

Des No 1701394 CE-2

Appendix C

Early Coordination



# INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue  
Room N642  
Indianapolis, Indiana 46204

PHONE: (317) 233-6795

**Eric J. Holcomb, Governor**  
**Joe McGuinness, Commissioner**

February 7, 2019

**Sample Early Coordination Letter - Graphics  
and photos from Appendix B were attached.**

Re: Des. No. 1701394, SR 224 over Holthouse Ditch Bridge Project - Adams County, Indiana

Agency Representative,

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving the bridge carrying SR 224 over Holthouse Ditch (Bridge Number 224-01-01546) in Adams County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above designation number (Des. No.) and description in your reply. We will incorporate your comments into a study of the project's environmental impacts.

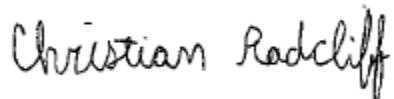
This project is located on State Road 224, approximately 0.95 miles west of US 27. Specifically, the project is located in Sections 4, 5, 32, and 33, Township 27 N, Range 14 East as shown on the Decatur, Indiana 7.5 minute quadrangle map. The purpose of this project is to provide a safe vehicular crossing of SR 224 over Holthouse Ditch. The need for this project is the deteriorated condition of the existing substructure and superstructure. The existing bridge is a 45.5-foot long concrete arch bridge that is 36.7 feet in width. The bridge received a sufficiency rating of 83.9 out of 100 in the June 22, 2018 bridge inspection report. The bridge provides a two-lane east west roadway with 12-foot travel lanes and 3-foot shoulders.

This project proposes to replace the existing structure with a new three-span reinforced concrete slab bridge. The new bridge will be 100 feet in length and 43.5 feet in width, with a clear roadway of 40.66 feet. A new guardrail with guardrail transitions and end treatments will be installed. Traffic is anticipated to be maintained through closure of the bridge and a detour route. The detour route will utilize US 27, SR 124, and SR 301 and will be approximately 19.5 miles in length. The intersection of CR 100 W at the southeast quadrant of the bridge will remain open for the duration of construction. Right of way acquisition is anticipated to be more than 0.5 acre. Right of way quantities will be defined during the design process.

Land use in the vicinity of the project is primarily agricultural with interspersed residences on the north side of SR 224. A narrow riparian corridor associated with Holthouse Ditch is within the immediate project area and extends north and south. A Waters of the US Report will be completed to identify any ecological resources that may be present. The USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat will be completed for this project. An historical investigation will be completed to satisfy the requirement of Section 106 of the National Historic Preservation Act.

Please respond with comments, questions, and concerns **within thirty (30) calendar days** from the date of this letter; if no response is received, it will be assumed that your agency feels that there are no adverse effects incurred as a result of this proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact Christian Radcliff at Green 3, LLC at [christian@green3studio.com](mailto:christian@green3studio.com) or 317-634-4110, or INDOT Project Manager Damien Perry at [dperry1@indot.in.gov](mailto:dperry1@indot.in.gov) or 260-969-8266. Thank you in advance for your input on this project.

Sincerely,



Christian Radcliff  
Green 3, LLC

Enclosures:  
Mailing List  
Project Maps  
Ground Level Photographs



# INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue  
Room N642  
Indianapolis, Indiana 46204

PHONE: (317) 232-XXXX  
FAX: (317) 233-XXXX

**Eric Holcomb, Governor**  
**Joe McGuinness, Commissioner**

February 7, 2019

TO: MS4 COORDINATOR  
Decatur, Indiana  
172 N. 2<sup>nd</sup> Street  
Decatur, Indiana 46733

FROM: Christian Radcliff  
Green 3, LLC  
1104 Prospect Street  
Indianapolis, Indiana 46203

RE: Early Notification  
INDOT DES Number: 1701394  
Location: US 224 over Holthouse Ditch  
Description: Bridge Replacement Project

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with the above project. You are being notified because this project lies within an Urbanized Area Boundary (UAB). In accordance with 327 IAC 15-13 (Rule 13 - Municipal Separate Storm Sewer Systems), INDOT has developed a Storm Water Quality Management Plan (SWQMP).

As part of its implementation, projects falling within the UAB will be required to consider appropriate post construction storm water quality best management practices (BMPs). These BMPs should take into consideration the available space, pollutants of concern and receiving waters.

This letter is for notification purposes only, and no action is required by you; however, if you would like to provide your input on water quality concerns, please provide this information **within thirty (30) calendar days** from the date of this letter to the undersigned. Should we not receive your response within the specified timeframe, it will be assumed that your agency does not have additional concerns about water quality issues resulting from the proposed project. Should you find that an extension to the response time is necessary, a reasonable amount of time may be granted upon request. If you have any questions regarding this matter, please feel free to contact Christian Radcliff, Ecologist, at [christian@green3studio.com](mailto:christian@green3studio.com). Thank you in advance for your attention to this matter.

Sincerely,

Christian Radcliff  
Ecologist  
Green 3, LLC

**US 224 Bridge Project, Des 1701394**  
**Early Coordination Notice sent to the Following Agencies:**

U.S. Fish and Wildlife Service  
Bloomington, Indiana Field Office  
[Elizabeth\\_mccloskey@fws.gov](mailto:Elizabeth_mccloskey@fws.gov)

Adams County Surveyor  
Paul Norr  
[pnorr@co.adams.in.us](mailto:pnorr@co.adams.in.us)

Federal Highway Administration  
Fort Wayne District  
[Joyce.Newland@dot.gov](mailto:Joyce.Newland@dot.gov)

Mayor of Decatur  
Kenneth L. Meyer  
[kmeyer@decaturin.org](mailto:kmeyer@decaturin.org)

State Conservationist  
Natural Resources Conservation Service  
[rick.neilson@in.usda.gov](mailto:rick.neilson@in.usda.gov)

Decatur Floodplain Administrator  
Curt Witte  
[cwitte@decaturin.org](mailto:cwitte@decaturin.org)

Indiana Geological Survey  
Online Submission:  
<https://igws.indiana.edu/eAssessment/>

Decatur MS4 Coordinator  
Don Bergdall  
[dbergdall@decaturin.org](mailto:dbergdall@decaturin.org)

Environmental Coordinator  
Indiana Department of Natural Resources  
Division of Fish and Wildlife  
[environmentalreview@dnr.in.gov](mailto:environmentalreview@dnr.in.gov)

Adams County Commissioners  
[commissioners@co.adams.in.us](mailto:commissioners@co.adams.in.us)

Indiana Department of Environmental Management  
Online Submission  
<https://www.in.gov/idem/5284.htm>

Decatur City Council  
[wsirk@decaturin.org](mailto:wsirk@decaturin.org)  
[tfullenkamp@decaturin.org](mailto:tfullenkamp@decaturin.org)  
[ccoshow@decaturchamber.org](mailto:ccoshow@decaturchamber.org)  
[ccollier@decaturin.org](mailto:ccollier@decaturin.org)  
[mdyer@decaturin.org](mailto:mdyer@decaturin.org)

Indiana Department of Environmental  
Management  
Groundwater Section  
<http://www.in.gov/idem/cleanwater/pages/wellhealth/>

INDOT Public Hearings  
[rclark@indot.in.gov](mailto:rclark@indot.in.gov)  
[mwright@indot.in.gov](mailto:mwright@indot.in.gov)

Regional Environmental Coordinator  
Midwest Regional Office  
National Park Service  
[hector\\_santiago@nps.gov](mailto:hector_santiago@nps.gov)

US Department of Housing and Urban Development  
Chicago Regional Office  
[michael.e.wurl@hud.gov](mailto:michael.e.wurl@hud.gov)

US Army Corps of Engineers  
Louisville District  
[gregory.a.mckay@usace.army.mil](mailto:gregory.a.mckay@usace.army.mil)

**From:** [Newland, Joyce \(FHWA\)](#)  
**To:** [Christian Radcliff](#)  
**Subject:** RE: Federally Funded Des 1701394, SR 224 over Holthouse Ditch Bridge Project  
**Date:** Thursday, February 7, 2019 4:33:42 PM  
**Attachments:** [image001.png](#)

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Thank you.

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**From:** Christian Radcliff [mailto:[christian@green3studio.com](mailto:christian@green3studio.com)]  
**Sent:** Thursday, February 7, 2019 4:31 PM  
**To:** Newland, Joyce (FHWA) <[Joyce.Newland@dot.gov](mailto:Joyce.Newland@dot.gov)>  
**Subject:** RE: Federally Funded Des 1701394, SR 224 over Holthouse Ditch Bridge Project

Good afternoon Joyce,

The project bridge is not eligible or listed on the National Register of Historic Places, so it is neither Select or Non-Select. Please note that the project is listed as SR 224 and should be US 224. I apologize if that caused any confusion.

Thanks,

Christian Radcliff  
Ecologist

[christian@green3studio.com](mailto:christian@green3studio.com)

g r e e n • 3



Historic Fountain Square  
1104 Prospect Street  
Indianapolis, IN 46203

p 317.634.4110  
f 866.422.2046 (toll free)

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**From:** Newland, Joyce (FHWA) <[Joyce.Newland@dot.gov](mailto:Joyce.Newland@dot.gov)>  
**Sent:** Thursday, February 7, 2019 2:12 PM  
**To:** Christian Radcliff <[christian@green3studio.com](mailto:christian@green3studio.com)>  
**Subject:** RE: Federally Funded Des 1701394, SR 224 over Holthouse Ditch Bridge Project

Hi –

Is this a select or non-select bridge?

Joyce Newland  
Planning & Environmental Specialist

## Christian Radcliff

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**From:** Wright, Mary <MWRIGHT@indot.IN.gov>  
**Sent:** Thursday, February 7, 2019 11:48 AM  
**To:** Christian Radcliff  
**Subject:** RE: Federally Funded Des 1701394, SR 224 over Holthouse Ditch Bridge Project

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### 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](mailto:rclark@indot.in.gov)

Mary Wright, Hearing Examiner  
Phone: 317-234-0796  
Email: [mwright@indot.in.gov](mailto:mwright@indot.in.gov)

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**From:** Christian Radcliff [mailto:[christian@green3studio.com](mailto:christian@green3studio.com)]  
**Sent:** Thursday, February 07, 2019 10:56 AM  
**To:** [elizabeth\\_mccloskey@fws.gov](mailto:elizabeth_mccloskey@fws.gov); [joyce.newland@dot.gov](mailto:joyce.newland@dot.gov); [rick.neilson@in.usda.gov](mailto:rick.neilson@in.usda.gov); DNR Environmental Review <[environmentalreview@dnr.IN.gov](mailto:environmentalreview@dnr.IN.gov)>; Clark, Rickie <[RCLARK@indot.IN.gov](mailto:RCLARK@indot.IN.gov)>; [hector\\_santiago@nps.gov](mailto:hector_santiago@nps.gov); [michael.e.wurl@hud.gov](mailto:michael.e.wurl@hud.gov); [gregory.a.mckay@usace.army.mil](mailto:gregory.a.mckay@usace.army.mil); [pnorr@co.adams.in.us](mailto:pnorr@co.adams.in.us); [kmeyer@decaturin.org](mailto:kmeyer@decaturin.org); [cwitte@decaturin.org](mailto:cwitte@decaturin.org); [dbergdall@decaturin.org](mailto:dbergdall@decaturin.org); [commisioners@co.adams.in.us](mailto:commisioners@co.adams.in.us); [wsirk@decaturin.org](mailto:wsirk@decaturin.org); [tfullenkamp@decaturin.org](mailto:tfullenkamp@decaturin.org); [ccoshow@decaturchamber.org](mailto:ccoshow@decaturchamber.org); [ccollier@decaturin.org](mailto:ccollier@decaturin.org); [mdyer@decaturin.org](mailto:mdyer@decaturin.org)  
**Cc:** Wright, Mary <MWRIGHT@indot.IN.gov>  
**Subject:** Federally Funded Des 1701394, SR 224 over Holthouse Ditch Bridge Project

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Good morning,

Please see the attached early coordination letter for the referenced project. Note that there is a separate letter for the MS4 coordinator. Please respond with comments, questions, and concerns within thirty (30) calendar days from the

**From:** [McCloskey, Elizabeth](#)  
**To:** [Christian Radcliff](#)  
**Subject:** Re: [EXTERNAL] Federally Funded Des 1701394, SR 224 over Holthouse Ditch Bridge Project  
**Date:** Friday, February 15, 2019 2:37:01 PM  
**Attachments:** [image001.png](#)

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Good afternoon, this project is actually US 224, not SR 224. However, because the proposed project will have minor impacts on natural resources, and no Federally endangered species are known to be present, the U.S. Fish and Wildlife Service will not be providing a comment letter.

Elizabeth McCloskey  
U.S. Fish and Wildlife Service  
Northern Indiana Suboffice

On Thu, Feb 7, 2019 at 9:59 AM Christian Radcliff <[christian@green3studio.com](mailto:christian@green3studio.com)> wrote:

Good morning,

Please see the attached early coordination letter for the referenced project. Note that there is a separate letter for the MS4 coordinator. Please respond with comments, questions, and concerns within thirty (30) calendar days from the date of this letter; if no response is received, it will be assumed that your agency feels that there are no adverse effects incurred as a result of this proposed project.

Thanks,

Christian Radcliff

Ecologist

[christian@green3studio.com](mailto:christian@green3studio.com)

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f 866.422.2046 (toll free)



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

DNR #: ER-21237

Request Received: February 7, 2019

**Requestor:** Green 3 LLC  
Christian Radcliff  
1104 Prospect Street  
Indianapolis, IN 46203

**Project:** SR 224 bridge (#224-01-01546) replacement over Holthouse Ditch, about 0.95 mile west of US 27; Des #1701394

**County/Site info:** Adams

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

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

**Regulatory Assessment:** This proposal will require the formal approval of our agency for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the bridge exemption criteria.

**Natural Heritage Database:** The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

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

1) Crossing Structure:

For purposes of maintaining fish and wildlife passage through a crossing structure, the Environmental Unit recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. If box or pipe culverts are used, the bottoms should be buried a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the OHWM width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width / length) of 0.25; and have stream depth, channel width, and water velocities during low-flow conditions that are approximate to those in the natural stream channel.

2) Bank Stabilization & Wildlife Passage:

The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to current conditions. Minimize the use of riprap and use alternative erosion protection materials whenever possible. Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed

Attachments: A - Bridge Exemption Criteria

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

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elevation). Where riprap must be used, we recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank up to the ordinary high water mark (OHWM). The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to the area and 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, if required) for any unavoidable habitat impacts that will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <http://www.in.gov/legislative/iac/20190130-IR-312190041NRA.xml.pdf>.

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

**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) Nesting Birds/Roosting Bats:**

Repairs to the bridge could affect any nesting birds or roosting bats. Cliff and Barn Swallows, among other species, often nest on the underside of road bridges and many bat species roost in expansion joints and other concrete crevices on road bridges. Survey the bridges for any bird nests prior to construction. Nest surveys should occur between May 7 and September 7, which denotes the main nesting season for most bird species. If nests are found with eggs, chicks, or parents actively attending to the nest (building the nest and visiting often), then repairs should be put on hold until the nests complete their nesting cycle (to fledging) or fail (by natural causes).

The Division of Fish and Wildlife (DFW) recommends bridge maintenance activities be restricted to the period between November 1 and March 1 to avoid the summer roosting period for most bats in the central part of the State. However, some endangered bats could use a bridge to roost between November and March. No matter when work is proposed, the bridge must be inspected for the presence of bats. If there is no

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

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evidence of active bat use, work can proceed. If there is evidence of active bat use, work must not occur until either the bats leave the structure for the season or a separate permit is issued to remove the bats. Please contact Linnea Petercheff (lpetercheff@dnr.in.gov) regarding permits to handle bats. If bats are present, a more formal survey to determine what species are present may be required.

The DFW recommends consulting with the State Mammologist or the US Fish and Wildlife Service before scheduling a bridge maintenance, repair, or replacement project where evidence of bat use of the structure has been observed. Information about bat use of transportation structures as well as avoidance and exclusion measures can be found at <https://www.batcon.org/pdfs/bridges/BatsBridges2.pdf> and <https://www.whitenosesyndrome.org/mmedia-education/acceptable-management-practices-for-bat-species-inhabiting-transportation-infrastructure>.

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

1. Revegetate all bare and disturbed areas that will not be mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in regularly mowed areas only.
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. Do not construct any temporary runarounds or causeways.
7. Operate equipment used to replace the bridge from the existing roadway.
8. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
9. Do not use broken concrete as riprap.
10. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
11. Minimize the movement of resuspended bottom sediment from the immediate project area.
12. Do not deposit or allow demolition/construction materials or debris to fall or otherwise enter the waterway.
13. 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.
14. Do not excavate or place fill in any riparian wetland.

THIS IS NOT A PERMIT

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

**Contact Staff:**

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



**Date:** March 8, 2019

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

## Organization and Project Information

**Project ID:**  
**Des. ID:** 1701394  
**Project Title:** US 224 over Holthouse Ditch  
**Name of Organization:** Green 3, LLC  
**Requested by:** Christian Radcliff

## Environmental Assessment Report

1. Geological Hazards:
  - Moderate liquefaction potential
  - Floodway
2. Mineral Resources:
  - Bedrock Resource: High Potential
  - Sand and Gravel Resource: Low Potential
3. Active or abandoned mineral resources extraction sites:
  - None documented in the area

\*All map layers from Indiana Map ([maps.indiana.edu](http://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.

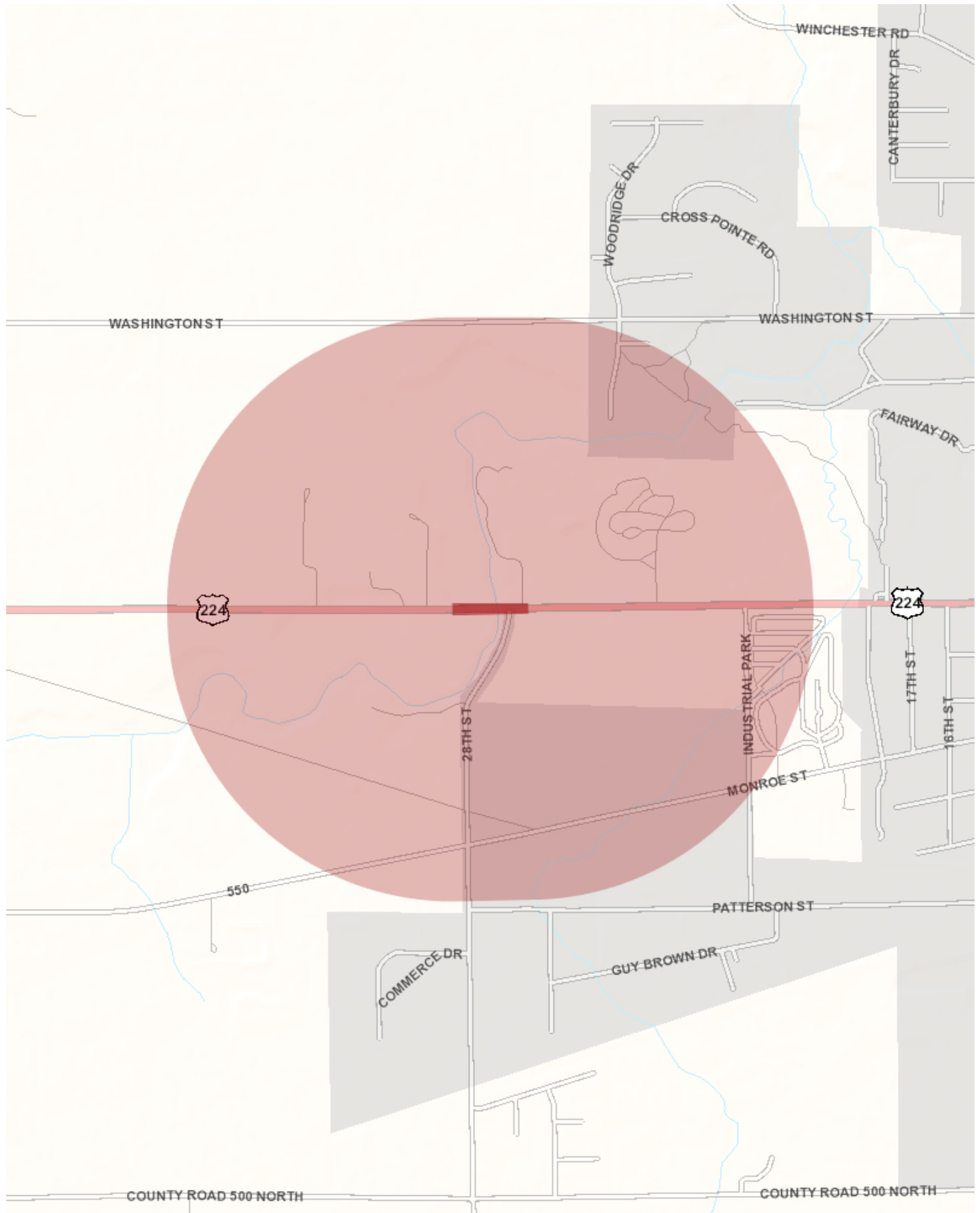
This information was furnished by Indiana Geological Survey

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

Email: [IGSEnvir@indiana.edu](mailto:IGSEnvir@indiana.edu)

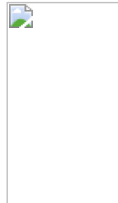
Phone: 812 855-7428

Date: December 04, 2019



## Metadata:

- [https://maps.indiana.edu/metadata/Geology/Seismic\\_Earthquake\\_Liquefaction\\_Potential.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/Geology/Industrial_Minerals_Sand_Gravel_Resources.html)
- [https://maps.indiana.edu/metadata/Hydrology/Floodplains\\_FIRM.html](https://maps.indiana.edu/metadata/Hydrology/Floodplains_FIRM.html)
- [https://maps.indiana.edu/metadata/Geology/Bedrock\\_Geology.html](https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html)



# 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](http://www.idem.IN.gov)

INDOT For Wayne District

Green 3, LLC

5333 Hatfield Road  
Fort Wayne , IN 46808  
Date

Christian Radcliff  
1104 Prospect Street  
Indianapolis , IN 46203

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: Des 1701394 involves the replacement of the bridge carrying US 224 over Holthouse Ditch in Adams County, Indiana.

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

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer questions not fully addressed in this letter. Also please be mindful that some environmental requirements may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: <http://www.in.gov/idem/5283.htm> (<http://www.in.gov/idem/5283.htm>).

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

## WATER AND BIOTIC QUALITY

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

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE Permits and Public Notices (<http://www.lrl.usace.army.mil/orf/default.asp>) (<http://www.lrl.usace.army.mil/orf/default.asp>) 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 Wetlands Program. To learn more about the Wetlands Program, visit: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>).
3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana . A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.
4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>) for the appropriate staff contact to further discuss your project.
5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
  - o IC 14-26-2 Lakes Preservation Act 312 IAC 11
  - o IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
  - o IC 14-28-1 Flood Control Act 310 IAC 6-1
  - o IC 14-29-1 Navigable Waterways Act 312 IAC 6
  - o IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
  - o IC 14-29-4 Construction of Channels Act No related code

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

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

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

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

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

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

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

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

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

## AIR QUALITY

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

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

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

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

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

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

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

To learn more about radon, radon risks, and ways to reduce exposure visit:

<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm> (<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>), <http://www.in.gov/idem/4145.htm> (<http://www.in.gov/idem/4145.htm>), or <http://www.epa.gov/radon/index.html> (<http://www.epa.gov/radon/index.html>).

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

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

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

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

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. All notification remitters will be billed on a quarterly basis.

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

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

## LAND QUALITY

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

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm> (<http://www.in.gov/idem/4998.htm>).
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If PCBs are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes (Asbestos removal is addressed above, under Air Quality).
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: <http://www.in.gov/idem/4999.htm> (<http://www.in.gov/idem/4999.htm>).

## FINAL REMARKS

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

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

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

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## Signature(s) of the Applicant

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

### Project Description

Des 1701394 involves the replacement of the bridge carrying US 224 over Holthouse Ditch in Adams County, Indiana.

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

Date: 12/18/2019

Signature of the INDOT  
Project Engineer or Other Responsible Agent \_\_\_\_\_



Karen James

Date: 12/4/2019

Signature of the  
For Hire Consultant Christian Radcliff

Christian Radcliff

## Christian Radcliff

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**From:** Phillips, Daniel - NRCS, Indianapolis, IN <daniel.phillips@usda.gov>  
**Sent:** Monday, May 4, 2020 3:12 PM  
**To:** Christian Radcliff  
**Cc:** Neilson, Rick - NRCS, Indianapolis, IN; Allen, John - NRCS, Indianapolis, IN  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch  
**Attachments:** Des1701394\_.pdf

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

Greetings,

Yes, this is a conversion. I have looked at the project and used the overall right of way acquisition of 0.77(including the land that is not prime), to complete the AD-1006.

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**From:** Christian Radcliff <christian@green3studio.com>  
**Sent:** Thursday, April 30, 2020 3:47 PM  
**To:** Phillips, Daniel - NRCS, Indianapolis, IN <daniel.phillips@usda.gov>  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch

The comment from the INDOT reviewer was to see if you considered any of the land to be impacted as prime farmland per the FPPA, and if so, to complete the AD-1006 form and include the score in the document. As it stands, we are anticipating acquiring approximately 0.36 acre of agricultural land for permanent right of way and approximately 0.02 acre of agricultural land for temporary right of way. The overall right of way acquisition (including land that is not currently agricultural) will be approximately 0.77 acre of permanent right of way and 0.12 acre of temporary right of way.

Do you think that this will be a conversion of prime farm land? I have attached the most recently plan sheets with the project boundaries.

Thanks!

Christian Radcliff  
Ecologist

[christian@green3studio.com](mailto:christian@green3studio.com)

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request	4. Sheet 1 of _____
1. Name of Project <b>Des.1701394 Bridge Plans</b>		5. Federal Agency Involved <b>Federal Highway Administration</b>	
2. Type of Project <b>Bridge Replacement Project</b>		6. County and State <b>Adams County, Indiana</b>	
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS	2. Person Completing Form <b>Daniel Phillips</b>
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated   Average Farm Size <b>177 Ac</b>	
5. Major Crop(s) <b>Corn</b>	6. Farmable Land in Government Jurisdiction Acres: <b>214,829</b> % <b>99</b>		7. Amount of Farmland As Defined in FPPA Acres: <b>213,069</b> % <b>98</b>
8. Name Of Land Evaluation System Used <b>LESA</b>	9. Name of Local Site Assessment System		10. Date Land Evaluation Returned by NRCS

<b>PART III (To be completed by Federal Agency)</b>	Alternative Corridor For Segment :			
	Corridor 1	Corridor 2	Corridor 3	Corridor 4
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
A. Total Acres Prime And Unique Farmland	<b>0.77</b>			
B. Total Acres Statewide And Local Important Farmland	<b>0.00</b>			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<b>&lt;0.001</b>			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	<b>90.0</b>			

<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>	<b>80</b>			
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<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	Maximum Points				
1. Area in Nonurban Use	15	10			
2. Perimeter in Nonurban Use	10	8			
3. Percent Of Corridor Being Farmed	20	12			
4. Protection Provided By State And Local Government	20	20			
5. Size of Present Farm Unit Compared To Average	10	2			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availability Of Farm Support Services	5	5			
8. On-Farm Investments	20	7			
9. Effects Of Conversion On Farm Support Services	25	1			
10. Compatibility With Existing Agricultural Use	10	3			
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>68</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)	100	80			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	68	0	0	0
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>148</b>	<b>0</b>	<b>0</b>	<b>0</b>

1. Corridor Selected:  A	2. Total Acres of Farmlands to be Converted by Project:  0.77	3. Date Of Selection:  5/4/2020	4. Was A Local Site Assessment Used?  YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
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5. Reason For Selection:

Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project.

Signature of Person Completing this Part: <b>Christian Radcliff</b>	DATE <b>6/16/20</b>
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NOTE: Complete a form for each segment with more than one Alternate Corridor



## 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 05, 2019

Consultation Code: 03E12000-2020-SLI-0381

Event Code: 03E12000-2020-E-01619

Project Name: Des 1701394 US 224 over Holthouse Ditch Bridge Project

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: 03E12000-2020-SLI-0381

Event Code: 03E12000-2020-E-01619

Project Name: Des 1701394 US 224 over Holthouse Ditch Bridge Project

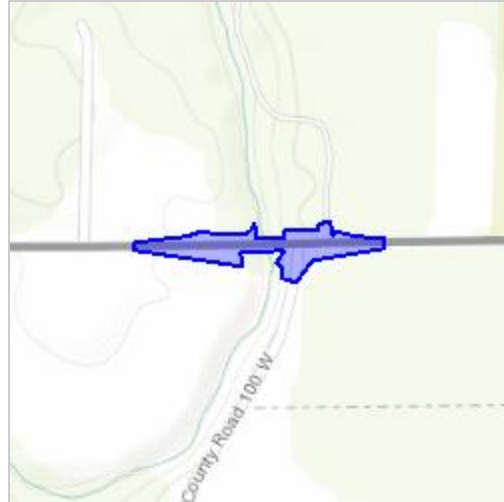
Project Type: TRANSPORTATION

Project Description: Des 1701394 involves the replacement of the bridge carrying US 224 over Holthouse Ditch (224-01-01546) in Adams County, Indiana. The existing single-span concrete arch bridge will be replaced with a three-span continuous reinforced concrete slab bridge on the same alignment. Two culverts (Structures 10 and 11) within the project area will be replaced as part of this project. Suitable habitat in the vicinity of the project area includes the riparian corridor along Holthouse Ditch and around the project bridge. It is proposed that 0.66 acre of trees be removed for construction access and installation of the new structure. All trees that will be removed are considered suitable summer habitat and are within 100 feet of the existing roadway. Tree removal will occur in the inactive season for bats. The species of trees that will be removed include Green Ash (*Fraxinus pennsylvanica*), Cottonwood (*Populus deltoides*), and Sugar Maple (*Acer saccharum*).

A check into the USFWS database for bats on January 3, 2019 did not indicate the presence of endangered bat species within 0.5 mile of the project area. The bridge inspection report dated June 22, 2018 indicated that no bats or signs of bats were observed on the bridge. An inspection of the bridge by Green 3 staff on February 5, 2019 did not indicate the presence or signs of bats on the bridge, and an inspection on July 10, 2019 did not indicate the presence or signs of bats in the culverts. Temporary lighting may be utilized to complete construction of the bridge. No permanent lighting will be installed as a part of this project. Construction is anticipated to be completed in Spring, Summer, and Fall 2022.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/40.83220326612205N84.95668250306205W>



Counties: Adams, 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 Fisheries<sup>1</sup>, 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 <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf</a>	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"> <li>▪ 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 <a href="http://www.fws.gov/midwest/endangered/mammals/nleb/index.html">www.fws.gov/midwest/endangered/mammals/nleb/index.html</a></li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Critical habitats

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

## Christian Radcliff

---

**From:** Herron, Toni N <ToHerron@indot.IN.gov>  
**Sent:** Monday, December 9, 2019 10:44 AM  
**To:** Christian Radcliff  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch IPaC Review

Hi Christian,

I concur with the MA-NLAA finding with AMMs for Des. No. 1701394. The concurrence verification letter should be included in the environmental document and the AMMs should be included in the commitments.

Let me know if you need anything further.

Thank you,

### **Toni N. Herron**

#### **Environmental Manager II**

5333 Hatfield Road  
Fort Wayne, IN 46808

**Office:** (260) 399-7341 x14341

**Email:** [ToHerron@indot.in.gov](mailto:ToHerron@indot.in.gov)



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**From:** Christian Radcliff [mailto:[christian@green3studio.com](mailto:christian@green3studio.com)]  
**Sent:** Thursday, December 05, 2019 1:53 PM  
**To:** Herron, Toni N <ToHerron@indot.IN.gov>  
**Cc:** Novak, Karen <KNovak@indot.IN.gov>  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch IPaC Review

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

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Toni,

Please see the email below about IPaC – I have added you as a member to this project as well. Let me know if you have any questions!

Thanks,

Christian Radcliff  
Ecologist

[christian@green3studio.com](mailto:christian@green3studio.com)



## 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 09, 2019

Consultation Code: 03E12000-2020-I-0381

Event Code: 03E12000-2020-E-01691

Project Name: Des 1701394 US 224 over Holthouse Ditch Bridge Project

Subject: Concurrence verification letter for the 'Des 1701394 US 224 over Holthouse Ditch Bridge Project' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **Des 1701394 US 224 over Holthouse Ditch Bridge Project** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

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

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 between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

## Project Description

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

### Name

Des 1701394 US 224 over Holthouse Ditch Bridge Project

### Description

Des 1701394 involves the replacement of the bridge carrying US 224 over Holthouse Ditch (224-01-01546) in Adams County, Indiana. The existing single-span concrete arch bridge will be replaced with a three-span continuous reinforced concrete slab bridge on the same alignment. Two culverts (Structures 10 and 11) within the project area will be replaced as part of this project. Suitable habitat in the vicinity of the project area includes the riparian corridor along Holthouse Ditch and around the project bridge. It is proposed that 0.66 acre of trees be removed for construction access and installation of the new structure. All trees that will be removed are considered suitable summer habitat and are within 100 feet of the existing roadway. Tree removal will occur in the inactive season for bats. The species of trees that will be removed include Green Ash (*Fraxinus pennsylvanica*), Cottonwood (*Populus deltoides*), and Sugar Maple (*Acer saccharum*).

A check into the USFWS database for bats on January 3, 2019 did not indicate the presence of endangered bat species within 0.5 mile of the project area. The bridge inspection report dated June 22, 2018 indicated that no bats or signs of bats were observed on the bridge. An inspection of the bridge by Green 3 staff on February 5, 2019 did not indicate the presence or signs of bats on the bridge, and an inspection on July 10, 2019 did not indicate the presence or signs of bats in the culverts. Temporary lighting may be utilized to complete construction of the bridge. No permanent lighting will be installed as a part of this project. Construction is anticipated to be completed in Spring, Summer, and Fall 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<sup>[1]</sup>?

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

**Automatically answered**

Yes

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

[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<sup>[1]</sup> 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<sup>[1]</sup>?

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

No

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

[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<sup>[1]</sup> summer habitat for Indiana Bat or NLEB **within** the project action area<sup>[2]</sup>? (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<sup>[1]</sup> 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<sup>[1][2]</sup> been conducted<sup>[3][4]</sup> **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**<sup>[1][2]</sup>?

[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 triangulation/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<sup>[1]</sup>?

[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**<sup>[1][2]</sup>?

[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 wetland or stream protection activities associated with compensatory wetland mitigation?

No

24. Does the project include slash pile burning?

No

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

Yes

26. Is there *any* suitable habitat<sup>[1]</sup> 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

27. Has a bridge assessment<sup>[1]</sup> been conducted **within** the last 24 months<sup>[2]</sup> 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**

- *Des 1701394 Inspection Forms.pdf* <https://ecos.fws.gov/ipac/project/Y4RM5VZAI5DUJGFLMKHCPBVOWM/projectDocuments/19355854>

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

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

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

No

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

No

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

No

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

Yes

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

Yes

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

No

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

No

35. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

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

Yes

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

No

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

**Automatically answered**

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

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

**Automatically answered**

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

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

40. 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*

**41. 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

**42. 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<sup>[1]</sup> 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

**43. 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

**44. Tree Removal AMM 4**

Can the project avoid cutting down/removal of *all* (1) **documented**<sup>[1]</sup> Indiana bat or NLEB roosts<sup>[2]</sup> (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



**45. 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<sup>[1]</sup> of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

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

0.66

4. Please describe the proposed bridge work:

*Bridge and culvert work will include replacing the existing single-span bridge with a three-span bridge and raising the roadway profile to accommodate the new structure. The existing culverts in the project area will be replaced after construction of the new bridge.*

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

*Spring, Summer, and Fall 2022*

6. Please enter the date of the bridge assessment:

*February 5, 2019 and July 10, 2019*

## Avoidance And Minimization Measures (AMMs)

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

**GENERAL AMM 1**

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

**LIGHTING AMM 1**

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

**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 December 02, 2019. Keys are subject to periodic revision.

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

This decision key should 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.

Des No 1701394 CE-2

Appendix D

Section 106 of the NHPA

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

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**Date:** 10/23/19

**Project Designation Number:** 1701394

**Route Number:** US 224

**Project Description:** Bridge Replacement Project, 0.95 mile W of US 27

The project is located just outside and to the west of the City of Decatur. US 224 is routed through this section over generally level terrain; land use is dominated by mostly single-family residences and agricultural uses. The existing US 224 approach roadway consists of two (2) 12-ft. through lanes with three (3)-ft. shoulders (3-ft. paved) in each direction. The existing bridge, Bridge No. 224-01-01546/NBI No.029120, constructed in 1936, is a 45.5-foot long, single-span reinforced concrete (closed spandrel) arch. The structure is currently skewed 10 degrees. Currently, the bridge has heavy deterioration in the top of the arch ring and both head walls. The decorative caps on both walls are disintegrating; cracking and spalling are present. The two wings of the abutments are deteriorating.

The project proposes to replace the existing structure with a three (3)-span, continuous reinforced concrete slab bridge with spans measuring 31 feet, 38 feet, and 31 feet, respectively. The new bridge will be 100 feet long at a skew of 10 degrees, and will have a clear roadway width of approximately 40 feet in addition to an out-to-out bridge width of approximately 43 feet. New concrete bridge rails, guardrails, guardrail transitions, and approach slabs will be installed. Due to the close proximity to the public road intersection at CR N 100 W, guardrail will be placed along the curve. Riprap will also be placed around the substructure. Approximately two (2) acres of right-of-way will be acquired for this project.

**Feature crossed (if applicable):** Holthouse Ditch

**Township:** Root Township

**City/County:** Adams County

**Information reviewed (please check all that apply):**

- General project location map     USGS map     Aerial photograph     Interim Report
- Written description of project area     General project area photos     Soil survey data
- Previously completed historic property reports     Previously completed archaeology reports
- Bridge Inspection Information

**Other (please specify):** SHAARD GIS; SHAARD; online street-view imagery; Indiana Historic Building, Bridges, and Cemeteries (IHBBC) map; Bridge Inspection Application System (BIAS); 2010 INDOT-sponsored *Historic Bridge Inventory* (HBI); County GIS data (accessed via [http://arcgis.co.adams.in.us/Html5Viewer/index.html?viewer=Adams\\_County\\_GIS.Adams\\_County\\_GIS\\_HTML5\\_Viewer](http://arcgis.co.adams.in.us/Html5Viewer/index.html?viewer=Adams_County_GIS.Adams_County_GIS_HTML5_Viewer)); *Residential Planning and Development in Indiana, 1940-1973*; project information provided by Green 3, LLC, dated 8/16/2019;

Jackson, Christopher

2019 A Phase Ia Archaeological Records Review and Reconnaissance Survey for the Proposed US Highway 224 Bridge Replacement over Holthouse Ditch (Des 1701394) near the City of Decatur, Root Township and Washington Township, Adams County, Indiana. Report on file, Indiana Department of Transportation, Cultural Resources Office, Indianapolis, In.

### **Results of the Records Review for Above-Ground Resources:**

With regard to above-ground resources, an INDOT-Cultural Resources Office (CRO) historian, who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61, first performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Adams County. No listed resources are present within 0.25 mile of the project area, a distance that would serve as an adequate area of potential effects (APE) given the scope of the project and the surrounding terrain.

The *Adams County Interim Report* (2011; Root Township, Washington Township) 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 (IHBBC) map. The SHAARD information was checked against the Interim Report hard copy maps. The following IHSSI sites are recorded within 0.25 mile of the project:

IHSSI #001-155-05047 (House, 1065 W SR 224, c. 1960; rated "contributing")

IHSSI #001-155-05046 (Bridge, SR 224, c. 1930; rated "contributing")

IHSSI #001-155-05045 (House, 895 W SR 224, c. 1955; rated "contributing")

IHSSI #001-155-05044 (House, 801 W SR 224, c. 1957; rated "contributing")

IHSSI #001-155-05043 (St. Josephs Catholic Cemetery, SR 224, c. 1894-present; rated "contributing")

IHSSI #010-155-00001 ("Crucifixion", 414 W Madison in St. Josephs Catholic Cemetery, c. 1935; rated "contributing")

According to the IHSSI rating system, generally properties rated "contributing" do not possess the level of historical or architectural significance necessary to be considered individually National Register eligible, although they would contribute to a historic district. If they retain material integrity, properties rated "notable" might possess the necessary level of significance after further research. Properties rated "outstanding" usually possess the necessary level of significance to be considered National Register eligible, if they retain material integrity. Historic districts identified in the IHSSI are usually considered eligible for the National Register.

As previously noted, land surrounding the project area is semi-rural and located at the city's edge, with agricultural fields, wooded land, and residential housing present. In addition to the five (5) surveyed IHSSI sites, 17 unsurveyed properties are present within 0.25 mile of the project area. Eight (8) properties will not be 50 years old or older by the time of project letting in 2021.

Two properties consist of barns or other outbuildings. One of these properties, dating from the early-twentieth century, is located to the southwest of the project area, south of the ditch. A line of mature deciduous trees shields this property from any project activities. For the purposes of this determination, the property is not considered adjacent to the project. The other property consists of pole barns dating from the mid-to-late-twentieth century. They are not associated with any house or commercial structure, and do not possess the necessary cultural significance or material integrity to be considered eligible to the National Register.

A residential property west of the project dates from the early-twentieth century. However, it has been highly altered with large additions, replacement windows and doors, and new siding. It has not

maintained the necessary material integrity to be considered eligible to the National Register. The remaining five (5) residential properties date from the mid-twentieth century. There is no evidence that any of these properties possess the cultural significance to be considered individually eligible to the National Register. In addition, these properties do not form a cohesive neighborhood and do not constitute a historic district according to the requirements listed in the Multiple Property Documentation Form, *Residential Planning and Development in Indiana, 1940-1973*.

The subject bridge (Bridge No. 224-01-01546/NBI No.029120) is a single-span, reinforced concrete (closed spandrel) arch bridge built in 1936. The bridge length is 43 feet and the deck width-out-to-out is 40 feet. The 2010 INDOT-sponsored *Historic Bridge Inventory* (HBI) determined that this bridge is not eligible for listing in the National Register (Volume 2, Section 2, page 238).

Based on the available information, as summarized above, no above-ground concerns exist as long as the project scope does not change.

**Archaeology Report Author/Date:**

Christopher Jackson/October 21, 2019

**Summary of Archaeology Investigation Results:**

An archaeological records check and Phase Ia field reconnaissance (Jackson 2019) were conducted by Green 3 personnel who meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61. The records check identified no previously recorded sites within or adjacent to the project area and determined that none of the project area has been previously examined. Approximately 2.8 acres of land was examined through visual walkover survey, pedestrian survey of agricultural fields, and eight shovel tests. No archaeological sites were identified and no further work was recommended. The report has been reviewed by INDOT Cultural Resources personnel who meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61. It is our opinion that the report is acceptable, and we concur with the evaluations and recommendations made by Jackson (October 21, 2019). Therefore, there are no archaeological concerns.

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

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

A-9. Installation, repair, or replacement of erosion control measures along roadways, waterways and bridge piers within previously disturbed soils.

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:** If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, construction in the immediate area of the find will be stopped and the INDOT Cultural Resources office and the Division of Historic Preservation and Archaeology will be notified immediately.

**INDOT Cultural Resources staff reviewer(s):** Kelyn Alexander and Shaun Miller

*\*\*\*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.*



## Karen Wood

---

**From:** Miller, Shaun (INDOT) <smiller@indot.IN.gov>  
**Sent:** Wednesday, December 11, 2019 9:21 AM  
**To:** Karen Wood  
**Cc:** Christian Radcliff; Chris Jackson; Novak, Karen; James, Karen; Alexander, Kelyn  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch - MPPA section 1 form and archaeology report submission

Hi Karen,

Thank you for letting us know about these minor project modifications. In kind replacement of pipes fall under A-3 of the MPPA. Since we do not complete MPPA determination forms for Category A projects, you can simply add A-3 to the CE and attach this email to it. We do not need to update the MPPA B-12 determination form.

Thanks again,

Shaun Miller  
INDOT, Cultural Resources Office  
Archaeology Team Lead  
(317)233-6795

---

**From:** Karen Wood [mailto:karen@green3studio.com]  
**Sent:** Tuesday, December 10, 2019 12:24 PM  
**To:** Miller, Shaun (INDOT) <smiller@indot.IN.gov>  
**Cc:** Christian Radcliff <christian@green3studio.com>; Chris Jackson <chris@green3studio.com>; Novak, Karen <KNovak@indot.IN.gov>; James, Karen <KJames1@indot.IN.gov>; Alexander, Kelyn <KAlexander3@indot.IN.gov>  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch - MPPA section 1 form and archaeology report submission

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

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Shaun,

This project was approved under B-12 of the MPPA in your email below. Two small structures—identified as Structure No. 10 and 11—will be replaced in kind as part of this project that were not part of the original written project description in the MPPA submission (although these structures to be replaced were shown on the plans in Chris's archaeology report). I have attached a page from the plans showing the two structures (No. 10 and No. 11) that will be replaced and photos of the existing structures.

Would you please review these documents and revise the MPPA determination to include these small structure replacements? Please let me know if you need anything else.

Thank you,

*Karen Wood*  
Environmental and Cultural Resources Manager

Des No 1701394 CE-2

Appendix E

Red Flag Investigation



# INDIANA DEPARTMENT OF TRANSPORTATION

*Driving Indiana's Economic Growth*

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

**Eric Holcomb, Governor**  
**Joe McGuinness, Commissioner**

Date: February 14, 2019

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

From: Christian Radcliff  
Green 3, LLC  
1104 Prospect Street  
Indianapolis, Indiana 46203  
[christian@green3studio.com](mailto:christian@green3studio.com)

Re: RED FLAG INVESTIGATION  
DES #1701394 State Project  
Bridge Replacement  
US 224 over Holthouse Ditch (Bridge #224-01-01546)  
Adams County, Indiana

## PROJECT DESCRIPTION

Brief Description of Project: This project involves the replacement of Bridge #224-01-01546, which carries US 224 over Holthouse Ditch. The new structure will be a three span reinforced concrete slab bridge. The new bridge will be 100 feet in length. Guardrails and guardrail transitions will be installed.

Bridge and/or Culvert Project: Yes  No  Structure # 224-01-01546

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

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

Proposed right of way: Temporary  # Acres \_\_\_\_\_ Permanent  # Acres 1.67

Type of excavation: Excavation for the piers and abutment footings to a maximum depth of 6 feet will be required to complete the project as proposed.

Maintenance of traffic: Traffic will be maintained through a detour to reduce construction costs and improve safety in the construction area. The official detour route will utilize US 27, SR 124, and SR 301 and will be approximately 19.5 miles in length. The intersection of US 224 and CR 100 W will remain open during construction.

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

State Project:  LPA:

Any other factors influencing recommendations: Right of way limits are an estimate and will be refined as design progresses.

**INFRASTRUCTURE TABLE AND SUMMARY**

<b>Infrastructure</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	<b>1</b>	Recreational Facilities	<b>1*</b>
Airports <sup>1</sup>	<b>N/A</b>	Pipelines	<b>3</b>
Cemeteries	<b>4</b>	Railroads	<b>1</b>
Hospitals	<b>N/A</b>	Trails	<b>N/A</b>
Schools	<b>1</b>	Managed Lands	<b>N/A</b>

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

Explanation:

Religious Facilities: One (1) religious facility is within the 0.5 mile search radius. Saint Mark’s United Methodist Church is approximately 0.4 mile southeast of the project area. No impact is expected.

Cemeteries: Four (4) cemeteries are within the 0.5 mile search radius. The nearest cemetery is Saint Joseph’s Cemetery, which is approximately 0.15 mile northeast of the project area. No impact is expected.

Schools: One (1) school is within the 0.5 mile search radius. Saint Mark’s Preschool and Child Care is not shown on the attached infrastructure map but was identified on Google Maps. This school is approximately 0.4 mile southeast of the project area. No impact is expected.

Recreational Facilities: One (1) recreational facility is within the 0.5 mile search radius. Cross Creek Golf Course is not mapped on the attached infrastructure graphic but can be seen on aerial imagery. Cross Creek Golf Course is approximately 0.37 mile east of the project area. No impact is expected.

Pipelines: Three (3) pipeline segments are within the 0.5 mile search radius. The nearest segment is a natural gas pipeline managed by the Northern Indiana Public Service Company and is approximately 0.23 mile south of the project area. No impact is expected.

Railroads: One (1) railroad segment is within the 0.5 mile search radius. The Erie Lackawanna Railroad is approximately 0.32 mile south of the project area. No impact is expected.

**WATER RESOURCES TABLE AND SUMMARY**

<b>Water Resources</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	<b>N/A</b>	Canal Routes - Historic	<b>N/A</b>
Karst Springs	<b>N/A</b>	NWI - Wetlands	<b>10</b>
Canal Structures – Historic	<b>N/A</b>	Lakes	<b>4</b>
NPS NRI Listed	<b>N/A</b>	Floodplain - DFIRM	<b>11</b>
NWI-Lines	<b>3</b>	Cave Entrance Density	<b>N/A</b>
IDEM 303d Listed Streams and Lakes (Impaired)	<b>1</b>	Sinkhole Areas	<b>N/A</b>
Rivers and Streams	<b>3</b>	Sinking-Stream Basins	<b>N/A</b>

Explanation:

NWI-Lines: Three (3) NWI line segments are within the 0.5 mile search radius. The nearest segment is in the immediate project area and is associated with Holthouse Ditch. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

IDEM 303d Listed Streams and Lakes (Impaired): One (1) IDEM 303d listed stream is within the 0.5 mile search radius. The segment is within the immediate project area and is associated with Holthouse Ditch. A review of the IDEM 303d map tool verified that Holthouse Ditch is listed as impaired by *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

Rivers and Streams: Three (3) River and Stream segments are within the 0.5 mile search radius. The nearest segment is within the immediate project area and is associated with Holthouse Ditch. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI Wetlands: Ten (10) NWI wetland polygons are within the 0.5 mile search radius. The nearest wetland is mapped approximately 0.11 mile west of the project area. No impact is expected.

Lakes: Four (4) Lakes are within the 0.5 mile search radius. The nearest lake is approximately 0.11 mile west of the project area. No impact is expected.

Floodplains – DFIRM: Eleven (11) floodplain polygons are within the 0.5 mile search radius. The nearest polygon is mapped within the immediate project area. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

**URBANIZED AREA BOUNDARY SUMMARY**

Explanation: The project lies within the Decatur UAB. Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the Decatur MS4 coordinator at 172 N. 2<sup>nd</sup> Street, Decatur, IN 46733.

**MINING AND MINERAL EXPLORATION TABLE AND SUMMARY**

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

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

## HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

<b>Hazardous Material Concerns</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	<b>N/A</b>	Manufactured Gas Plant Sites	<b>N/A</b>
RCRA Generator/ TSD	<b>1</b>	Open Dump Waste Sites	<b>N/A</b>
RCRA Corrective Action Sites	<b>N/A</b>	Restricted Waste Sites	<b>N/A</b>
State Cleanup Sites	<b>N/A</b>	Waste Transfer Stations	<b>N/A</b>
Septage Waste Sites	<b>N/A</b>	Tire Waste Sites	<b>N/A</b>
Underground Storage Tank (UST) Sites	<b>1*</b>	Confined Feeding Operations (CFO)	<b>N/A</b>
Voluntary Remediation Program	<b>N/A</b>	Brownfields	<b>N/A</b>
Construction Demolition Waste	<b>N/A</b>	Institutional Controls	<b>N/A</b>
Solid Waste Landfill	<b>N/A</b>	NPDES Facilities	<b>1</b>
Infectious/Medical Waste Sites	<b>N/A</b>	NPDES Pipe Locations	<b>N/A</b>
Leaking Underground Storage (LUST) Sites	<b>1</b>	Notice of Contamination Sites	<b>N/A</b>

### Explanation:

RCRA Generator/TSD: One (1) RCRA generator/TSD is within the 0.5 mile search radius. The Indiana Department of Environmental Management Virtual File Cabinet (IDEM VFC) was accessed for information about hazardous material sites. Thunderbird Products (2200 W Monroe Street, AI ID 14719) is approximately 0.17 mile south of the project area. The site was determined to comply for all laws except for documentation requirements in the annual compliance inspection dated June 18, 2018. No impact is expected.

Underground Storage Tanks (UST) Sites: One (1) UST site is within the 0.5 mile search radius, however, it is not mapped on the attached Hazardous Material Concerns map. The tank is associated with Thunderbird Products (2200 W Monroe Street, AI ID 14719) detailed below. The most recent inspection report dated January 4, 2017 indicated that the facility does meet the equipment, operating, maintenance, and financial responsibility requirements set forth in Indiana's UST Rule 329 IAC 9. No impact is expected.

Leaking Underground Storage Tank (LUST) Sites: One (1) LUST site is mapped within the 0.5 mile search radius. According to the IDEM VFC, Thunderbird Products (2200 W Monroe Street, AI ID 14719) is approximately 0.17 mile south of the project area; however, no documented spills have occurred for the site. The site maintains the UST documented above. No impact is expected.

NPDES Facilities: One (1) NPDES facility is within the 0.5 mile search radius. According to the IDEM VFC, Thunderbird Products (2200 W Monroe Street, AI ID 14719) is a privately owned facility that maintains an NPDES permit and is located approximately 0.17 mile south of the project area. No impact is expected.

## ECOLOGICAL INFORMATION SUMMARY

The Adams County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services Division 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 in a rural area with the riparian corridor of Holthouse Ditch adjacent to the immediate project area. Agricultural land is beyond the immediate project area with interspersed residential lots on the north side of SR 224. The June 22, 2018 inspection report for Bridge #224-01-01546 states that no evidence of bats was seen or heard under the bridge. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to “Using the USFWS’s IPaC System for Listed Bat Consultation for INDOT Projects”.

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

## **RECOMMENDATIONS SECTION**

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

INFRASTRUCTURE: N/A

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

- One (1) NWI line segment is in the immediate project area and is associated with Holthouse Ditch.
- One (1) River and Stream segment is within the immediate project area and is associated with Holthouse Ditch.
- One (1) floodplain polygon is mapped within the immediate project area.

One (1) IDEM 303d listed stream is within the immediate project area and is associated with Holthouse Ditch. A review of the IDEM 303d map tool verified that Holthouse Ditch is listed as impaired by *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

URBANIZED AREA BOUNDARY: The project lies within the Decatur UAB. Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the Decatur MS4 coordinator at 172 N. 2<sup>nd</sup> Street, Decatur, IN 46733.

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: N/A

ECOLOGICAL INFORMATION: The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to “Using the USFWS’s IPaC System for Listed Bat Consultation for INDOT Projects”.

Date: 2019.02.14

*Ronald E. Baker*

14:33:23 -05'00'

INDOT Environmental Services concurrence:

\_\_\_\_\_  
(Signature)

Prepared by:

Christian Radcliff

Ecologist

Green 3, LLC

**Graphics:**

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

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

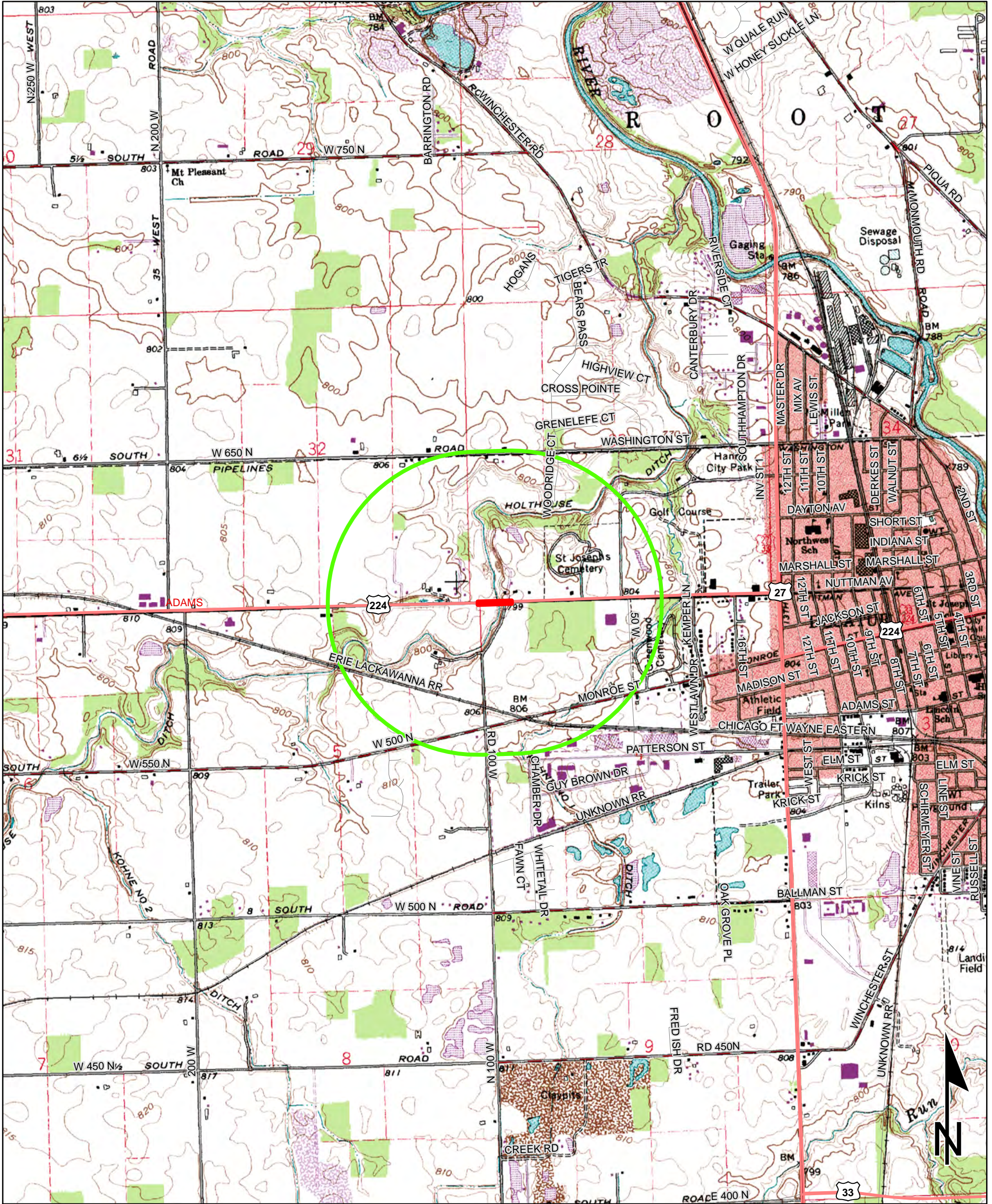
URBANIZED AREA BOUNDARY: YES

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: YES



Red Flag Investigation - Site Location  
 US 224 over Holthouse Ditch  
 Des. No. 1701394, Bridge Project  
 Adams County, Indiana



Sources: 0.4 0.2 0 0.4 Miles  
**Non Orthophotography**  
 Data - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://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.

DECATUR QUADRANGLE  
 INDIANA  
 7.5 MINUTE SERIES  
 (TOPOGRAPHIC)

# Red Flag Investigation - Infrastructure

## US 224 over Holthouse Ditch

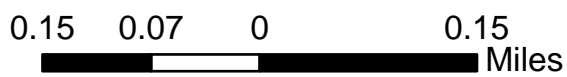
### Des. No. 1701394, Bridge Project

### Adams 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](http://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.**



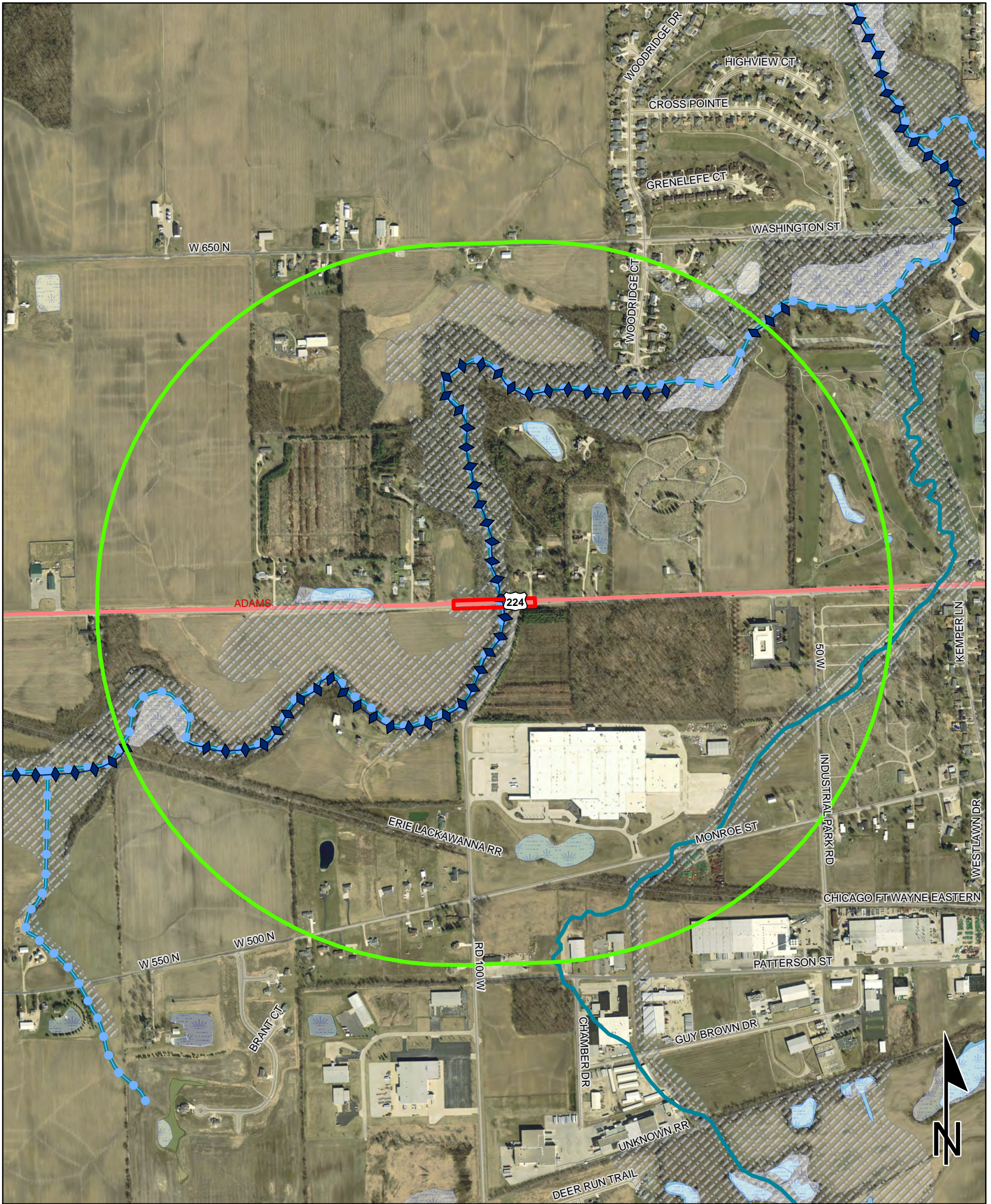
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

# Red Flag Investigation - Water Resources

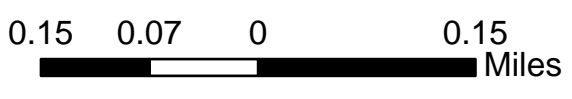
## US 224 over Holthouse Ditch

### Des. No. 1701394, Bridge Project

#### Adams County, Indiana



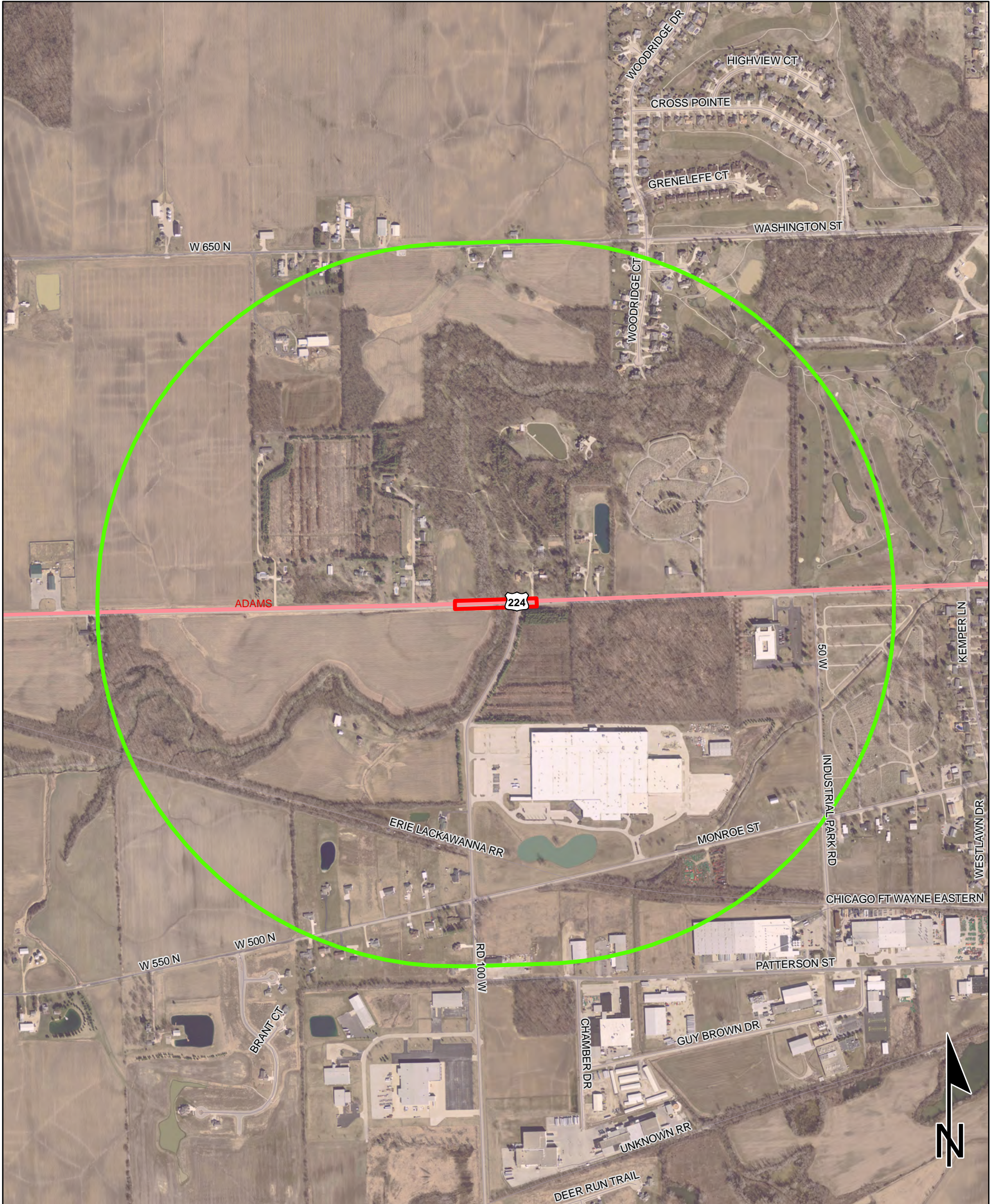
**Sources:**  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83



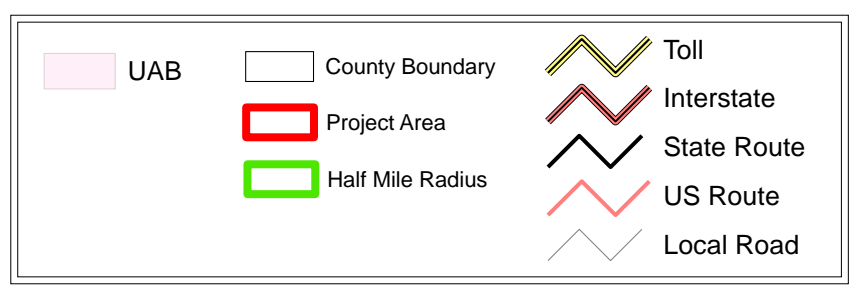
**This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.**

NWI - Point	Wetlands	Project Area
Karst Spring	Lake	Half Mile Radius
NWI - Line	Floodplain - DFIRM	Toll
Impaired_Stream_Lake	Cave Entrance Density	Interstate
NPS NRI listed	Sinkhole Area	State Route
River	Sinking-Stream Basin	US Route
Canal Structure - Historic	County Boundary	Local Road
Canal Route - Historic		

# Red Flag Investigation - Urbanized Area Boundary US 224 over Holthouse Ditch Des. No. 1701394, Bridge Project Adams County, Indiana



**Sources:** 0.15 0.07 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](http://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.**

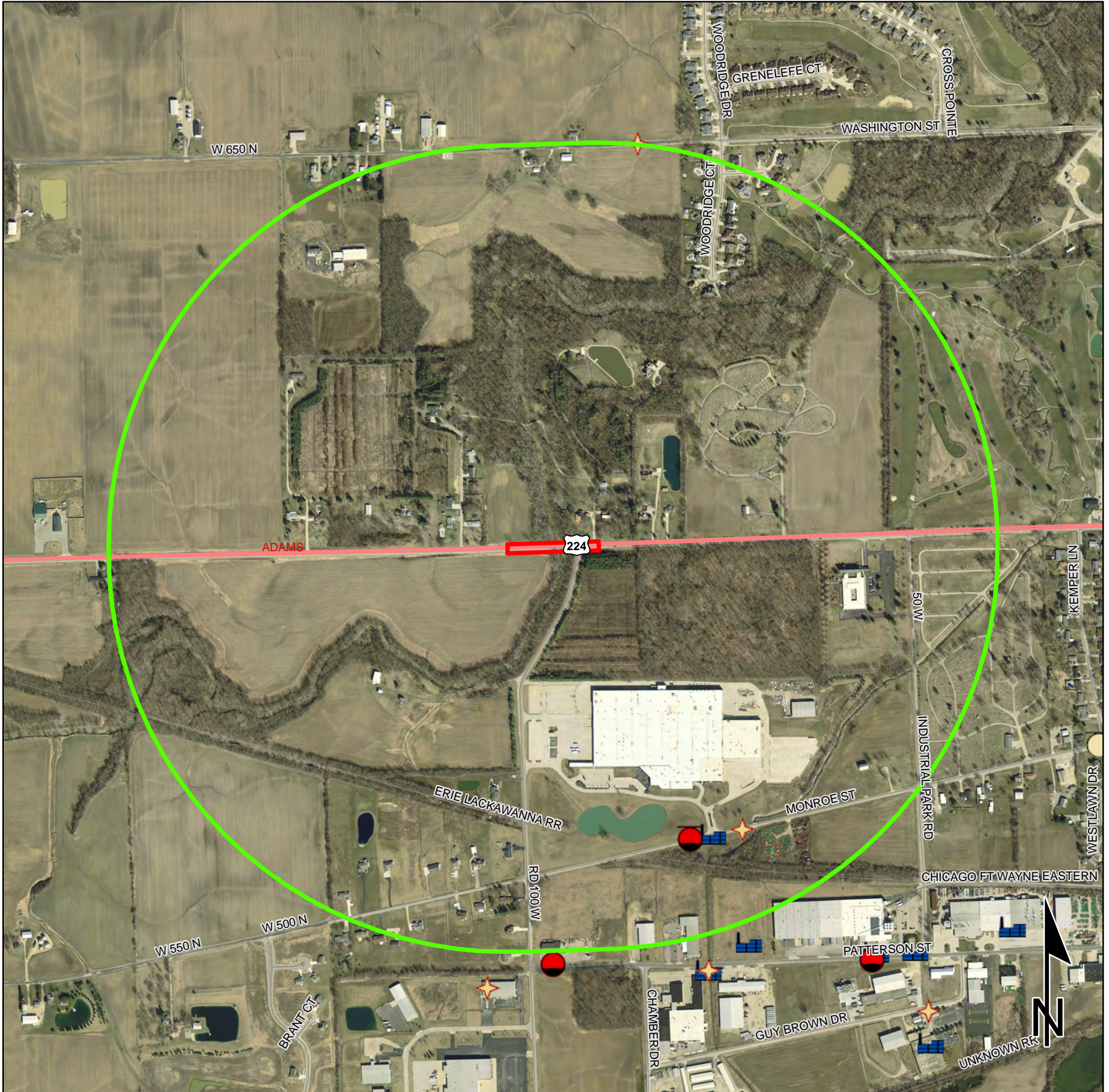


# Red Flag Investigation - Hazardous Material Concerns

## US 224 over Holthouse Ditch

### Des. No. 1701394, Bridge Project

### Adams County, Indiana



	Brownfield		RCRA Generator/TSD		Institutional Controls
	RCRA Corrective Action Sites		Restricted Waste Site		County Boundary
	Confined Feeding Operation		Septage Waste Site		Project Area
	Notice_of_Contamination		Solid Waste Landfill		Half Mile Radius
	Construction/Demolition Site		State Cleanup Site		Toll
	Infectious/Medical Waste Site		Superfund		Interstate
	Leaking Underground Storage Tank		Tire Waste Site		State Route
	Manufactured Gas Plant		Underground Storage Tank		US Route
	NPDES Facilites		Voluntary Remediation Program		Local Road
	NPDES Pipe Locations		Waste Transfer Station		
	Open Dump Waste Site				

0.15 0.07 0 0.15  
Miles

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

E-11

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

Indiana County Endangered, Threatened and Rare Species List

County: Adams

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Mollusk: Bivalvia (Mussels)</b>					
Epioblasma triquetra	Snuffbox	LE	SE	G3	S1
Obovaria subrotunda	Round Hickorynut	C	SE	G4	S1
Pleurobema clava	Clubshell	LE	SE	G1G2	S1
Ptychobranthus fasciolaris	Kidneyshell		SSC	G4G5	S2
Toxolasma lividus	Purple Lilliput	C	SSC	G3Q	S2
Villosa fabalis	Rayed Bean	LE	SE	G2	S1
<b>Reptile</b>					
Clonophis kirtlandii	Kirtland's Snake	C	SE	G2	S2
<b>Bird</b>					
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
Lanius ludovicianus	Loggerhead Shrike		SE	G4	S3B
<b>Mammal</b>					
Mustela nivalis	Least Weasel		SSC	G5	S2?
<b>High Quality Natural Community</b>					
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	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

## Christian Radcliff

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**From:** Mathas, Marlene <MMathas@indot.IN.gov>  
**Sent:** Wednesday, February 19, 2020 5:42 PM  
**To:** Christian Radcliff  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch Red Flag Investigation

Hi, Christian –

I did a quick review of the 2019 RFI and didn't see any substantive changes. I don't see a need for additional documentation unless you want to refer to this e-mail in your environmental document.

Thanks!  
Marlene

Marlene Mathas, CHMM  
Site Assessment & Management (SAM) Team Lead  
Environmental Policy Office  
INDOT Environmental Services Division  
(317) 232-5113

The Site Assessment and Management (SAM) Manual can be found at <http://www.in.gov/indot/2523.htm>  
Be sure to refer to the updated information in the SAM Manual for document preparation and submission.

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**From:** Christian Radcliff [mailto:christian@green3studio.com]  
**Sent:** Wednesday, February 19, 2020 10:45 AM  
**To:** Mathas, Marlene <MMathas@indot.IN.gov>  
**Subject:** RE: Des 1701394 US 224 over Holthouse Ditch Red Flag Investigation

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

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Good morning Marlene,

I am about to submit the CE for the above referenced project and noticed that the RFI was approved February 14, 2019. Do you see any need to do any further investigation into hazardous materials in the project area? I checked the GIS layers and didn't see any new hazardous material sites within the 0.5 mile radius.

Thanks,

Christian Radcliff  
Ecologist

[christian@green3studio.com](mailto:christian@green3studio.com)