203

Project Name: Marshall County Bridge #73 (Des. No. 1600931)

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

Project Summary

Consultation Code: 03E12000-2018-SLI-0955

Event Code: 03E12000-2020-E-02203

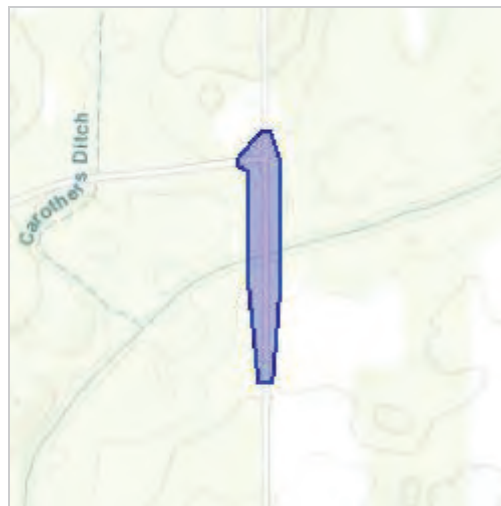
Project Name: Marshall County Bridge #73 (Des. No. 1600931)

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: The proposed project would involve the replacement of Marshall County Bridge No. 73 (asset name 50-00073). Marshall County Bridge No. 73 carries King Road over Yellow River in Marshall County. The proposed project will include the complete removal of the existing structure and the installation of the new structure. The installation of the new structure will include embankment widening, benching the sideslopes, the removal of an existing private drive, and the removal of an existing overflow pipe. The new structure will be longer, taller, and slightly wider than the existing structure. Excavation within the Yellow River will occur in order to install the substructure units. The project will extend less than 100 feet from the existing roadway. Tree clearing will be required for this project. Approximately 3.198 acres of tree clearing will occur within 100 feet of the existing roadway. New permanent and temporary lighting may be included in the project. The project has an anticipated construction date of Spring and Summer of 2022.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/41.368940285000036N86.26146644768724W>



Counties: Marshall, IN

Endangered Species Act Species

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

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

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

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

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

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Incidental take of the NLEB is not prohibited here. Federal agencies may consult using the 4(d) rule streamlined process. Transportation projects may consult using the programmatic process. See www.fws.gov/midwest/endangered/mammals/nleb/index.html Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

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



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

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

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



In Reply Refer To:

June 22, 2018

Consultation Code: 03E12000-2018-I-0955

Event Code: 03E12000-2018-E-04737

Project Name: Marshall County Bridge #73 (Des. No. 1600931)

Subject: Concurrence verification letter for the 'Marshall County Bridge #73 (Des. No. 1600931)' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated to verify that the Marshall County Bridge #73 (Des. No. 1600931) (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 et seq.).

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

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

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

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

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

- Clubshell, *Pleurobema clava* (Endangered)
- Eastern Massasauga (=rattlesnake), *Sistrurus catenatus* (Threatened)
- Rayed Bean, *Villosa fabalis* (Endangered)
- Sheepnose Mussel, *Plethobasus cyphus* (Endangered)

Project Description

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

Name

Marshall County Bridge #73 (Des. No. 1600931)

Description

The proposed project would involve the replacement of Marshall County Bridge No. 73 (asset name 50-00073). Marshall County Bridge No. 73 carries King Road over Yellow River in Marshall County. The proposed project will include the complete removal of the existing structure and the installation of the new structure. The installation of the new structure will include embankment widening, benching the sideslopes, the removal of an existing private drive, and the removal of an existing overflow pipe. The new structure will be longer, taller, and slightly wider than the existing structure. Excavation within the Yellow River will occur in order to install the substructure units. The project will extend less than 100 feet from the existing roadway. Tree clearing will be required for this project. Approximately 3.198 acres of tree clearing will occur within 100 feet of the existing roadway. New permanent and temporary lighting may be included in the project. The project has an anticipated construction date of Spring and Summer of 2022.

Determination Key Result

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

Qualification Interview

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

[1] See [Indiana bat species profile](#)

Automatically answered

Yes

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

[1] See [Northern long-eared bat species profile](#)

Automatically answered

Yes

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

A) Federal Highway Administration (FHWA)

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

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

No

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

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

No

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

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

No

7. Is the project located within a karst area?

No

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

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

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [national consultation FAQs](#).

Yes

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

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

Yes

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

No

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

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

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

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

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

No

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

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

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

No

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

Yes

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

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

B) During the inactive season

15. Does the project include activities within documented NLEB habitat^{[1][2]}?

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

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

No

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

Yes

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

B) During the inactive season

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

Yes

19. Will the tree removal alter any documented Indiana bat or NLEB roosts and/or alter any surrounding summer habitat within 0.25 mile of a documented roost?

No

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

No

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

Yes

22. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing permanent lighting?
No
23. Does the project include maintenance of the surrounding landscape at existing facilities (e.g., rest areas, stormwater detention basins)?
No
24. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?
No
25. Does the project include slash pile burning?
No
26. Does the project include any bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?
Yes
27. Is there any suitable habitat^[1] for Indiana bat or NLEB within 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

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

Yes

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

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

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

Yes

SUBMITTED DOCUMENTS

- AppDBridgeStructureAssessmentForm_20180606.pdf <https://ecos.fws.gov/ipac/project/BSU4STFPP5HBJPB5IYAE4QJTCI/projectDocuments/12840976>

29. Did the bridge assessment detect any signs of bats roosting in/under the bridge (bats, guano, etc.)?

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

No

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

Yes

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

No

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

Yes

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

Yes

34. Will the project install any new or replace any existing permanent lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities?

No

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

No

36. Are all project activities that are not associated with habitat removal, tree removal/trimming, bridge or structure removal, replacement, and/or maintenance, lighting, or use of percussives, limited to actions that DO NOT cause any stressors to the bat species, including as described in the BA/BO (i.e. activities that do not involve ground disturbance, percussive noise, temporary or permanent lighting, tree removal/trimming, nor bridge/structure activities)?

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

Yes

37. Will the project raise the road profile above the tree canopy?

No

38. Are the project activities that are not associated with habitat removal, tree removal/trimming, bridge removal, replacement, and/or maintenance, structure removal, replacement, and/or maintenance, and lighting, consistent with a No Effect determination in this key?

Automatically answered

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

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

Automatically answered

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

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

Automatically answered

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

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

Automatically answered

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

42. General AMM 1

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

Yes

43. Tree Removal AMM 1

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

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

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

Yes

44. Tree Removal AMM 2

Can all tree removal activities be restricted to when Indiana bats are not likely to be present (e.g., the inactive season)^[1]?

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

Automatically answered

Yes

45. Tree Removal AMM 2

Can all tree removal activities be restricted to when Northern long-eared bats are not likely to be present (e.g., the inactive season)^[1]?

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

Automatically answered

Yes

46. Tree Removal AMM 3

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

Yes

47. Tree Removal AMM 4

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

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

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

Yes

48. Lighting AMM 1

Will all temporary lighting used during the removal of suitable habitat and/or the removal/trimming of trees within suitable habitat be directed away from suitable habitat during the active season?

Yes

49. Lighting AMM 1

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

Yes

Project Questionnaire

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

Yes

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

No

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

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

3.198

4. How many acres^[1] of trees are proposed for removal between 100-300 feet of the existing road/rail surface?

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

0

5. Please describe the proposed bridge work:

The existing bridge will be removed and replaced with a new structure. The installation of the new structure will include embankment widening, benching the sideslopes, the removal of an existing private drive, and the removal of an existing overflow pipe. The new structure will be longer, taller, and slightly wider than the existing structure. Excavation within the Yellow River will occur in order to install the substructure units.

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

Spring and Summer of 2022

Avoidance And Minimization Measures (AMMs)

These measures were accepted as part of this determination key result:

GENERAL AMM 1

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

LIGHTING AMM 1

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

TREE REMOVAL AMM 1

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

TREE REMOVAL AMM 2

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

TREE REMOVAL AMM 3

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

TREE REMOVAL AMM 4

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

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

This key was last updated in IPaC on March 16, 2018. Keys are subject to periodic revision.

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

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

From: [Spiess, Jessica J](#)
To: [Beaupre, Samantha](#)
Cc: [Krueckeberg, John](#)
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) IPaC
Date: Friday, June 22, 2018 4:32:10 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Looks good! Your concurrence letter should be generated soon.

Please let me know if you need anything else.

Thank you,

Jessica Spiess

Environmental Team Lead-LaPorte District

315 East Boyd Boulevard

LaPorte, IN 46350

Office: (219) 325-7439

Email: jspiess@indot.in.gov



From: Beaupre, Samantha [mailto:SBeaupre@lochgroup.com]
Sent: Friday, June 22, 2018 3:14 PM
To: Spiess, Jessica J <JSpiess@indot.IN.gov>
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) IPaC

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

Yes, it is ready for you to review.

Thank you,

Samantha Beaupre

Environmental Biologist

APPENDIX D: Bridge/Structure Assessment Form

This form will be completed and submitted to the District Environmental Manager by the Contractor prior to conducting any work below the deck surface either from the underside; from activities above that bore down to the underside; from activities that could impact expansion joints; from deck removal on bridges; or from structure demolition for bridges/structures within 1000 feet of suitable bat habitat.

DOT Project #	Water Body	Date/Time of Inspection	Within 1,000ft of suitable bat habitat (circle one)
Des. No. 1600931	Yellow River	June 6, 2018 11:00 AM	<div>Yes</div> <div>No</div>

Route	County	Federal Structure ID
King Road	Marshall County	INDOT: 50-00073 NBI: 5000058

If the bridge/structure is 1,000 feet or more from suitable bat habitat (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check box and STOP HERE. No assessment required. ☐

Please submit to the U.S. Fish and Wildlife Service.

Areas Inspected (Check all that apply)

Bridges		Culverts/Other Structures		Summary Info (circle all that apply)			
All vertical crevices sealed at the top and 0.5-1.25" wide & ≥4" deep	X	Crevices, rough surfaces or imperfections in concrete		Human disturbance or traffic under bridge/in culvert or at the structure	High	Low	None
All crevices >12" deep & not sealed	X	Spaces between walls, ceiling joists		Possible corridors for netting	None/poor	Marginal	Excellent
All guardrails	X						
All expansion joints	X						
Spaces between concrete end walls and the bridge deck	X						

Last Revised May 31, 2017

Vertical surfaces on concrete I-beams	x						
---------------------------------------	---	--	--	--	--	--	--

Evidence of Bats (Circle all that apply) Presence of one or more indicators is sufficient evidence that bats may be using the structure.

None

Visual (e.g. survey, thermal, emergent etc.)

- Live __ number seen
- Dead __ number seen

Photo documentation Y/N

Guano

Odor Y/N

Photo documentation Y/N

Staining definitively from bats

Photo documentation Y/N

Audible

Assessment Conducted By: <u>Samantha Beaupre</u> Signature(s): <u><i>Samantha Beaupre</i></u>
District Environmental Use Only: Date Received by District Environmental Manager: _____

DOT Bat Assessment Form Instructions

1. Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges, regardless of whether assessments have been conducted in the past.
2. Any bridge/structure suspected of providing habitat for any species of bat will be removed from work schedules until such time that the DOT has coordinated with the USFWS. Additional studies may be undertaken by the DOT to determine what species may be utilizing each structure identified as supporting bats prior to allowing any work to proceed.
3. Any questions should be directed to the District Environmental Manager.

Last Revised June 2017

From: [Beaupre, Samantha](#)
To: ["Newland, Joyce \(FHWA\)"](#)
Cc: [Hook, Ruth](#)
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination
Date: Wednesday, June 27, 2018 12:26:00 PM

The INDOT PM for this project is John Krueckeberg. You can contact him at jkrueckeberg@indot.in.gov or (219) 325-7520.

Thank you,

Samantha Beaupre
Environmental Biologist
Lochmueller Group
SBeaupre@lochgroup.com

This e-mail message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient(s), please contact the sender by reply e-mail and destroy all copies of the original message. Thank you!

From: Newland, Joyce (FHWA) <Joyce.Newland@dot.gov>
Sent: Wednesday, June 27, 2018 12:16 PM
To: Beaupre, Samantha <SBeaupre@lochgroup.com>
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination

I was just making sure. FHWA has been emphasizing bike/ped connectivity.

Who is the INDOT contact/project manager assigned to this project?

From: Beaupre, Samantha [<mailto:SBeaupre@lochgroup.com>]
Sent: Wednesday, June 27, 2018 12:12 PM
To: Newland, Joyce (FHWA) <Joyce.Newland@dot.gov>
Cc: Hook, Ruth <RHook@lochgroup.com>
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination

Hi Joyce,

We haven't heard anything regarding future connectivity from MACOG and there are no existing or proposed trails near the project area. You're welcome to call me at (317) 334-6828 if you would like to discuss this further.

Thank you,

Samantha Beaupre

Environmental Biologist
Lochmueller Group

SBeaupre@lochgroup.com

This e-mail message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient(s), please contact the sender by reply e-mail and destroy all copies of the original message. Thank you!

From: Newland, Joyce (FHWA) <Joyce.Newland@dot.gov>
Sent: Wednesday, June 27, 2018 11:55 AM
To: Beaupre, Samantha <SBeaupre@lochgroup.com>
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination

I only ask because of the trail. I was wondering if this provides opportunity for future connectivity to the trail. Did MACOG comment on whether there are plans for connectivity?

From: Beaupre, Samantha [<mailto:SBeaupre@lochgroup.com>]
Sent: Wednesday, June 27, 2018 11:52 AM
To: Newland, Joyce (FHWA) <Joyce.Newland@dot.gov>
Cc: Hook, Ruth <RHook@lochgroup.com>
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination

Dear Joyce,

Thank you for your response. There will be no bike or pedestrian facilities included in this proposed project. This is a rural county road, and there are no existing facilities on the roadway that would need to be maintained as part of the proposed project. Please let me know if you have any other questions.

Thanks,

Samantha Beaupre
Environmental Biologist
Lochmueller Group

3502 Woodview Trace
Suite 150, Indianapolis, IN 46268

SBeaupre@lochgroup.com
<http://lochgroup.com>

This e-mail message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient(s), please contact the sender by reply e-mail and destroy all copies of the original message. Thank you!

From: Newland, Joyce (FHWA) <Joyce.Newland@dot.gov>
Sent: Wednesday, June 27, 2018 11:24 AM
To: Beaupre, Samantha <SBeaupre@lochgroup.com>
Subject: RE: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination

Are there bike plans for this stretch of road that the bridge should accommodate? Please remember not to identify the solution to the problem in the ECL.

From: Beaupre, Samantha [<mailto:SBeaupre@lochgroup.com>]
Sent: Wednesday, June 20, 2018 9:14 AM
To: Newland, Joyce (FHWA) <Joyce.Newland@dot.gov>
Cc: Hook, Ruth <RHook@lochgroup.com>
Subject: Marshall County Bridge #73 (Des. No. 1600931) Early Coordination

Ms. Newland,

Please see the attached early coordination letter and attachments for the Marshall County Bridge #73 Bridge Replacement project (Des. No. 1600931).

Please contact myself or Ruth Hook at RHook@lochgroup.com with any questions.

Thank you,

Samantha Beaupre
Environmental Biologist
Lochmueller Group

3502 Woodview Trace
Suite 150, Indianapolis, IN 46268

SBeaupre@lochgroup.com
<http://lochgroup.com>

This e-mail message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient(s), please contact the sender by reply e-mail and destroy all copies of the original message. Thank you!

July 13, 2018

Ruth Hook
Environmental Biologist
Lochmueller Group
3502 Woodview Trace, Suite 150
Indianapolis, Indiana 46268

Dear Ms. Hook:

The proposed project to rehabilitate bridge number 73 over Yellow River in Center Township, Marshall County, Indiana (Des No. 1600931), as stated in your letter received June 22, 2018, will not cause a conversion of prime farmland.

If you need additional information, please contact Rick Neilson at 317-295-5875.

Sincerely,

GERALD ROACH Digitally signed by
GERALD ROACH
Date: 2018.07.17
15:59:27 -04'00'

GERALD L. ROACH
Acting State Conservationist

Helping People Help the Land.



USDA is an equal opportunity provider, employer and lender.

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

DNR #: ER-20652

Request Received: June 20, 2018

Requestor: Lochmueller Group Inc
Ruth Hook
3502 Woodview Trace, Suite 150
Indianapolis, IN 46268

Project: King Road bridge (#73 / 50-000736) replacement over Yellow River, and removal of an existing private drive and overflow pipe, about 0.54 mile east of US 31; Des #1600931

County/Site info: Marshall

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

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

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

Natural Heritage Database: The Natural Heritage Program's data have been checked.
The animal species below have been documented within 1/2 mile of the project area.

1. BIRD: Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*), state endangered
2. AMPHIBIAN: Northern Leopard Frog (*Lithobates pipiens*), state special concern
3. MAMMAL: American Badger (*Taxidea taxus*), state special concern

Fish & Wildlife Comments: We do not foresee any impacts to the Yellow-headed Blackbird as a result of this project. Also, badgers are a wide ranging species that prefer an open, prairie-type habitat, with Indiana being at the eastern edge of their natural range. The range of the badger continues to expand as a result of land-use changes from forest to farmland and open pastureland. Impacts to the American badger or its preferred habitat are unlikely as a result of this project.

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

1) Northern Leopard Frog:

To minimize impacts to this species, we recommend placing an entrenched silt fence around the project area prior to construction.

2) Wildlife Passage & Bank Stabilization:

The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Riprap may be used only at the toe of the sideslopes up to the ordinary high water mark (OHWM). The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs,

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

and trees native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

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

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

3) Riparian Habitat:

We recommend a mitigation plan be developed (and submitted with the permit application) for any unavoidable habitat impacts that will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf>.

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

A native riparian forest mitigation plan should use at least 5 canopy trees and 5 understory trees or shrubs selected from the Woody Riparian Vegetation list or an approved equal. A native riparian forest mitigation plan for impacts of less than one acre in an urban area may involve fewer numbers of species, depending on the level of impact. Additionally, a native herbaceous seed mixture should be planted consisting of at least 10 species of grasses, sedges, and wildflowers selected from the Herbaceous Riparian Vegetation list or an approved equal.

4) Wetland Habitat:

Due to the presence or potential presence of wetland habitat on site, we recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program and also the US Army Corps of Engineers (USACE) 404 program. Impacts to wetland habitat should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding.

5) Cofferdams:

Any proposed dewatering should be detailed using the following guidelines:

- a. Dewatering should be limited to one streambank or side of the creek (at the bridge construction site) at a time so at least half of the creek is always flowing naturally. On larger streams, both sides can be dammed at once as long as the center of the channel is allowed to flow naturally.
- b. Do not dewater directly into the stream. Dewater into a sediment bag, into a roll off box, and onto a riprap apron or similar system.
- c. Cofferdam materials and methods can vary. Self-contained and encapsulated materials and methods are recommended. Anything filled with water is better than soil-filled where there is a potential for leaking or failure of the system due to length of

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

use or accidents.

d. Dewatering pumps should incorporate filters or bypasses to avoid injuring or killing fish and other aquatic organisms.

6) Causeways and Runarounds:

If possible, the project design should avoid inclusion of a temporary causeway or runaround. Such features result in impacts to the stream and surrounding habitat. In many cases, the need for a causeway can be eliminated by working from either bank, or using temporary, easily removed structures such as timber mats. If a causeway is deemed critical for the construction to occur, please submit a justification for the necessity of the causeway with any permit application.

Impacts related to causeways can be reduced by creating a partial causeway that does not span the entire channel, leaving one side or the middle of the channel open and flowing at all times. If a full causeway is absolutely necessary, impacts to the waterway from its installation and removal can be reduced by minimizing the amount of time the causeway is in place, reducing the temporary causeway width, using more and larger culvert pipes, placing filter fabric under the aggregate fill to reduce impacts during the removal of the causeway, using larger size aggregate, and removing sections of the causeway as portions of the bridge are completed. Do not use fines or soil in the temporary causeway.

7) Migratory Birds:

All migratory bird species are protected under the Migratory Bird Treaty Act (MBTA) of 1918. Species such as swallows and flycatchers often build nests on the undersides of bridges. To ensure compliance with the MBTA, we recommend that either work not take place between May 7 and September 7 (which is the nesting season), or that the bridge be surveyed for nests during those dates prior to construction. If nests are found with eggs, chicks, or parents actively tending to the nest (building the nest and visiting often), then repairs should be put on hold until the nesting cycle is completed (to fledging) or fails (by natural causes).

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

1. Revegetate all bare and disturbed areas within the project area using a mixture of grasses (excluding all varieties of tall fescue), sedges, wildflowers, shrubs and hardwood trees native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.
6. Operate equipment used to replace the bridge from the existing roadway.
7. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
8. Do not use broken concrete as riprap.
9. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
10. Minimize the movement of resuspended bottom sediment from the immediate project area.
11. Do not deposit or allow demolition/construction materials or debris to fall or

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

otherwise enter the waterway.

12. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

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

14. Do not excavate or place fill in any riparian wetland.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife

Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.



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

Date: July 20, 2018



DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
477 MICHIGAN AVE.
DETROIT, MICHIGAN 48226-2550

August 24, 2018

Ruth Hook
Lochmueller Group, Inc.
3502 Woodview Trace, Ste. 150
Indianapolis, IN 46268

Dear Ms. Hook:

This is in response to your June 20, 2018, letter requesting comments on the proposed replacement of Bridge No. 73 over Yellow River, located 0.54 mile east of United States Highway 31 in Marshall County, Indiana (Des. No. 1600931). The following information is provided in accordance with our responsibilities under our regulatory and civil works programs.

Your early coordination request has been provided to our Regulatory Office for their review pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. No activities under the Corps of Engineers' regulatory jurisdiction may commence without prior Corps' authorization. Questions regarding the regulatory review should be directed to Mr. Donald Reinke, Chief, Compliance and Enforcement Branch, Regulatory Office, at 313-226-6812.

Our civil works program does not include any existing or currently planned projects for water resources in the vicinity of the proposal described in your letter; nor do we have any proposed studies for this area.

The project involves work in a Federally delineated floodplain (Enclosure). The project includes embankment widening and other actions that affect the hydraulic capacity of the bridge. As there are houses and other structures in or near the delineated floodplain, an evaluation of potential effects may be needed to ensure the project design does not induce flood impacts. We recommend that you coordinate with local officials and with the Indiana Department of Natural Resources regarding the applicability of a floodplain permit prior to construction. This coordination would help ensure compliance with local and state floodplain management regulations and acts, such as the Indiana Flood Control Act (IC 13-2-22). If you obtain information that any part of your project would impact the floodplain, you should consider other alternatives that, to the extent possible, avoid or minimize adverse impacts associated with use of the floodplain.

We appreciate the opportunity to comment on the proposed replacement of Bridge No. 73 over the Yellow River in Marshall County, Indiana. Any questions may be directed to Mr. Paul Allarding of my staff at 313-226-7590 or me at 313-226-2476.

Sincerely,

Original signed

Charles A. Uhlarik, Chief
Environmental Analysis Branch

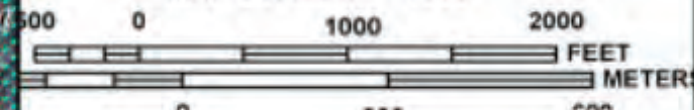
Enclosure

Copies furnished:

Greg Mausolf, Corps Floodplain Management Services, Detroit
Don Reinke, Corps Regulatory Office, Detroit



MAP SCALE 1" = 1000'



NFIP

PANEL 0135C

FIRM

FLOOD INSURANCE RATE MAP
MARSHALL COUNTY,
INDIANA
AND INCORPORATED AREAS

PANEL 135 OF 300

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
MARSHALL COUNTY	180443	005	C

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
18099C0135C

EFFECTIVE DATE
NOVEMBER 16, 2011

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

From: [Bowman, Sandra A](#)
To: [Beaupre, Samantha](#)
Cc: [Hook, Ruth](#)
Subject: RE: Marshall Bridge #73 Bridge Replacement Project (Des. No. 1600931)
Date: Thursday, March 12, 2020 4:51:01 PM
Attachments: [1600931 Migratory Bird USP.RTF](#)

Samantha,

1. Yellow-headed Blackbird – does not foresee impacts, nothing required.
2. Northern Leopard Frog – Can you incorporate the entrenched silt fence around the site prior to construction? Does the site layout permit this?
3. American Badger – impacts unlikely, nothing required.
4. pp. 234, 251 has photo of nest on bridge. Include the Migratory Bird USP attached. It looks like one nest and they didn't like the bridge otherwise there would be more. Unless it is an Eastern Phoebe. They would have a single nest. The photos weren't clear enough to see how it was constructed. Swallow nests are mud. Eastern Phoebe's will use a mix of materials. Essentially the process is take the nest out before the start of the nesting season, monitor to ensure no new nests get started and get busy with the demo. If the bridge is coming down that work should be enough to keep them starting a new nest. There is language in the USP about having a plan but the contractor could tell the PE/PS what I said above and that would be sufficient for this type of project. They shouldn't need exclusion devices.

Sandy

MGR, Ecology and Waterway Permitting
Office (317) 233-5568
sbowman@indot.in.gov

From: Beaupre, Samantha [mailto:SBeaupre@lochgroup.com]
Sent: Thursday, March 12, 2020 3:36 PM
To: Bowman, Sandra A <SBowman@indot.IN.gov>
Cc: Hook, Ruth <RHook@lochgroup.com>
Subject: Marshall Bridge #73 Bridge Replacement Project (Des. No. 1600931)

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

Good Afternoon Sandy,

I just left you a voicemail but I wanted to follow up with an email. I am working on a CE for the above mentioned project and during the review process, Brandon Miller commented that I should coordinate with you. I attached the IDNR letter from the CE that includes Brandon's comment. If you could give me a call back to discuss, I would greatly appreciate it!

Categorical Exclusion

Appendix D

**Section 106 of the National Historic
Preservation Act (NHPA)**

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

Date: 12/27/2019

Project Designation Number: 1600931

Route Number: N/A

Project Description: Marshall Co. Bridge #73 Project

The proposed project will replace the existing bridge, which carries King Road over Yellow River in Marshall County, with a new structure. The existing structure (Structure #50-00073) is a four span bridge built in 1966 and is 152 feet long with a 24.3 foot clear roadway width. The existing bridge will be replaced with a 3 span, precast concrete I beam type II bridge. The construction of the new structure will include embankment widening, benching the sideslopes, the removal of an existing private drive, and the removal of an existing overflow pipe. Excavation within the Yellow River will occur in order to install the substructure units. The proposed project will require 2.1 acres of permanent ROW and 0.14 acre of temporary ROW. The construction of the proposed project will require the removal of the existing structure. Therefore, constructing the project while maintaining one lane of traffic is not feasible. Therefore, the maintenance of traffic (MOT) plan for the project requires the temporary closure of King Road for the duration of the project. The official detour for local traffic is as follows: King Road, to Plymouth Goshen Trail, to Jarrah Road, to 8A Road, and returning to King Road. This detour route is approximately 4.2 miles long. The official detour for truck traffic is as follows: US 31 from the interchange of US 30 and US 31 to US 6 to SR 331 to US 30. This detour route is approximately 35 miles long.

Feature crossed (if applicable): Yellow River

Township: Center

City/County: Marshall County

Information reviewed (please check all that apply):

General project location map ☒ USGS map ☒ Aerial photograph ☒

Written description of project area ☐ General project area photos ☒

Previously completed archaeology reports ☐ Interim Report ☒

Previously completed historic property reports ☐

Soil survey data ☐ Bridge inspection information ☐

Other (please specify): SHAARD GIS; online street-view imagery

Martin, Andrew V.

2019 A Phase Ib Intensive Survey of Site 12MR496 for the Marshall County Bridge 73 Project (DES 1600931) in Marshall County, Indiana. Project No. I19L020, Cultural Resource Analysts, Evansville.

Results of the Records Review for Above-Ground Resources:

With regard to above-ground resources, an INDOT Cultural Resources historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 performed a desktop review,

Last revised 9-23-08

Page 1 of 4

checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Marshall County. No listed resources are located near the project area.

The *Marshall County Interim Report* (1990; Center Township Scattered Sites) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD and IHBBCM information was checked against the Interim Report hard copy maps.

IHSSI #099-516-20016 was located approximately 0.25 mile from the project area but was demolished, as noted in SHAARD. No extant IHSSI properties are located within 0.25 mile of the project area. A 0.25 mile buffer around the project area would serve as a more-than-adequate area of potential effects (APE) given the project scope and surrounding terrain, which is partially wooded.

Properties adjacent to the project area consist of wooded areas, agricultural fields, and a late 20th-century ranch house (common type). None of the properties adjacent to the project area possess the significance and integrity necessary to be considered potentially eligible for the National Register.

The subject structure (Marshall Co. Bridge #73; NBI #5000058) is a precast concrete beam bridge constructed in 1966. Due to its post-1965 construction date, it was not included in 5000058.

On November 2, 2012, the Advisory Council on Historic Preservation (ACHP) issued the Program Comment for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges (Program Comment). The Program Comment relieves federal agencies from the Section 106 requirement to consider the effects of undertakings on most concrete and steel bridges built after 1945. On March 19, 2013, federal agencies were approved to use the Program Comment for Indiana projects.

The Program Comment applies for Marshall Co. Bridge #73 because it has not been previously listed in or determined eligible for listing in the National Register of Historic Places and it is not located in or adjacent to a historic district (Section IV.A of the Program Comment). As an example of a post-1945 concrete beam bridge the bridge is also not one of the types to which the Program Comment does not apply (arch bridges, truss bridges, bridges with movable spans, suspension bridges, cable-stayed bridges, or covered bridges [Section IV.B]).

Additionally, this bridge has not been identified as having exceptional significance for association with a person or event, being a very early or particularly important example of its type in the state or the nation, having distinctive engineering or architectural features that depart from standard designs, or displaying other elements that were engineered to respond to a unique environmental context (Section IV.C). The bridges also have not been identified as having some exceptional quality. Based on consultation between FHWA, INDOT, SHPO and interested parties, no bridges with exceptional significance were identified in Indiana (Section IV.C). Because the above criteria from the Program Comment have been met, no individual consideration under Section 106 is required for Marshall Co. Bridge #73.

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

Archaeology Report Author/Date:

Andrew V. Martin/December 27, 2019

Summary of Archaeology Investigation Results:

An electrical resistance survey was conducted by INDOT-CRO on August 22, 2019. The results of the survey indicated a narrow strip of apparently intact land between the R/W fence and the field edge. Three

low resistance anomalies were identified that had moderate potential to represent prehistoric pit features, although two of these also had the potential to be disturbance related to the roadside fence.

Cultural Resource Analysts (CRA) conducted Phase Ib investigations of the site in September 2019 (Martin 2019). Four 1 x 1 m test units and fifteen shovel probes were excavated, making up an approximate 7% sample of the portion of the site within the project R/W. No features or evidence for intact deposits was found in any of the units or shovel probes, including those placed to investigate the geophysical anomalies, and only a low density of artifacts was recovered from within the A horizon. The portion of the site within the project r/w was determined to be ineligible, and no additional investigation was recommended (Martin 2019). However, it is possible that the site continues eastward outside of the R/W limits. There are no archaeological concerns, provided that all ground disturbance is limited to the project limits as covered by the Phase Ib investigation (Martin 2019).

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

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

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

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

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

- i. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *AND*
- ii. With regard to the subject bridge, at least one of the conditions listed below is satisfied (*AT LEAST one of the conditions a, b or c, must be fulfilled*):
 - a. The latest Historic Bridge Inventory identified the bridge as non-historic (see <http://www.in.gov/indot/2531.htm>);
 - b. The bridge was built after 1945, and is a common type as defined in Section V. of the *Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect *AND* the considerations listed in Section IV of the Program Comment do not apply;
 - c. The bridge is part of the Interstate system and was determined not eligible for the National Register under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.

If no, please explain:

Additional comments: Applicability of the MPPA to this project is contingent upon ground disturbance being limited to the proposed project R/W as of the date of this form. Ground disturbance outside of this area adjacent to site 12Mr496 must be avoided. In the field, the project limits should be marked prior to construction with fencing or 4"x4" wood posts to avoid accidental disturbance, and this area should be labeled "Avoidance Area – Do Not Disturb" on design plans. Special provisions will include no soil disturbance in this area. If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction in the immediate area of the find will be stopped, and the INDOT Cultural Resources Section and the Division of Historic Preservation and Archaeology will be notified immediately.

INDOT Cultural Resources staff reviewer(s): Anthony Ross and Matt Coon

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

Blad, Hannah

From: Coon, Matthew <mcoon@indot.IN.gov>
Sent: Friday, December 27, 2019 4:10 PM
To: Quigg, Gary
Cc: Ross, Anthony; amartin; Miller, Shaun (INDOT); Blad, Hannah; Hook, Ruth; Costa, Chad; Miller, Brandon
Subject: RE: Marshall County Bridge #73 - Des. No. 1600931- MPPA Submission Form and Phase IB - LPA Project
Attachments: Minor Projects PA determination form_B-12_Des1600931.pdf

Or today...

We have completed our review of the materials and have determined that Category B-12 of the MPPA is applicable, and therefore no further Section 106 work is necessary. The completed determination form is attached for use in the CE document.

The archaeological report has been reviewed and approved by INDOT-CRO. Please forward one hard copy of the report to DHPA, indicating in the cover letter that the project qualified as a Minor Project and therefore the report is for their records only and no formal review is required under Section 106. In addition, we ask that a copy of the DHPA submittal letter be sent to INDOT-CRO c/o Matt Coon during the time of submission and that the archaeological report be posted to IN SCOPE.

Please note that the applicability of the MPPA to this project is contingent upon ground disturbance being limited to the proposed project R/W as of the date of this form. Ground disturbance outside of this area adjacent to site 12Mr496 must be avoided. In the field, the project limits should be marked prior to construction with fencing or 4"x4" wood posts to avoid accidental disturbance, and this area should be labeled "Avoidance Area – Do Not Disturb" on design plans. Special provisions will include no soil disturbance in this area.

Please keep in mind that if the scope of the project or the project limits should change, our office will need to re-examine the information to determine whether the MPPA still applies. Please don't hesitate to contact us should you have any questions or need additional information. Thank you.

Sincerely,

Matt Coon
Archaeologist, Cultural Resources Office
INDOT Environmental Services
100 N. Senate Avenue, Room N642
Indianapolis, IN 46204
Phone: 317.233.2083

From: Coon, Matthew
Sent: Friday, December 27, 2019 4:04 PM
To: 'Quigg, Gary' <GQuigg@lochgroup.com>
Cc: Ross, Anthony <ARoss3@indot.IN.gov>; amartin <amartin@crai-ky.com>; Miller, Shaun (INDOT) <smiller@indot.IN.gov>; Blad, Hannah <HBlad@lochgroup.com>; Hook, Ruth <RHook@lochgroup.com>; Costa, Chad <CCosta@lochgroup.com>
Subject: RE: Marshall County Bridge #73 - Des. No. 1600931- MPPA Submission Form and Phase IB - LPA Project

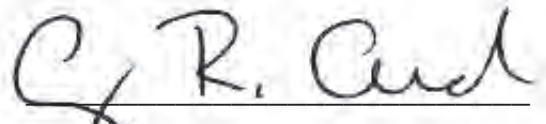
Thanks, Gary – I will return the completed form first thing on Monday morning.



**Archaeological Records Check and Phase Ia Reconnaissance:
Marshall County Bridge 73 Project over the Yellow
River in Center Township, Marshall County, Indiana
Des. No.: 1600931**

Prepared for:
**Lochmueller Group and
Indiana Department of Transportation/Federal Highway Administration**

Prepared by:
WEINTRAUT & ASSOCIATES, INC.


Principal Investigator: Craig R. Arnold
Author: Colin D. Graham

P.O. Box 5034 | Zionsville, Indiana | (317)733-9770 | (linda@weintrautinc.com)

June 2019

Management Summary

At the request of Lochmueller Group, Weintraut & Associates, Inc. (W&A) archaeologists completed an archaeological records check and a Phase Ia archaeological field reconnaissance for a project to replace Marshall County Bridge No. 73 on King Road over the Yellow River in Center Township, Marshall County, Indiana (Des. No.1600931). Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the impacts of their undertakings on historic properties. This Indiana Department of Transportation (INDOT) project is utilizing Federal Highway Administration (FHWA) funding, which requires a Section 106 review.

Marshall County Commissioners with administrative oversight by INDOT intends to proceed with the replacement of the bridge carrying King Road over the Yellow River. The project is located approximately two miles northeast of Plymouth, Indiana, in Section 26, Township 34 North, Range 2 East, of the USGS 7.5' series Plymouth, Indiana, topographic quadrangle map. Additional new and temporary right-of-way (ROW) would be necessary to accommodate the bridge replacement footprint and construction work. Current designs indicate the project limits will be approximately 1,280 feet (ft) long resulting in 2 to 2.5 acres (ac) of ROW acquisition. The archaeological survey area had an irregular rectangular shape generally paral-

leling King Road, totaling approximately 1.16 hectares (ha), or 2.86 ac.

This investigation was conducted in accordance with Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology (IDNR/DHPA) guidelines, and with INDOT's *Cultural Resource Manual* issued by INDOT (2015). The goals of the Phase Ia reconnaissance were to identify and verify the presence or absence of cultural deposits within the project area; assess the potential of any sites identified for inclusion in the Indiana Register of Historic Sites and Structures (IRHSS) or the National Register of Historic Places (NRHP); and collect sufficient information to identify the cultural affiliation of any sites located and their possible function(s).

One new archaeological site (12MR0496) was encountered during the Phase Ia archaeological field reconnaissance of the project area.

Site specific
information redacted

Since the appropriate use of standard Phase Ia methodology was not sufficient to evaluate the site's potential eligibility for listing in the NRHP, W&A recommends avoidance. If avoidance is not possible, Phase Ib hand

excavation is recommended within the site area to document the subsurface artifact distribution and the potential for intact cultural deposits associated with the site.

[REDACTED]

[REDACTED]

[REDACTED] Site specific information redacted [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

However, these recommendations are made with the understanding that if any previously unidentified intact archaeological deposits or human remains are uncovered during construction, demolition, or earthmoving activities, work within the area will stop and the IDNR/DHPA will be notified of the discovery within two (2) business days as required by Indiana Code 14-21-1-27 and 29.

Introduction

In response to a request from Lochmueller Group, Weintraut & Associates, Inc. (W&A) archaeologists conducted an archaeological records check and a Phase Ia archaeological field reconnaissance for the replacement of Marshall County Bridge No. 73 on King Road over the Yellow River in Center Township, Marshall County, Indiana (Des. No.1600931). The survey area is located in the center portion of Section 26, Township 34 North, Range 2 East, on the USGS 7.5' series Plymouth, Indiana, topographic quadrangle map (Figure 1). The proposed project will receive funding from the Federal Highway Administration (FHWA); therefore, an account of the effects of the project on archaeological resources is required in consultation with the State Historic Preservation Office (SHPO) at the Indiana Department of Natural Resources, Division of Historic Architecture and Archaeology (IDNR/DHPA).

Rules defining archaeological standards, plans, and permits (312 IAC 21; 312 IAC 22; 312 IAC 6-1) have been established under Indiana Code (IC) 14-21-1 and IC 14-29-1-8 to permit the IDNR/DHPA to operate an archaeological review and compliance program. As authorized by 312 IAC 21, the “Indiana Historic Sites and Structures Inventory – Archaeological Sites Guidebook” includes guidelines for Phase I, II, and III archaeological projects to ensure that the products of compliance-related archaeo-

logical investigations will lead to the location, identification, evaluation, and protection of important archaeological sites. The Indiana Department of Transportation (INDOT) *Cultural Resource Manual* (2015) provides guidance on compliance with state and national regulations. Pursuant to 36 CFR § 800.4(b), Section 106 of the National Historic Preservation Act (NHPA) identification and evaluation efforts were initiated with the Phase Ia archaeological records check and survey.

Work for this project was conducted in accordance with state and national regulations. Craig Arnold, M.A., completed an online review of IDNR/DHPA archaeological records in December 2018. Phase Ia fieldwork was initiated and completed on December 21, 2018 and March 20, 2019 by Arnold and by Colin Graham, B.A. Arnold served as Principal Investigator during all phases of the project and Graham served as report author. Bethany Hughes, B.A., created the GIS graphics, and Charity Munro, B.A., provided technical review. Arnold and James R. Jones III, Ph.D., provided peer review and edits. Elizabeth Warn, M.F.A., completed the report layout. Linda Weintraut, Ph.D., provided oversight and final edits. This report details the results of the records check and Phase Ia field reconnaissance and presents the conclusions and recommendations of W&A concerning the necessity of any additional archaeological investigations.

Conclusions and Recommendations

Per the request from Lochmueller Group, W&A archaeologists conducted an archaeological records check and a Phase Ia archaeological field reconnaissance for a Bridge Replacement on King Road over the Yellow River in Center Township, Marshall County, Indiana. This investigation was conducted in accordance with IDNR/DHPA guidelines. The archaeological survey area totaled approximately 1.16 ha, or 2.86 ac, having an irregular rectangular shape. It was investigated using shovel probes.

One new archaeological site (12MR0496) was encountered during the field reconnaissance within the survey area.

[Redacted text block]

Since the appropriate use of standard Phase Ia methodology was not sufficient to evaluate the site's potential eligibility for listing in the NRHP, W&A recommends avoidance. If avoidance is not possible, Phase Ib hand excavations is recommended within the site area to better document the subsurface artifact distribution and the potential for intact cultural deposits associated with the site. Additional probing is also recommended to determine how far into the existing ROW/ditch area the site may extend.

[Redacted text block]

However, these recommendations are made with the understanding that if any previously unidentified intact archaeological deposits or human remains are uncovered during construction, demolition, or earthmoving activities, work within the area will stop and the IDNR/DHPA will be notified of the discovery within two (2) business days as required by Indiana Code 14-21-1-27 and 29.

A PHASE IB INTENSIVE SURVEY OF SITE 12MR496 FOR THE MARSHALL COUNTY BRIDGE 73 PROJECT (DES 1600931) IN MARSHALL COUNTY, INDIANA

Site Specific
Information
Redacted

by
Andrew V. Martin, RPA 61710

Prepared for



Prepared by



Kentucky | West Virginia | Wyoming
Indiana | Louisiana | Tennessee | Virginia

A PHASE IB INTENSIVE SURVEY OF SITE 12MR496 FOR THE MARSHALL COUNTY BRIDGE 73 PROJECT (DES 1600931) IN MARSHALL COUNTY, INDIANA

by

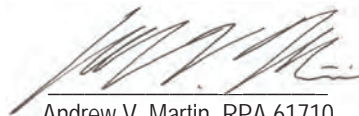
Andrew V. Martin, RPA 61710
With a contribution by Matthew Coon

Prepared for

Chad Costa
Lochmueller Group, Inc.
3502 Woodview Trace, Suite 150
Indianapolis, Indiana 46268
Phone Number: (317) 334-6807
Email ccosta@lochgroup.com

Prepared by

Cultural Resource Analysts, Inc.
201 NW 4th Street, Suite 204
Evansville, Indiana 47708
E-mail: amartin@crai-ky.com
CRA Project No.: I19L020



Andrew V. Martin, RPA 61710
Principal Investigator

December 27, 2019

Lead Agency: Indiana Department of Transportation Des. No.: 1600931
Indiana State Museum Accession Number: 71.833.8211
DHPA No. 24046

ABSTRACT

Between September 11 and 13, 2019, Cultural Resource Analysts, Inc., personnel conducted a phase Ib intensive survey of Site 12Mr496 for the proposed Marshall County Bridge 73 project (Indiana Department of Transportation Designation Number: 1600931) near the town of Plymouth in Marshall County, Indiana. The investigation was conducted at the request of Lochmueller Group, Inc., [REDACTED]

[REDACTED]

[REDACTED]
[REDACTED] Site specific information redacted [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] Since the site could not be avoided by the proposed project construction activities, a phase Ib plan was submitted to, and accepted by, the Division of Historic Preservation and Archaeology.

The approved phase Ib investigation initially consisted of a geophysical survey, followed by hand excavation of four test units and fifteen close-interval shovel probes resulting in approximately 59.2 sq ft (5.5 sq m) of the site being sampled, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

No archaeological features were found during the investigation of the site; rodent disturbance and eroded deposits were noted, which suggests that a majority of the site within the project area does not retain good depositional integrity. Considering the erosion and bioturbation, as well as the amount of sampling conducted in the narrow site area within proposed construction limits, the portion of Site 12Mr496 within the project area is not recommended eligible for listing on the National Register of Historic Places and archaeological clearance is recommended for the project.

I. INTRODUCTION

Between September 11 and 13, 2019, Cultural Resource Analysts, Inc. (CRA), personnel conducted a phase Ib intensive survey of Site 12Mr496 for the proposed Marshall County Bridge 73 project (Indiana Department of Transportation [INDOT] Designation [DES] Number: 1600931) near the town of Plymouth in Marshall County, Indiana (Figures 1 and 2). The investigation was conducted at the request of Lochmueller Group, Inc., and focused on approximately 75.0 sq m (807.3 sq ft) of the site within the proposed project area

Prior to the archaeological field reconnaissance, a phase Ib plan was submitted to, and accepted by, the Indiana Division of Historic Preservation and Archaeology (DHPA). Andrew Martin (field supervisor) and Cecilia Szmuto completed the fieldwork in approximately 70 person hours.

Purpose of Study

This study was conducted to comply with Section 106 of the National Historic Preservation Act. This transportation project is federally funded, and is therefore considered an undertaking subject to Section 106 review.

Site 12Mr496 was originally identified in 2018 (Graham 2019). Due to the presence of artifacts recovered deep below the ground surface during that investigation, the site was recommended for additional evaluation because of its potential to provide additional information about the prehistory of the area. The purpose of the current investigation is to further evaluate the site deposits for their potential to provide such information.

The following is a description of the site area, previous research and cultural history of the area, field methods used, and the results of this investigation including recommendations. The survey and report are intended to conform to the Indiana Department of Natural Resources, DHPA and INDOT guidelines.

Project Description

The bridge carrying King Road over the Yellow River (Marshall County Bridge 73) is intended to be replaced. Proposed construction limits and new right-of-way (ROW) extend a minimum of approximately 4.5 m (15.0 ft) beyond existing disturbed ROW at its narrowest point in the southern part of the project, to a maximum of approximately 13.7 m (45.0 ft) wide in the vicinity of the new bridge location (Appendix A).

Site specific information redacted

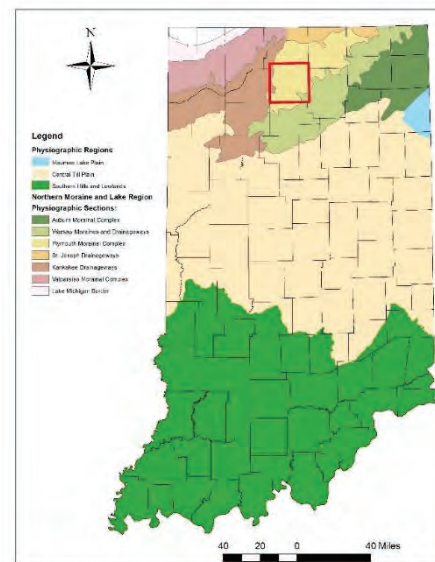


Figure 1. Map of Indiana showing the location of Marshall County, Indiana (Indiana Geological Survey 2002).

Site specific information redacted

Between September 11 and 13, 2019, CRA personnel conducted a phase Ib intensive survey of Site 12Mr496 for the proposed Marshall County Bridge 73 project (INDOT DES: 1600931) near the town of Plymouth in Marshall County, Indiana. The investigation was conducted at the request of Lochmueller Group, Inc., and focused on approximately 75.0 sq m of the site within the proposed project area. Approximately 31.5 sq. m (339.0 sq. ft) of the site is in proposed construction limits.

Since the site could not be avoided by the proposed project construction activities, a phase Ib plan was submitted to, and accepted by, the DHPA.

approximately 5.25 sq. m (59.2 sq ft) of the site being sampled, which represents about 7 percent of the site within the project area and 17 percent of the site within proposed construction limits. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

Andrefsky, William
1994 Raw Material Availability and the
Organization of Technology. *American
Antiquity* 59:21–35.

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

D15

Categorical Exclusion

Appendix E

**Red Flag Investigation
& Hazardous Materials**



Date: April 4, 2018

To: Site Assessment & Management
Environmental Services
Indiana Department of Transportation
100 N Senate Avenue, Room N642
Indianapolis, IN 46204

From: Ruth Hook
Lochmueller Group, Inc.
3502 Woodview Trace
Indianapolis, IN 46268
RHook@lochgroup.com

Re: RED FLAG INVESTIGATION
Des. No, 1600931, Local Project
Bridge Replacement Project
King Road, Marshall County Bridge No. 73 over Yellow River
Marshall County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The proposed project would involve the replacement of Marshall County Bridge No. 73 (asset name 50-00073). Marshall County Bridge No. 73 carries King Road over Yellow River in Marshall County. The proposed project will include the complete removal of the existing structure and the installation of a new structure. The installation of the new structure will include embankment widening, benching the sideslopes, removal of an existing private drive, and removal of an existing overflow pipe. The new structure will be longer, taller, and slightly wider than the existing structure; however, exact dimensions have yet to be determined. Excavation within the Yellow River will occur to install the substructure units. The design for the proposed project is on-going.

Bridge and/or Culvert Project: Yes ☒ No ☐ Structure # 50-00073

If this is a bridge project, is the bridge Historical? Yes ☐ No ☒ , Select ☐ Non-Select ☐

Proposed right of way: Temporary ☐ # Acres n/a Permanent ☒ # Acres 1 to 2 acres

The acquisition of permanent right-of way will be required, but the amount of right-of-way needed has yet to be determined. Based on initial design information it can be anticipated that one to two acres of permanent acquisition will be required.

Type of excavation: Excavation will be required for the substructure removal, benching the sideslopes, construction of new substructure, and removal of an existing drive on the northwest portion of the project. The depth of excavation has yet to be determined.

3502 Woodview Trace, Suite 150
Indianapolis, Indiana 46268
PHONE: 317.222.3880 • TOLL FREE: 888.830.6977

Maintenance of traffic: The MOT for this project will require full closure of King Road. A detour route will be required. Although the details of the MOT have yet to be determined, the MOT design will follow the criteria outlined in the *Indiana Design Manual*.

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

State Project: ☐ LPA: ☒

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Religious Facilities	N/A	Recreational Facilities	N/A
Airports ¹	1	Pipelines	2
Cemeteries	N/A	Railroads	N/A
Hospitals	N/A	Trails	N/A
Schools	N/A	Managed Lands	N/A

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

Explanation:

Airports: Although not located within the 0.5 mile search radius, one (1) public airport, Plymouth Municipal Airport, is located within 3.8 miles (20,000 feet) of the project area; therefore, early coordination with INDOT Aviation will occur.

Pipelines: Two (2) pipelines are located within the 0.5 mile search radius. One (1) pipeline, owned by Northern Indiana Public Service Company, crosses through the project area. Coordination with INDOT Utilities and Railroads will occur.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	17
Canal Structures – Historic	N/A	Lakes	6
NPS NRI Listed	N/A	Floodplain - DFIRM	1
NWI-Lines	5	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	5	Sinkhole Areas	N/A
Rivers and Streams	9	Sinking-Stream Basins	N/A

Explanation:

NWI-Lines: Five (5) NWI-line segments are located within the 0.5 mile search radius. Two (2) NWI-lines, representing the Yellow River, are located within the project area. A Waters of the U.S. Report will be prepared and coordination with the appropriate agency, if applicable, will occur.

IDEM 303d Listed Streams and Lakes (Impaired): Five (5) 303d Listed Rivers and Stream segments are located within the 0.5 mile search radius. One (1) 303d Listed Rivers and Streams, the Yellow River, is located within the project area. The Yellow River is impaired for PCBs in fish tissue. Exposure to PCBs in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. If there will be sediment and/or soils disturbed by construction, additional investigation may be necessary. Coordination with INDOT Environmental Services (ES) will occur.

Rivers and Streams: Nine (9) stream segments are located within the 0.5 mile search radius. One (1) stream, the Yellow River, is located within the project area. A Waters of the U.S. Report will be prepared and coordination with the appropriate agency, if applicable, will occur.

NWI-Wetlands: Seventeen (17) NWI-wetland polygons are located within the 0.5 mile search radius. One (1) NWI-wetland polygon is located within the project area. A Waters of the U.S. Report will be prepared and coordination with the appropriate agency, if applicable, will occur.

Lakes: Six (6) lakes (ponds) are located within the 0.5 mile search radius. The nearest lake (pond) is located 0.03 miles west of the project area. No impact is expected.

Floodplain- DFIRM: One (1) floodplain polygon is located within the 0.5 mile search radius. The project area is located within the floodplain polygon. Coordination with the appropriate agency will occur.

URBANIZED AREA BOUNDARY SUMMARY

Explanation: N/A

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration			
Petroleum Wells	12	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation:

Petroleum Wells: Twelve (12) petroleum wells are located within the 0.5 mile search radius. One (1) well is located within the project area. Coordination with IDNR Oil and Gas Division will occur.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	N/A	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	N/A
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	N/A	Notice of Contamination Sites	N/A

Explanation:

No Hazardous Materials Concerns were identified within the 0.5 mile search radius.

ECOLOGICAL INFORMATION SUMMARY

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

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by farm fields and wooded areas. The October 12, 2017, inspection report for Bridge #50-00073 contains no information about whether bats are present or absent on the bridge. Additional investigation to confirm the presence or absence of bats on the bridge will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects" dated October 25, 2017.

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

RECOMMENDATIONS SECTION

INFRASTRUCTURE:

Airports: Although not mapped within the 0.5 mile search radius, one (1) public airport, Plymouth Municipal airport, is located within 3.8 miles (20,000 feet) of the project area. Early coordination with INDOT Aviation will occur.

Pipelines: One (1) pipeline, owned by Northern Indiana Public Service Company, crosses through the project area. Coordination with INDOT Utilities and Railroads will occur.

WATER RESOURCES:

The presence of following water resources will require the preparation of a Waters of the U.S. Report:

Two (2) NWI-line segments, representing the Yellow River, are located within the project area. Coordination with the appropriate agency, if applicable, will occur.

One (1) 303d Listed Rivers and Streams, the Yellow River, is located within the project area. Coordination with INDOT ES will occur.

One (1) stream, the Yellow River, is located within the project area. Coordination with the appropriate agency, if applicable, will occur.

One (1) NWI- wetland polygon is located within the project area. Coordination with the appropriate agency, if applicable, will occur.

The project area is located within the floodplain. Coordination with the appropriate agency will occur.

URBANIZED AREA BOUNDARY: N/A

MINING/MINERAL EXPLORATION:

One (1) petroleum well is located within the project area. Coordination with IDNR Oil and Gas Division will occur.

HAZMAT CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. Additional investigation to confirm the presence or absence of bats on the bridge will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects" dated October 25, 2017.

INDOT Environmental Services concurrence:  Date: 2018.06.20 14:14:51 -04'00' (Signature)

Prepared by:

Ruth Hook



Environmental Biologist
Lochmueller Group, Inc.

Graphics:

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: N/A

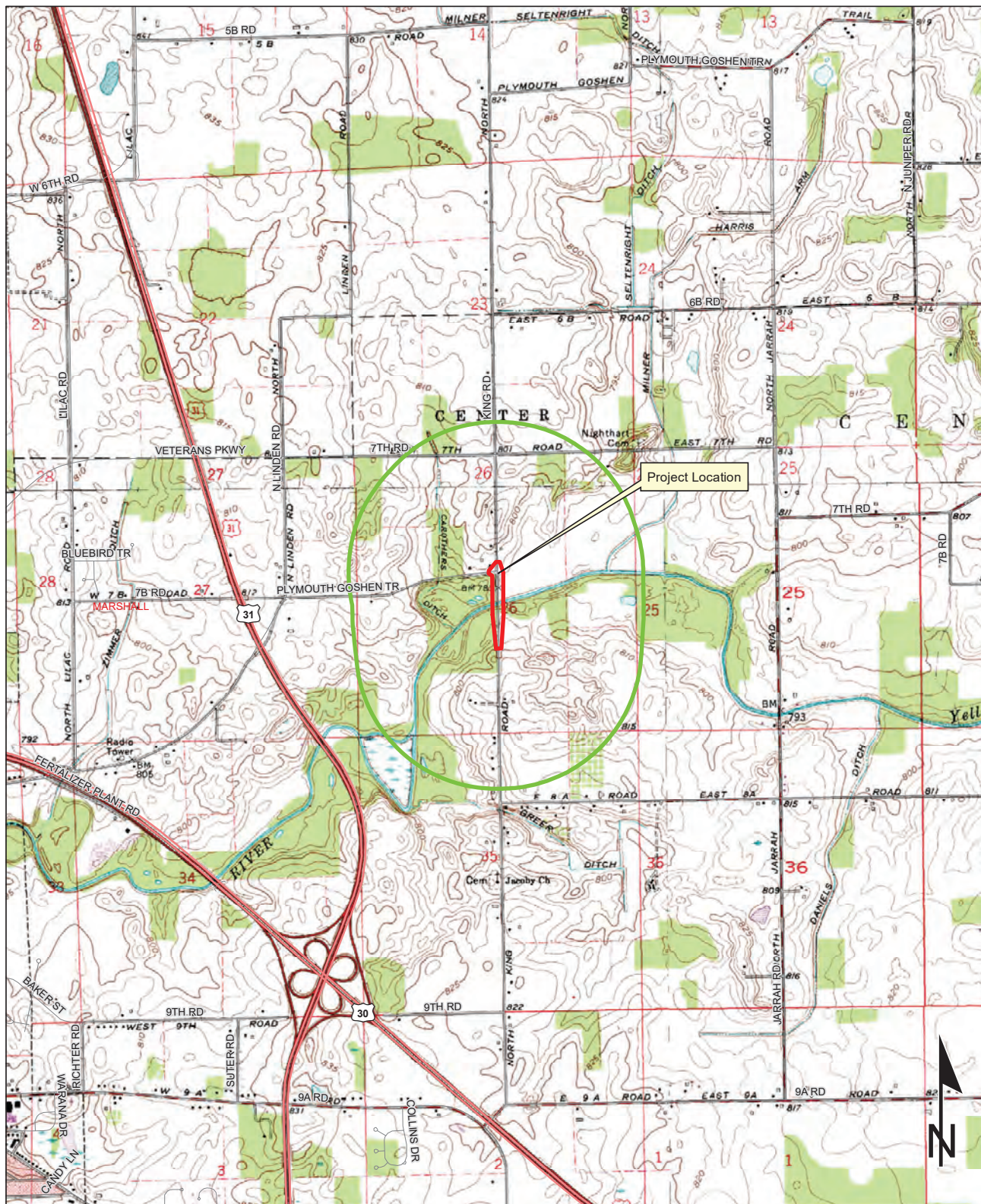
MINING/MINERAL EXPLORATION: YES

HAZMAT CONCERNS: N/A

Supplemental Graphics:

MARSHALL COUNTY LISTING OF THE INDIANA NATURAL HERITAGE DATA CENTER

Red Flag Investigation - Plymouth Quadrangle
 Bridge No. 73 carrying King Road over the Yellow River
 Des. No. 1600931, Bridge Replacement Project
 Marshall County, Indiana



Sources: 0.45 0.225 0 0.45 Miles
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

PLYMOUTH QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

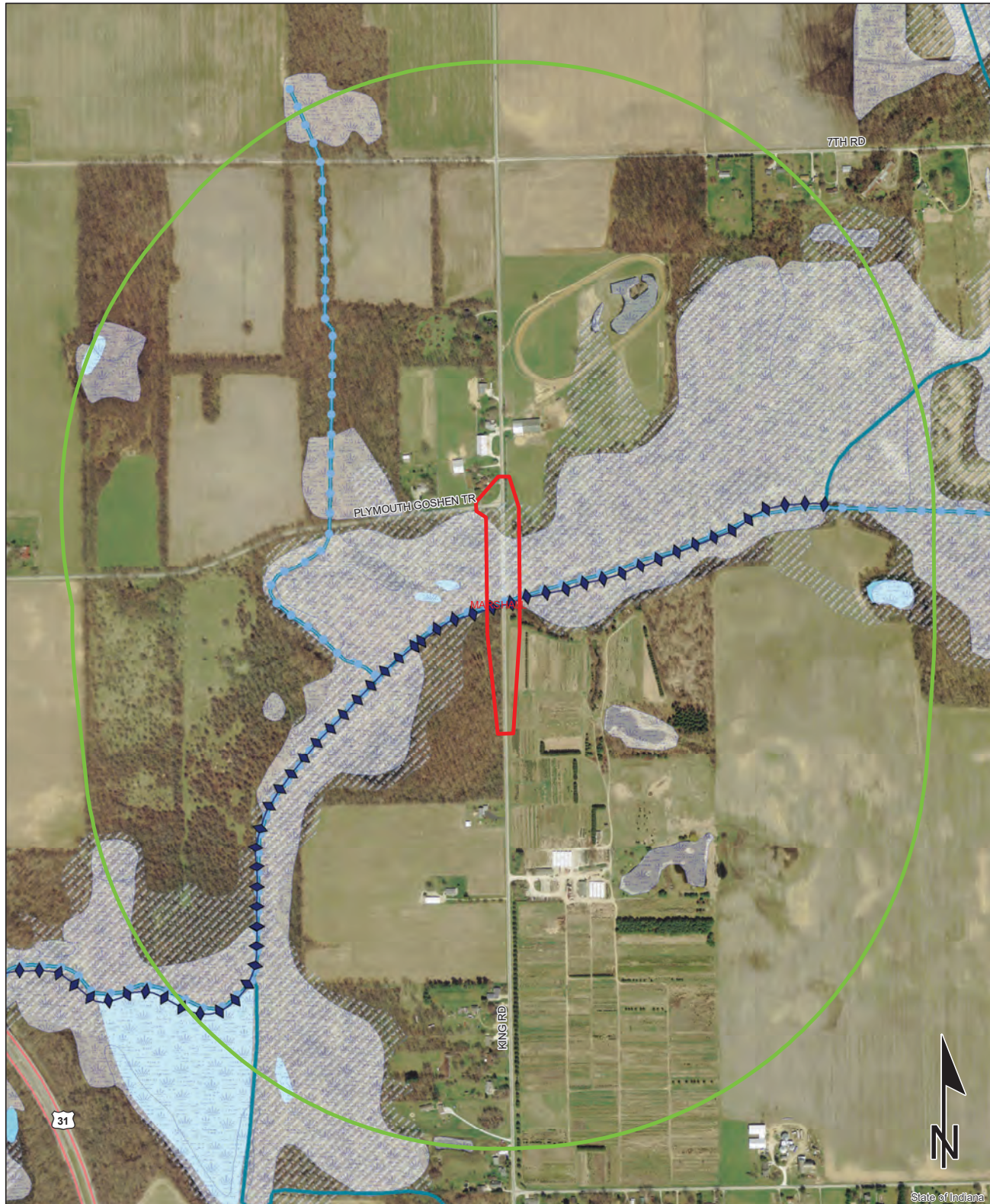
Red Flag Investigation - Infrastructure
 Bridge No. 73 carrying King Road over the Yellow River
 Des. No. 1600931, Bridge Replacement Project
 Marshall County, Indiana



Sources: 0.15 0.075 0 0.15 Miles
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

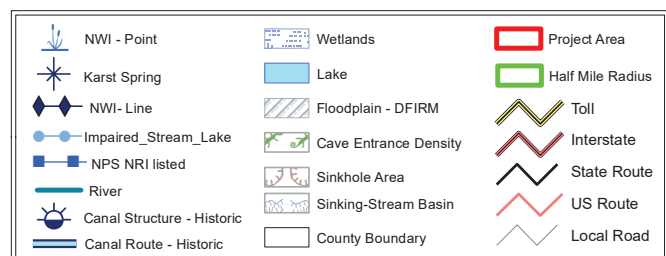
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources
 Bridge No. 73 carrying King Road over the Yellow River
 Des. No. 1600931, Bridge Replacement Project
 Marshall County, Indiana

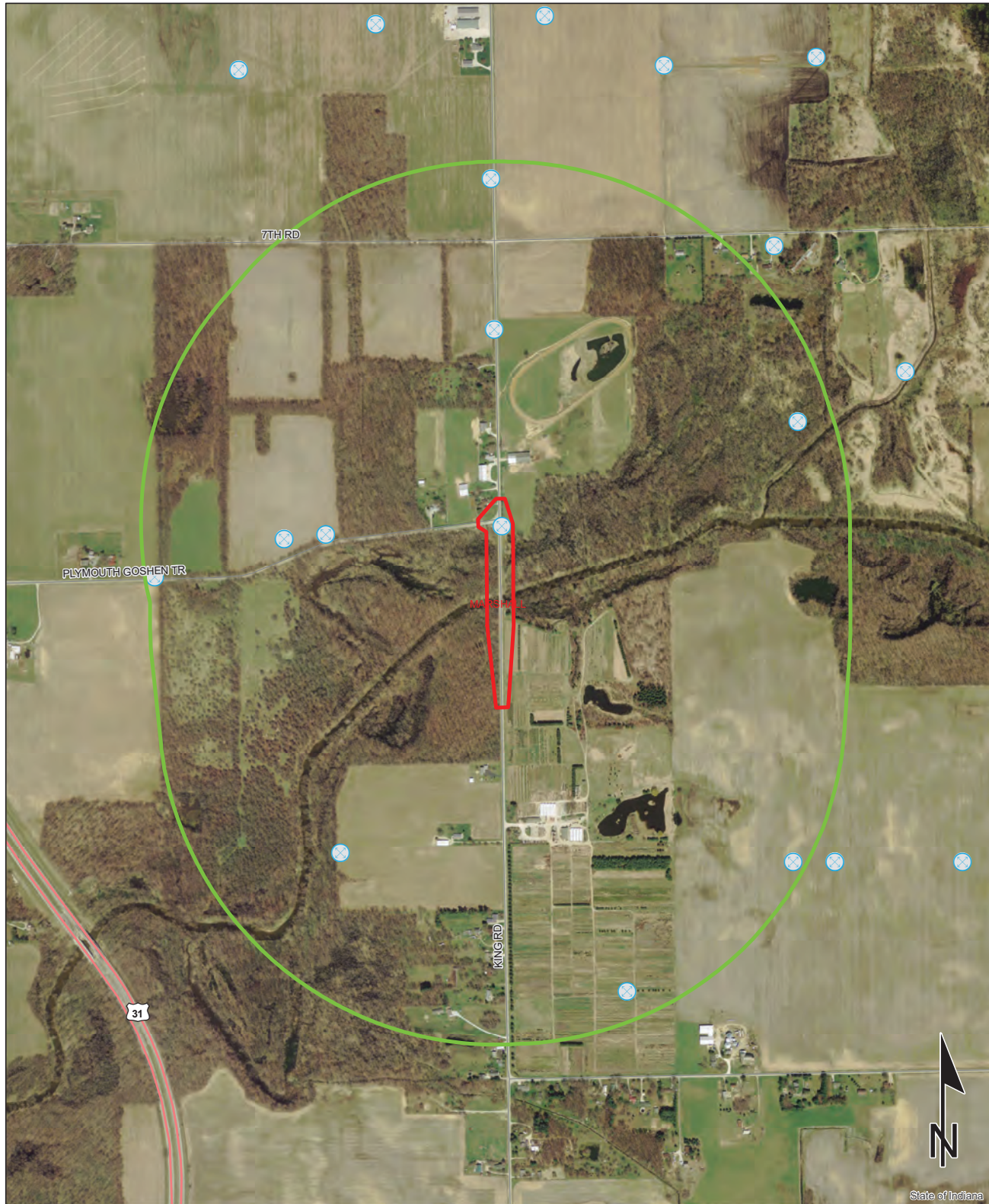


Sources:
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

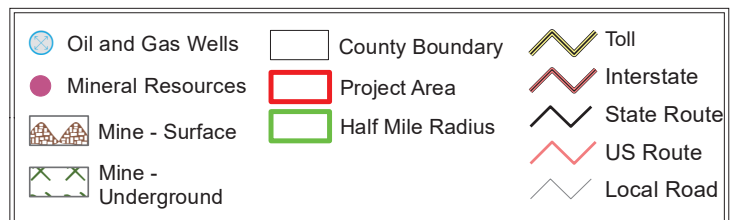
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.



Red Flag Investigation - Mining/Mineral Exploration
 Bridge No. 73 carrying King Road over the Yellow River
 Des. No. 1600931, Bridge Replacement Project
 Marshall County, Indiana



Sources:
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
 Map Projection: UTM Zone 16 N Map Datum: NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.



Indiana County Endangered, Threatened and Rare Species List

County: Marshall

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	S1
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Ligumia recta	Black Sandshell			G4G5	S2
Obovaria subrotunda	Round Hickorynut	C	SE	G4	S1
Plethobasus cyphus	Sheepnose	LE	SE	G3	S1
Pleurobema clava	Clubshell	LE	SE	G1G2	S1
Ptychobranhus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	LT	SE	G3G4T3	S1
Toxolasma lividus	Purple Lilliput	C	SSC	G3Q	S2
Villosa fabalis	Rayed Bean	LE	SE	G2	S1
Mollusk: Gastropoda					
Campeloma decusum	Pointed Campeloma		SSC	G5	S2
Lymnaea stagnalis	Swamp Lymnaea		SSC	G5	S2
Insect: Lepidoptera (Butterflies & Moths)					
Papaipema beeriana	Beer's Blazing Star Borer Moth		ST	G2G3	S1S3
Fish					
Coregonus artedi	Cisco		SSC	G5	S2
Ichthyomyzon bdellium	Ohio Lamprey			G3G4	S2
Ichthyomyzon fossor	Northern Brook Lamprey		SE	G4	S1
Amphibian					
Hemidactylum scutatum	Four-toed Salamander		SSC	G5	S2
Lithobates pipiens	Northern Leopard Frog		SSC	G5	S2
Reptile					
Clemmys guttata	Spotted Turtle	C	SE	G5	S2
Clonophis kirtlandii	Kirtland's Snake	C	SE	G2	S2
Emydoidea blandingii	Blanding's Turtle	C	SE	G4	S2
Sistrurus catenatus catenatus	Eastern Massasauga	LT	SE	G3	S2
Terrapene ornata ornata	Ornate Box Turtle		SE	G5T5	S1
Thamnophis butleri	Butler's Garter Snake		SE	G4	S1
Bird					
Accipiter striatus	Sharp-shinned Hawk		SSC	G5	S2B
Botaurus lentiginosus	American Bittern		SE	G5	S2B
Certhia americana	Brown Creeper			G5	S2B
Cistothorus palustris	Marsh Wren		SE	G5	S3B
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Pandion haliaetus	Osprey		SE	G5	S1B
Rallus elegans	King Rail		SE	G4	S1B

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Indiana County Endangered, Threatened and Rare Species List

County: Marshall

Species Name	Common Name	FED	STATE	GRANK	SRANK
Rallus limicola	Virginia Rail		SE	G5	S3B
Setophaga cerulea	Cerulean Warbler		SE	G4	S3B
Wilsonia citrina	Hooded Warbler		SSC	G5	S3B
Xanthocephalus xanthocephalus	Yellow-headed Blackbird		SE	G5	S1B
Mammal					
Spermophilus franklinii	Franklin's Ground Squirrel		SE	G5	S2
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Armoracia aquatica	Lake Cress		SE	G4?	S1
Carex atlantica ssp. atlantica	Atlantic Sedge		ST	G5T5	S2
Carex cephaloidea	Thinleaf Sedge		SE	G5	S1
Coeloglossum viride var. virescens	Long-bract Green Orchis		ST	G5T5	S2
Cypripedium candidum	Small White Lady's-slipper		WL	G4	S2
Eleocharis equisetoides	Horse-tail Spikerush		SE	G4	S1
Geranium bicknellii	Bicknell Northern Crane's-bill		SE	G5	S1
Glyceria grandis	American Manna-grass		SE	G5	S1
Hypericum pyramidatum	Great St. John's-wort		ST	G4	S1
Lycopodium clavatum	Running Pine		WL	G5	S3
Lycopodium tristachyum	Deep-root Clubmoss		SR	G5	S2
Platanthera leucophaea	Prairie White-fringed Orchid	LT	SE	G2G3	S1
Platanthera orbiculata	Large Roundleaf Orchid		SX	G5	SX
Poa alsodes	Grove Meadow Grass		SR	G4G5	S2
Potamogeton friesii	Fries' Pondweed		ST	G5	S1
Potamogeton pusillus	Slender Pondweed		WL	G5	S2
Potamogeton strictifolius	Straight-leaf Pondweed		ST	G5	S1
Symphotrichum boreale	Rushlike Aster		SR	G5	S2
Tofieldia glutinosa	False Asphodel		SR	G5	S2
Valeriana edulis	Hairy Valerian		SE	G5	S1
Viburnum opulus var. americanum	Highbush-cranberry		SE	G5T5	S1
Zannichellia palustris	Horned Pondweed		SR	G5	S2
Zigadenus elegans var. glaucus	White Camas		SR	G5T4T5	S2
High Quality Natural Community					
Prairie - mesic	Mesic Prairie		SG	G2	S2
Wetland - beach marl	Marl Beach		SG	G3	S2
Wetland - bog acid	Acid Bog		SG	G3	S2
Wetland - fen	Fen		SG	G3	S3
Wetland - flat muck	Muck Flat		SG	G2	S2

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked