

SR 135 Pavement Rehabilitation (Des No. 2001901)

APPENDIX C: EARLY COORDINATION





INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
(855) INDOT4U

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

March 3, 2022

{See Attached List}

Re: State Road 135 Pavement Rehabilitation
Morgan County, Indiana
INDOT Des No.: 2001901
CMT Project No.: 21070901-00

Dear Interested Party:

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a project involving pavement rehabilitation in Morgan 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 numbers and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

Project Description

This project is located along State Road (SR) 135 from 0.33 miles south of SR 252 to 0.37 miles north of SR 252 in Morgantown, Morgan County, Indiana. The project area also includes a segment of SR 252 from 970 feet west of its intersection with SR 135 to the intersection with SR 135. The project is located in Sections 24 & 25, Township 11 North, and Range 2 East, on the USGS Morgantown, IN Quadrangle.

SR 135 is classified as a minor arterial and transverses through the center of Morgantown. SR 135 has a posted speed limit of 30 mph within the majority of the study area and is on the National Truck Network and the National Highway 3R System. The entire segment is free flowing except for an all-way stop-controlled intersection at the SR 135/ Marion Street and SR 252/Washington Street intersection. From the southern project terminus to Marion Street, the roadway consists of two 12-foot travel lanes, no parking or sidewalks, and 2- to 4-foot shoulders. Guardrails are present near the Indian Creek bridge. From South Marion Street to SR 252/Washington Street, SR 135 consists of two 13- to 14-foot travel lanes with curb and sidewalk. Much of the sidewalk in this section is in poor condition. From the junction of SR 135 and SR 252 to Church Street, SR 135 consists of two 12-foot travel lanes. An 8-foot parallel parking lane and a 16-foot angled parking lane are present along the north and south sides of the roadway, respectively. Curb and gutter and decorative lighting are located along this section of SR 135, and much of the curb is in poor condition. From North Church Street to the eastern project terminus, SR 135 consists of two 12-foot travel lanes with curb and gutter and sidewalk. On-street parking is available and a 4-foot grass buffer is present on both sides of the roadway over a portion of this section. An active railroad crosses SR 135 immediately east of Ash Street. From the SR 135 and SR 252 junction to the western project terminus, SR 252 consists of two approximately 12-foot lanes. Sidewalks are present along much of this section, and guardrail is present near the bridge over Long Run.

The current proposed project is anticipated to entail a mill and overlay with patching throughout the project area. Mill and overlay depths will range from 1.5 to 4 inches deep. Curb ramps will be replaced to meet requirements of the Americans with Disabilities Act (ADA) as needed throughout the project area. The sidewalks will be replaced along the east side of SR 135 (Marion Street) and along the north side of SR 135 (Washington Street) between Marion Street and Church Street. These same limits will have curb replacement too. Additionally, where existing curbs and/or sidewalks are showing deterioration, those will be repaired.

Since stormwater ponding is an issued in the downtown area, additional curb inlets will be installed throughout the project area to improve drainage. Also, an existing 24" pipe culvert will be replaced at the intersection of SR 135

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and Church Street. A culvert headwall repair is expected at the eastern project limits on the north side of SR 135/SR 252. Several other small structures are located along the project area and will be assessed for potential replacement for drainage improvements.

Approximately 0.5 acre of new, permanent right-of-way will be needed for completion of the project. Temporary right-of-way may also be needed to replace existing driveway approaches and grading for the sidewalk replacements. The Maintenance of traffic (MOT) is anticipated to involve the use of flaggers for one-lane, two-way operations. Temporary closure of on-street parking will also be needed. SR 135. No road closures or detours to INDOT facilities are anticipated. Cross Street and Church Street may need to be closed and detoured to reconstruct their approaches to SR 135. No trees are expected to be cleared as part of this project. The project is anticipated to begin construction in the late fall 2025.

Land use in the vicinity of the project is generally urban and consists primarily of commercial development. The INDOT Ecology & Permitting Office will perform a waters and wetlands determination to identify any water resources that may be present within the study area. Culvert rehabilitation and replacements will likely result in work below the ordinary high water mark (OHWM) of streams. 401/404 Permits are anticipated to be required for this project. This project is anticipated to qualify for the USFWS Rangeland Programmatic Agreement for the Indiana bat and Northern long-eared bat by completing the USFWS's Information for Planning and Consultation (IPaC).

Coordination will occur with INDOT Cultural Resources Office (CRO) to evaluate the project area for archaeological and historic resources and for Section 106 compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence as appropriate. The project will occur within a National Register of Historic Places district, the Morgantown Historic District (NR-1863). INDOT will ensure compliance with Section 106 of the National Historic Preservation Act of 1966.

Should we not receive a response **within thirty (30) calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary; a reasonable amount may be granted upon request.

If you have any questions or concerns regarding this matter, please feel free to contact me at 317-492-9162 or via email at nbatta@cmtengr.com or contact INDOT Project Manager Brad Williamson at BWilliamson@indot.in.gov.

Thank you in advance for your input.

Sincerely,

Crawford, Murphy & Tilly, Inc.

Nick Batta
Project Manager

Attachments-
Maps (Location, Aerial, USGS Topographic)
Photographs

Note: Duplicate mapping and photographs were included in the Early Coordination Packet, but were intentionally removed. Please see Appendix B for maps and photographs.

The following agencies received Early Coordination Letters sent March 3, 2022:

Field Supervisor

U.S. Fish and Wildlife Service
Bloomington Indiana Field Office
620 South Walker Street
Bloomington, Indiana 47403-2121
robin_mcwilliams@fws.gov

Erica Tait, Federal Highway Administration
Federal Office Building, Room 254
575 North Pennsylvania Street
Indianapolis, Indiana 46204
erica.tait@dot.gov

Indiana Geological and Water Survey
611 North Walnut Grove
Bloomington, Indiana 47405
Early Coordination submittal at
<https://igws.indiana.edu/eAssessment/>

Environmental Coordinator
Indiana Department of Natural Resources
Division of Fish and Wildlife
402 West Washington Street, Rm W273
Indianapolis, Indiana 46204
environmentalreview@dnr.in.gov

Chief, Groundwater Section
Indiana Department of Environmental
Management
100 N. Senate Avenue
Indianapolis, IN 46204
<https://www.in.gov/idem/cleanwater/pages/wellhead/>

Section Chief, Wetlands and Stormwater
Programs
Indiana Department of Environmental
Management
100 N. Senate Avenue
Indianapolis, IN 46204
jturner2@idem.in.gov
rbaun@idem.in.gov

Field Environmental Officer
Chicago Regional Office
US Department of Housing & Urban
Development
Metcalf Fed. Bldg.
77 W. Jackson Blvd. Rm 2401
Chicago, IL 60604
erik.r.sandstedt@hud.gov

David Dye, Environmental Section Manager
Indiana Department of Transportation
185 Agrico Lane
Seymour, IN 47274
Ddye@indot.in.gov
Ron Bales, Environmental Policy Manager
Indiana Department of Transportation
100 N. Senate Ave.
Indianapolis, IN 46204
rbales@indot.in.gov

Brian Royer
Orphan Well Manager
Indiana Department of Natural Resources
Division of Oil & Gas
402 W. Washington Street, Room W293
Indianapolis, Indiana 46204
BRoye@dnr.in.gov

Scott Manning
Strategic Communications Director
Indiana Department of Transportation
100 N. Senate Avenue
IGCN Room N755
Indianapolis, IN 46204
SManning1@indot.IN.gov

Ms. Deborah Snyder
US Army Corps of Engineers,
Louisville District, Indianapolis Regulatory
Office,
Indianapolis, IN 46216
RegulatoryApplicationsLRL@usace.army.mil

www.in.gov/dot/

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Anna Gremling and Sean Northup
Indianapolis MPO
200 E. Washington Street
Indianapolis, IN 46216
anna.gremling@indympo.org
sean.northup@indympo.org

Morgan County Commissioner's Office
180 S. Main St.
Suite 112
Martinsville, IN 46151
bcollier@morgancounty.in.gov
khale@morgancounty.in.gov
dadams@morgancounty.in.gov

Mark Tumey, Director
Morgan County EMA
1050 Lincoln Hill Rd.
Martinsville, IN 46151
mtumey@morgancounty.in.gov

Keenan Blair, Director
Morgan County EMS
1789 E Morgan St.
Martinsville, IN 46151
kdblair@morgancounty.in.gov

Grant Collinsworth, Superintendent
Morgan County Highway Department Office
5400 Blue Bluff Rd
Martinsville, IN 46151
gcollinsworth@morgancounty.in.gov

Tony Hinkle, PE, County Engineer
Morgan County Highway Department Office
5400 Blue Bluff Rd.
Martinsville, IN 46151
ahinkle@morgancounty.in.gov

Laura Parker, Director of Planning & Zoning
180 S Main St.
Suite 204
Martinsville, IN 46151
lparker@morgancounty.in.gov

Sheriff Richard Meyers
Morgan County Sheriff's Office
160 N. Park Avenue
Martinsville, IN 46151

Terry Brock, Surveyor
Morgan County Surveyor's Office
180 S Main St.
Suite 10
Martinsville, IN 46152
tbrock@morgancounty.in.gov

Bill Dials, Stormwater Coordinator
Morgan County Surveyor's Office
180 S Main St.
Suite 10
Martinsville, IN 46152
bdials@morgancounty.in.gov

Morgan County Council
180 S. Main Street
Suite 112
Martinsville, IN 46151
Jeff Downey, DPW Manager
120 W Washington Street
PO Box 416
Morgantown, IN 46160
jdowney.mtowndpw@aol.com

Morgantown Town Council
Penny Anderson, Walter Abbott, Vern Snyder,
Courtney Allen, Terry Poindexter
120 W Washington Street
PO Box 416
Morgantown, IN 46160

Town Marshal Ryan Swank
120 W Washington Street
Morgantown, IN 46160

Chief Clinton Chapman
Morgantown Fire Department
269 N Highland Street
Morgantown, IN 46160

State Road 135 Pavement Rehabilitation (Des No. 2001901)

March 3, 2022

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Morgantown Planning and Zoning
120 W Washington Street
PO Box 416
Morgantown, IN 46160

Morgantown Baptist Church
109 W Elm Street
Morgantown, IN 46160
shepherd@comehome2mbc.org

Morgantown United Methodist Church
20 E Washington Street
Morgantown, IN 46160
aspahr79@aol.com

New Beginnings Community Church
140 E Washington Street
Morgantown, IN 46160
Tam3369@outlook.com

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

DNR #: ER-24573

Request Received: March 16, 2022

Requestor: Crawford Murphy and Tilly Inc
Nick Batta
8790 Purdue Road
Indianapolis, IN 46268

Project: SR 135 pavement rehabilitation, from 0.33 mile south to 0.37 mile north of SR 252, and a segment of SR 252 from SR 135 to 970' west, Morgantown; Des #2001901, CMT #21070901-00

County/Site info: Morgan

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 may require the formal approval of our agency pursuant to the Flood Control Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile, unless it qualifies for a bridge exemption (see enclosure) or qualifies under the INDOT and IDNR Memorandum of Understanding for Maintenance Activity Exemption, dated March 1997. Please include a copy of this letter with the permit application, if required.

Natural Heritage Database: The Natural Heritage Program's data have been checked. The Little Spectaclecase (*Villosa lianosa*), a state species of special concern, has been documented in Indian Creek within 1/2 mile of the project area.

Fish & Wildlife Comments: Since no work will occur in Indian Creek, we do not foresee any impacts to the Little Spectaclecase as a result of this project.

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

1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; low endophyte tall fescue may be used in the ditch bottom and side slopes only.
2. Minimize and contain within the project limits all tree and brush clearing.
3. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
4. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
5. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Attachments: A - Bridge Exemption Criteria

THIS IS NOT A PERMIT

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

6. Plant five trees, 1 inch to 2 inches in diameter-at-breast height, for each tree which is removed that is 10 inches or greater in diameter-at-breast height.

Contact Staff:

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

Christie L. Stanifer

Date: April 13, 2022

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

From: [McWilliams, Robin](#)
To: [Austin Clarridge](#)
Subject: Re: [EXTERNAL] Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)
Date: March 17, 2022 3:28:31 PM

External Message: This email was sent from someone outside of CMT. Please use caution with links and attachments from unknown senders or receiving unexpected emails.

Dear Austin,

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

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

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

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

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

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

Sincerely,
Robin McWilliams Munson

Standard Recommendations:

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the “tree clearing” restriction for potential Indiana Bat habitat.)**
2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT’s standard specifications.
6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High-Water Mark during this time unless the machinery is within the caissons or on the cofferdams.
7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing

Robin McWilliams Munson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, IN 46142
812-334-4261

[Mon-Tues 8-3:30p](#)

[Wed-Thurs 8:30-3p Telework](#)

From: Austin Clarridge <aclarridge@cmtengr.com>

Sent: Wednesday, March 16, 2022 2:58 PM

To: McWilliams, Robin <robin_mcwilliams@fws.gov>

Subject: [EXTERNAL] Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dear Interested Party:

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA), with federal funding, intend to proceed with a project involving pavement rehabilitation in Morgan County, Indiana. Please see the attached letter, which 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. We will incorporate your comments into a study of the project's environmental impacts.

If you have any questions or concerns regarding this matter, please feel free to contact Nick Batta at 317-492-9162 or via email at nbatta@cmtengr.com. Thank you for your assistance, and we look forward to your response.

Thank you,

AUSTIN CLARRIDGE | Environmental Scientist



Crawford, Murphy & Tilly | Engineers & Consultants

8790 Purdue Road | Indianapolis, IN 46268

w 614.468.1214 | m 937.707.8020 | aclarridge@cmtengr.com

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Organization and Project Information

Project ID: 21070901-00
Des. ID: 2001901
Project Title: State Road 135 Pavement Rehabilitation
Name of Organization: Crawford, Murphy, & Tilly, Inc
Requested by: Austin Clarridge

Environmental Assessment Report

1. Geological Hazards:
 - High liquefaction potential
 - Floodway
2. Mineral Resources:
 - Bedrock Resource: Moderate Potential
 - Sand and Gravel Resource: Low Potential
3. Active or abandoned mineral resources extraction sites:
 - Petroleum Exploration Wells

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

DISCLAIMER:

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

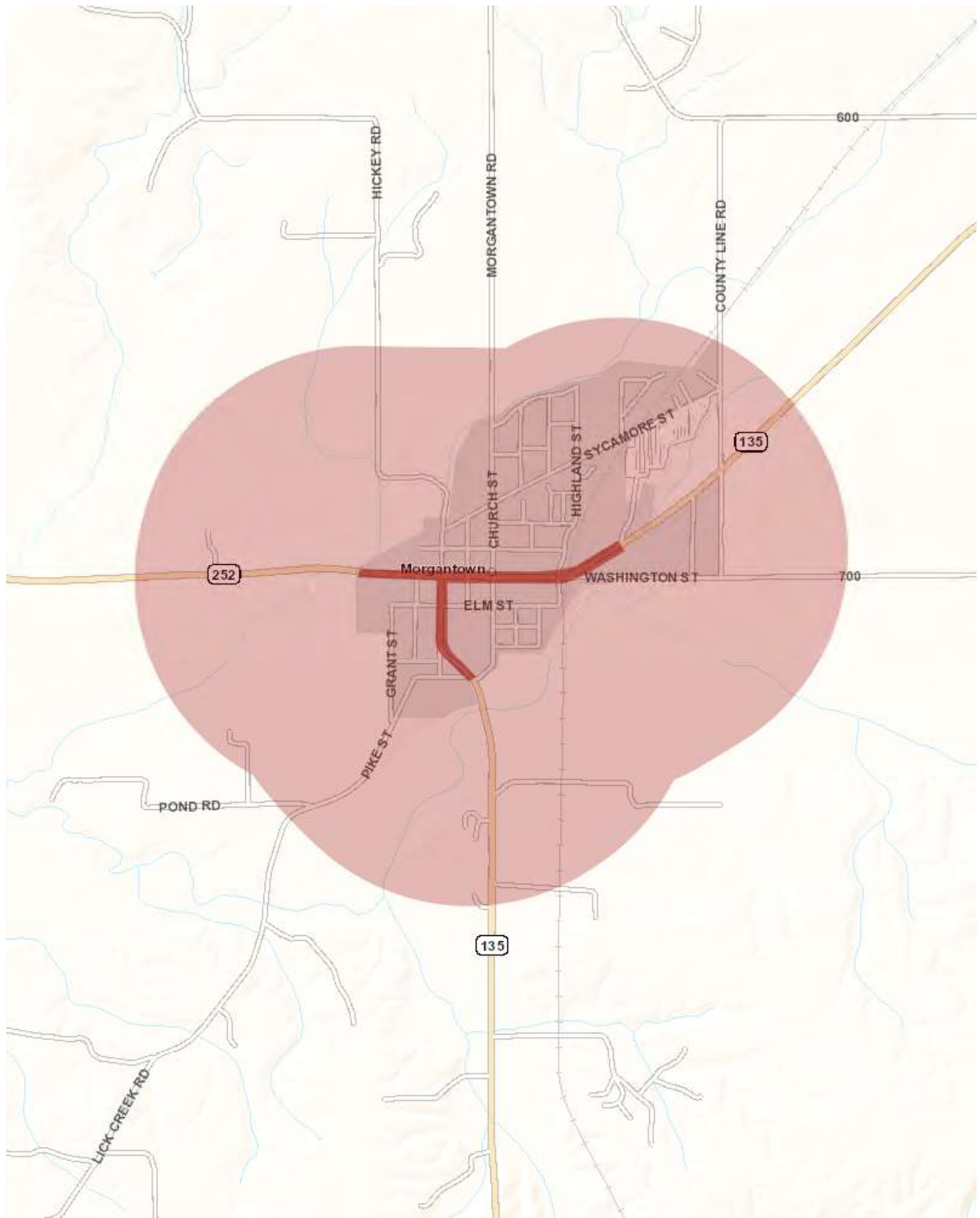
This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: March 16, 2022



Metadata:

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

March 30, 2022

Austin Clarridge
Crawford, Murphy and Tilly
8790 Purdue Road
Indianapolis, Indiana 46278

Dear Mr. Clarridge:

The proposed project to rehabilitate the pavement on State Road 135 (Des. No. 2001901) in Morgan County, Indiana as referred in your letter received on March 29, 2022, will not cause a conversion of prime farmland.

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

Sincerely,

JOHN ALLEN Digitally signed by JOHN ALLEN
Date: 2022.03.30 13:28:41 -04'00'

JOHN ALLEN
State Soil Scientist

Enclosure

From: [Royer, Brian](#)
To: [Austin Clarridge](#)
Subject: RE: Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)
Date: March 17, 2022 1:31:10 PM

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There are no known oil and gas related wells within this project area.

Thanks,

Brian Royer

Orphan Well Manager
Indiana Department of Natural Resources
Division of Reclamation
317-417-6556
broyer@dnr.IN.gov
www.dnr.IN.gov

** Please let us know about the quality of our service by taking this [brief customer survey](#).*

From: Austin Clarridge <aclarridge@cmtengr.com>
Sent: Wednesday, March 16, 2022 2:52 PM
To: Royer, Brian <BRoyer@dnr.IN.gov>
Subject: Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)

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Dear Interested Party:

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA), with federal funding, intend to proceed with a project involving pavement rehabilitation in Morgan County, Indiana. Please see the attached letter, which 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. We will incorporate your comments into a study of the project's environmental impacts.

If you have any questions or concerns regarding this matter, please feel free to contact Nick Batta at 317-492-9162 or via email at nbatta@cmtengr.com. Thank you for your assistance, and we look forward to your response.

Thank you,

AUSTIN CLARRIDGE | Environmental Scientist

Austin Clarridge

From: Austin Clarridge
Sent: Friday, March 18, 2022 9:06 AM
To: Timothy Edsell
Subject: RE: Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)

Hey Tim

Thanks for the response and the information. At this point, the project is in the very early planning stages. Later this year, we will hold some public stakeholder meetings to discuss concerns including those you shared. I definitely encourage you and/or representatives from the school district to attend and share your thoughts and input.

Thank you and we look forward to working with you moving forward. Have a great weekend!

AUSTIN CLARRIDGE | Crawford, Murphy & Tilly | w 614.468.1214 | m 937.707.8020
Environmental Specialist

From: Timothy Edsell <tedsell@nhj.k12.in.us>
Sent: March 17, 2022 10:35 AM
To: Austin Clarridge <aclarridge@cmtengr.com>
Subject: Re: Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)

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Austin,

I shared this email with my Transportation Director and here's some of our thoughts. Currently, we have 9 school buses that travel through this area four times a day. We can adjust their bus routes but will have to coordinate this with our parents. Also, four of our buses do stop in Morgantown to pick up/drop off students which creates concern. It would be nice to have this start after this current school year is complete, so you have all of June and July to work without school bus interruptions, but I understand your timeline too.

Tim Edsell, Ph.D.
Superintendent
Nineveh-Hensley-Jackson United School Corporation
802 S. Indian Creek Drive
Trafalgar, IN 46181
317-878-2100

"If you want to go to the highest level, you can only do so with the help of others." - John C. Maxwell

GO BRAVES!!!

On Wed, Mar 16, 2022 at 2:57 PM Austin Clarridge <aclarridge@cmtengr.com> wrote:

Dear Interested Party:

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA), with federal funding, intend to proceed with a project involving pavement rehabilitation in Morgan County, Indiana. Please see the attached letter, which 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. We will incorporate your comments into a study of the project's environmental impacts.

If you have any questions or concerns regarding this matter, please feel free to contact Nick Batta at 317-492-9162 or via email at nbatta@cmtengr.com. Thank you for your assistance, and we look forward to your response.

Thank you,

AUSTIN CLARRIDGE | Environmental Specialist



Crawford, Murphy & Tilly | Engineers & Consultants

8101 North High Street, Suite 150 | Columbus, OH | 43235
w 614.468.1214 | m 937.707.8020 | aclarridge@cmtengr.com

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Austin Clarridge

From: Turnbow, Alisha <ATurnbow@idem.IN.gov>
Sent: Wednesday, February 1, 2023 4:22 PM
To: Austin Clarridge
Subject: RE: Wellhead Protection Coordination and Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)

External Message: This email was sent from someone outside of CMT. Please use caution with links and attachments from unknown senders or receiving unexpected emails.

Hi Austin,

Des No 2001901 is located in Morgantown Water Utility's Wellhead Protection Area. The contact for Morgantown Water Utility is Steve Rose and they can be reached at srose@morgantown.in.gov and 812-597-4626.

Des No 2001901 is not located in a Source Water Assessment Area.

The next step is to coordinate with the local public water supply, Morgantown Water Utility, regarding this project. Let me know what questions you have.

Sincerely,



Alisha Turnbow
Environmental Manager
Office of Water Quality
Drinking Water Branch, Groundwater Section
(317) 233-9158 • aturnbow@idem.IN.gov

Indiana Department of Environmental Management



IDEM values your feedback.
Please take two minutes and complete this brief survey.



From: Austin Clarridge <aclarridge@cmtengr.com>
Sent: Thursday, January 26, 2023 2:08 PM
To: Turnbow, Alisha <ATurnbow@idem.IN.gov>
Subject: Wellhead Protection Coordination and Early Coordination Letter: State Road 135 Pavement Rehabilitation (Des No.: 2001901)

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

Dear Ms. Turnbow,

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a project involving pavement rehabilitation in Morgan County, Indiana (INDOT Des No 2001901). Please see the attached letter, which is part of the early coordination phase of the environmental review process. The Indiana Department of Environmental Management's Wellhead Proximity Determinator website identified that this project is located within a Wellhead



United States Department of the Interior



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

In Reply Refer To:

January 09, 2023

Project Code: 2022-0048577

Project Name: INDOT SR 135 HMA Overlay Morgantown Des No.: 2001901

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

To Whom It May Concern:

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

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

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

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

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

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

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

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

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

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

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

Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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

Attachment(s):

- Official Species List
- Migratory Birds
- Wetlands

Official Species List

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

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

Project Summary

Project Code: 2022-0048577
 Project Name: INDOT SR 135 HMA Overlay Morgantown Des No.: 2001901
 Project Type: Road/Hwy - Maintenance/Modification
 Project Description: The proposed project consists of a pavement rehabilitation and minor drainage upgrades along SR 135 in Morgantown, Morgan County, Indiana. The project area also extends approximately 970 feet west along SR 252. The project is located in Sections 24 & 25, Township 11 North, and Range 2 East, on the USGS Morgantown, IN Quadrangle. The project will primarily involve pavement milling and resurfacing. Storm sewer improvements will occur along the Washington Street corridor. The project will also install Americans with Disabilities Act (ADA) compliant curb ramps at the intersections of Washington Street (SR 135) and Marion Street, Washington and Cross Street, Washington and Church Street, and Marion and Elm Street. Additionally, upgrades will be made to the pedestrian signals at the intersection of SR 135 and SR 252 and will include design drainage improvements throughout the project corridor. A check of the USFWS bat database on December 8, 2021 did not indicate the presence of endangered bats within 0.5 mile of the project area. A site visit by CMT on April 20, 2022 determined that no bats were present in any culverts or underneath the adjacent bridges. Habitat for bats is located within and adjacent to the project area in the form of man made structures and the Long Run and Indian Creek riparian corridors. No structures will be removed for the project. While tree clearing is not anticipated, removal of individual street trees may be required.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.36956925,-86.26321374206823,14z>



Counties: Morgan County, Indiana

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

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

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

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

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

Mammals

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

Insects

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

Critical habitats

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

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

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

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

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

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Field Sparrow <i>Spizella pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Aug 15
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20

NAME	BREEDING SEASON
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

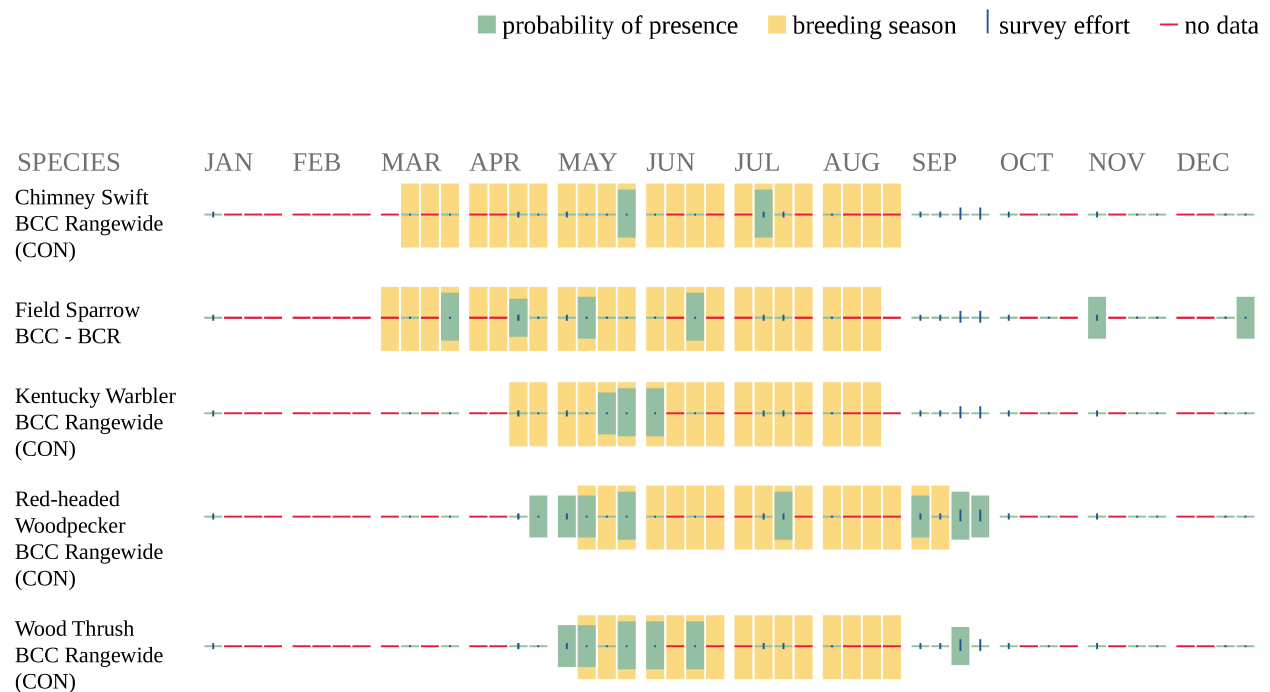
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly

important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

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

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

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

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPaC User Contact Information

Agency: Crawford, Murphy and Tilly Inc.
Name: Stephanie Spence
Address: 1404 Race Street
Address Line 2: Suite 200
City: Cincinnati
State: OH
Zip: 45202
Email: sspence@cmtengr.com
Phone: 5134278169

Lead Agency Contact Information

Lead Agency: Department of Transportation



United States Department of the Interior



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

In Reply Refer To:

February 08, 2023

Project code: 2022-0048577

Project Name: INDOT SR 135 HMA Overlay Morgantown Des No.: 2001901

Subject: Concurrence verification letter for the 'INDOT SR 135 HMA Overlay Morgantown Des No.: 2001901' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated February 08, 2023 to verify that the **INDOT SR 135 HMA Overlay Morgantown Des No.: 2001901** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

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

NOTE: The Service reclassified the NLEB as an endangered species on November 30, 2022. This ruling becomes effective on January 30, 2023. This NLAA determination does not require reinitiation. For projects requiring consultation after the effective date of January 30, 2023, please use the 2022 FHWA, FRA, FTA PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

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

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

- Monarch Butterfly *Danaus plexippus* Candidate

Project Description

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

Name

INDOT SR 135 HMA Overlay Morgantown Des No.: 2001901

Description

The proposed project consists of a pavement rehabilitation and minor drainage upgrades along SR 135 in Morgantown, Morgan County, Indiana. The project area also extends approximately 970 feet west along SR 252. The project is located in Sections 24 & 25, Township 11 North, and Range 2 East, on the USGS Morgantown, IN Quadrangle. The project will primarily involve pavement milling and resurfacing. Storm sewer improvements will occur along the Washington Street corridor. The project will also install Americans with Disabilities Act (ADA) compliant curb ramps at the intersections of Washington Street (SR 135) and Marion Street, Washington and Cross Street, Washington and Church Street, and Marion and Elm Street. Additionally, upgrades will be made to the pedestrian signals at the intersection of SR 135 and SR 252 and will include design drainage improvements throughout the project corridor. A check of the USFWS bat database on December 8, 2021 did not indicate the presence of endangered bats within 0.5 mile of the project area. A site visit by CMT on April 20, 2022 determined that no bats were present in any culverts or underneath the adjacent bridges. Habitat for bats is located within and adjacent to the project area in the form of man made structures and the Long Run and Indian Creek riparian corridors. No structures will be removed for the project. While tree clearing is not anticipated, removal of individual street trees may be required.

Determination Key Result

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

Qualification Interview

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

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

Automatically answered

Yes

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

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

Automatically answered

Yes

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

A) *Federal Highway Administration (FHWA)*

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

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

No

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

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

No

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

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

No

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

No

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

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

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

Yes

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

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

Yes

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

No

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

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

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

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

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

No

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

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

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

No

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

Yes

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

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

B) During the inactive season

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

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

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

No

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

Yes

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

B) During the inactive season

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

Yes

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

No

20. Are *all* trees that are being removed clearly demarcated?
Yes
21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?
No
22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?
No
23. Does the project include slash pile burning?
No
24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?
Yes
25. Is there *any* suitable habitat^[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

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

Yes

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

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

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

Yes

SUBMITTED DOCUMENTS

- *FinalMorgantown Culvert Table.pdf* <https://ipac.ecosphere.fws.gov/project/KWMAGWZ7VRBHNHRYN2WTLQHTNY/projectDocuments/114258352>

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

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

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

No

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

No

29. 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

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

Yes

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

Yes

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

No

33. 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?

Yes

34. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season^[1]?

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

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 use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season

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^[1] in excess of what is required to implement the project safely?

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

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

Yes

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**^[1] Indiana bat or NLEB roosts^[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

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

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

Yes

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?

N/A

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

N/A

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

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

0.1

4. Please describe the proposed bridge work:

Culvert headwall repair

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

Late Fall 2025

6. Please enter the date of the bridge assessment:

April 20, 2022

Avoidance And Minimization Measures (AMMs)

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

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.

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.

TREE REMOVAL AMM 1

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

LIGHTING AMM 1

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

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).

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 01, 2022. Keys are subject to periodic revision.

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

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

IPaC User Contact Information

Agency: Indiana Department of Transportation
Name: Taylor Schwering
Address: 185 Agrico Lane
City: Seymour
State: IN
Zip: 47201
Email: tschwering@indot.in.gov
Phone: 8127160748


Lead Agency Contact Information

Lead Agency: Department of Transportation

Bat/Bird Structure Assessments

Length (ft.)	Type	Birds?	Bats?	Water Connectivity
90	Concrete	No	No	N/A
85	Corrugated metal	No	No	N/A
36	Corrugated metal	No	No	N/A
39	Corrugated metal	No	No	N/A
54	Concrete	No	No	Drains to WET A
42	Corrugated metal	No	No	N/A
50	Corrugated plastic	No	No	N/A
100	Corrugated metal	No	No	N/A
38	Concrete Box	No	No	Drains to WET B

Structure	Latitude	Longitude	Height (in.)	Width (in.)
Culvert	37.3714	-86.25782	20	20
Culvert	39.37146	-86.25759	10	10
Culvert	39.36857	-86.26267	10	10
Culvert	39.36843	-86.26245	6	6
Culvert	39.36852	-86.26260	30	20
Culvert	39.36824	-86.26217	4	12
Culvert	39.36806	-86.2622	12	20
Culvert	39.36781	-86.26191	20	20
Culvert	39.36799	-86.26169	30	30

Assessment performed by: 
Austin Clarridge
on April 20, 2022

From: [Austin Clarridge](#)
To: [Austin Clarridge](#)
Subject: FW: IPaC Verification Request: SR 135 Pavement Rehabilitation (DES No. 2001901)
Date: Wednesday, February 8, 2023 8:30:43 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

From: Schwering, Taylor <TSchwering@indot.IN.gov>
Sent: Wednesday, January 18, 2023 9:44 AM
To: Stephanie Spence <sspence@cmtengr.com>
Cc: Dye, David <DDYE@indot.IN.gov>
Subject: RE: IPaC Verification Request: SR 135 Pavement Rehabilitation (DES No. 2001901)

External Message: This email was sent from someone outside of CMT. Please use caution with links and attachments from unknown senders or receiving unexpected emails.

Stephanie,

Thank you for the updates. The IPaC determination key for Des. 2001901 was accepted and sent to USFWS for their 14 day review period.

Thanks,

Taylor Schwering

Environmental Manager

185 Agrico Lane
Seymour, IN 47274

Office: (812) 524-3794

Email: tschwering@indot.in.gov



From: Stephanie Spence <sspence@cmtengr.com>
Sent: Tuesday, January 17, 2023 4:17 PM
To: Schwering, Taylor <TSchwering@indot.IN.gov>
Subject: RE: IPaC Verification Request: SR 135 Pavement Rehabilitation (DES No. 2001901)

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

Austin Clarridge

From: Baker, Mindy <MBaker2@indot.IN.gov>
Sent: Wednesday, December 8, 2021 11:40 AM
To: Austin Clarridge
Cc: Dye, David
Subject: RE: Bat Database Request- SR 135 Pavement Rehabilitation (Des No 2001901)

External Message: This email was sent from someone outside of CMT. Please use caution with links and attachments from unknown senders or receiving unexpected emails.

Austin,

I have conducted a check of the USFWS confidential bat database for Des No. 2001901, and the results are stated below.

A review of the USFWS database did not indicate the presence of endangered bat species within 0.5 mile of the project area. Additional investigation to confirm the presence or absence of bats in or on any culverts, bridges or structures affected by the project will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Also, although I am the contact for USFWS bat database checks, David Dye will be the contact for your IPAC review.

Mindy Baker

Environmental Manager

185 Agrico Lane

Seymour, IN 47274

Office: (812) 524-3746

Email: mbaker2@indot.in.gov



From: Austin Clarridge <aclarridge@cmtengr.com>
Sent: Tuesday, December 7, 2021 3:51 PM
To: Baker, Mindy <MBaker2@indot.IN.gov>
Subject: Bat Database Request- SR 135 Pavement Rehabilitation (Des No 2001901)

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

Mindy-

We are requesting a review of the bat database regarding the presence of endangered bats in or near the project area for the SR 135 Pavement Rehabilitation project (Des No 2001901). The project location is shown

SR 135 Pavement Rehabilitation (Des No. 2001901)

APPENDIX D: SECTION 106 OF THE NHPA



Minor Projects PA Project Assessment Form

Date: 12/14/2022

Project Designation Number: 2001901

Route Number: State Road (SR) 135 (locally Marion Street [north/south] and Washington Street [east/west])

Project Description: HMA Overlay Minor Structural, 0.33 mile south of the west junction of SR 252 (Indian Creek Bridge) to 0.37 mile north of the west junction of SR 252

The project consists of pavement replacement and an HMA overlay for 0.7 mile on State Road (SR) 135 in the town of Morgantown. The project is located 0.33 mile south of the west junction with SR 252 to 0.37 mile north of the west junction with SR 252. Additional improvements include replacement of sidewalk and curb ramp rehabilitation. The sidewalk along the east side of Marion Street (from its southern terminus to Elm Street) and along the north side of Washington Street (from Marion Street to Church Street) will be fully replaced. The sidewalk along Marion Street will be widened from 4' to 6'. The sidewalk along Washington Street will be the same width as the existing. The curbs along these sidewalks will also be replaced. All curb ramps at public street intersections and within the limits of the project will be replaced to be ADA-compliant. No roadway widening is anticipated. Acquisition of permanent and temporary right-of-way will be needed, but amounts are unknown at this time. The project vicinity is composed of primarily residential and commercial land uses.

The need for this project is due to the deteriorating pavement conditions along SR 135. The pavement currently has intermittent longitudinal and transverse cracking which left untreated, will continue to degrade after several more winter seasons. The deterioration of the pavement is worse in select areas of the project area with known ponding issues. The purpose of the project is to extend the service life of the existing pavement and correct minor drainage issues within the project limits.

The existing roadway is a two-lane facility that is classified as a minor arterial. Terrain in the vicinity of the project is level. The entire segment is free flowing except for an all-way stop controlled intersection at the SR 135/N. Marion St. and SR 252/Washington St. intersection.

The existing roadway can be divided into four distinct sections: South Project Limits to S. Marion St, S. Marion St. to SR 252/Washington St., West Junction SR 135/SR 252 to N. Church St., and N. Church St. to East Project Limits. The details of each roadway segment can be found in the sections below.

South Project Limits to S. Marion St

This section of SR 135 starts after the Indian Creek bridge and consists of two lanes with no parking; there are shoulders but no sidewalk or curb and gutter. There is a 2-foot shoulder on the west side, a 4-foot shoulder on the east side, and 12-foot lanes. For the Indian Creek bridge, there is 250 feet of guardrail on the east side of the roadway and 125 feet on the west side.

This section includes intersections with S. Church Street and Bloomington Pike, which are both two-way stops controlled (TWSC) intersections. The intersection with S. Marion Street is also a stop-controlled intersection on the minor approach. The speed limit is 30 mph north of S. Church Street, and 40 mph south of S. Church Street.

Per design plans for Des. No. 1600025 (bridge project at Indian Creek), just north of the bridge, the alignment uses a 649-foot horizontal curve to the west, followed by a 300-foot horizontal curve to the north. The result is a 475-foot shift of SR 135 to the west as it enters the Town of Morgantown. As SR 135 enters Morgantown, low speed urban criteria apply due the drop in posted speed limit to 30 mph and the more urban nature of a small town.

Surface drainage in this section of the project is conveyed south to Indian Creek via roadside ditches. Existing culverts convey water under SR 135 at the Bloomington Pike and S. Church Street intersections to the existing

Minor Projects PA Project Assessment Form

ditches along SR 135. Additionally, there is headwall failure and significant erosion at SR 135 between S. Marion Street and Bloomington Pike.

S. Marion St to SR 252/Washington St

The existing roadway section contains two 14-foot lanes, 1-foot of curb offset, curb, and sidewalk. There are no horizontal curves through this portion of the project. The profile is relatively level, with a high point at S. Marion Street and a low point near the intersection with Elm Street. From the intersection with S. Marion Street north to Elm Street, the exposed curb height on the east side of SR 135 is approximately 1.5 inches in height. Existing sidewalk on the east side of the roadway is in poor condition with widths of less than four feet in many areas.

The existing curb height on the west side of SR 135 is approximately 6 inches in height. From Elm Street to SR 252/Washington Street, the existing roadway section changes to 13-foot lanes with curb and gutter. The exposed curb height on the west side of SR 135 reduces to approximately 1.5 inches in height. The existing business adjacent to SR 135 at this location requires vehicles to drive over the sidewalk and curb and gutter to access parking on the east side of the building. Sidewalks and curb and gutter along the east side of SR 135 are of appropriate height or width and in good condition.

Surface drainage north of S. Marion Street is conveyed via the existing curb line north to the intersection with Elm Street. Grate inlets are present on the minor approaches of Elm Street to SR 135. No existing inlets are present along this section of SR 135 and there are known ponding issues in the vicinity of the intersection.

The TWSC intersection at Elm Street has curb ramps with detectable warning surfaces (DWS) but no marked crosswalks. The All Way Stop Control (AWSC) intersection of SR 135/N. Marion St and SR 252/Washington Street has crosswalks and curb ramps with DWS (reconstructed in 2013). The posted speed limit of this section is 30 mph. From Elm Street to Washington Street, the existing sidewalk on the east side of SR 135 contains a narrow band of decorative pavers. The paver band is approximately 2 feet in width and is adjacent to the back of curb. Additional information regarding the intersection of SR 135/N. Marion Street and SR 252/Washington Street can be found in the following section.

West Junction SR 135/SR 252 to N. Church St

Following the west junction with SR 252, SR 135 continues through Morgantown as a two-lane section with 12-foot lanes. An 8-foot parallel parking lane exists on the northside of the roadway and a 16-foot angled parking lane on the south side. This section has curb and gutter with wide sidewalks which extend to the existing adjacent building faces. Existing decorative street lighting is also present in this section of the project. There are no horizontal curves through this portion of the project. Based on existing contour information, the profile of SR 135 is very flat but continues to increase in elevation from the west junction with SR 252 to the intersection of N. Church Street.

Existing surface drainage is collected via combined curb and gutter inlets at the intersection corners and grate inlets located within the gutter line. Along this section of the project, the north curb line of SR 135/SR 252 has a curb height of approximately 1.5 inches between N. Marion Street and Cross Street. The reduced curb height has resulted in a portion of the existing curb box becoming ineffective. Traditionally, at locations on grade, the curb box acts as a factor of safety in cases where the grate becomes clogged with debris and unable to drain water from the roadway. This factor of safety has been reduced or eliminated at these locations.

In addition, at locations of reduced curb height, significant ponding will introduce flooding onto the adjacent sidewalk. During a site visit, a trench drain was noted in the sidewalk just east of the west junction of SR 135 and SR 252. Ponding issues were noted by a Morgantown representative during the field check at the intersection of SR 135 and N. Church Street.

Utilizing existing plan sets for projects in the vicinity, the ultimate outlet for the existing storm sewer system in Morgantown is anticipated to be Long Run Creek located 900 feet west of the west junction of SR 135 and SR

Minor Projects PA Project Assessment Form

252. The existing plan set shows an existing 48-inch pipe outlet along the north side of SR 252 and an existing 36-inch pipe outlet along the south side of SR 252 at this location. Additional sewer maps were unavailable at the time of this report.

The intersection of SR 135/N. Marion Street and SR 252/Washington Street exists as an all-way stop flasher. Existing curb ramps in all quadrants were reconstructed in 2013 and contain detectable warning surfaces. In select quadrants, the usable sidewalk width in some areas was reduced due to the presence of signs, street lighting and utilities. TWSC intersections exist at Cross St and N. Church St. These locations include curb ramps with DWS and marked crosswalks. The speed limit of this section is 30 mph.

N. Church St to East Project Limits

From N. Church Street east to Highland Street/Ash Street, the roadway section narrows. This section of SR 135 contains two 12-foot lanes with curb and gutter. On street parking is available from Church St to Highland St/Ash St on the south side of the roadway. There is existing sidewalk and a four-foot grass buffer on either side of SR 135 from N. Church Street to Highland Street/Ash Court. At this TWSC intersection, prior to the railroad crossing, curb ramps convey pedestrians across the minor approaches. The existing sidewalk on the north side of the road ends at the railroad crossing just east of Highland Street. The existing sidewalk located on the south side of SR 135 crosses over the existing railroad and continues east along Washington Street. The pedestrian crossing over the railroad occurs within the limits of the existing railroad warning devices.

East of the railroad crossing, SR 135 splits from Washington Street via a 675-foot horizontal curve and continues to the northeast. Given the urban nature of this section of SR 135, low speed urban criteria were used to evaluate the horizontal curve. For a posted speed of 30 mph, the horizontal curve meets normal crown criteria per IDM Figure 43-3D.

A large, landscaped island exists at the divergence point just east of the railroad crossing. SR 135 continues as a two-lane roadway with 12-foot lanes and four-foot shoulders. Several large, unpaved drives exist along the north side of SR 135 at this location.

Surface drainage from N. Church Street to the railroad crossing does not encounter any existing curb inlets. The existing roadway profile increases in elevation from west to east in this portion of the project at a profile grade of approximately 1.5%. It is anticipated that the lack of inlets through this section of the project contributes to the drainage problems noted at the N. Church Street intersection. Drainage east of the railroad tracks is conveyed via roadside ditches south to Indian Creek. There is headwall failure and significant erosion at the SR 135 & Washington Street divergence point adjacent to the railroad tracks.

Feature crossed (if applicable): N/A

City/Township: Morgantown/Jackson Township

County: Morgan County

Information reviewed (please check all that apply):

General project location map	<input checked="" type="checkbox"/>	USGS map	<input checked="" type="checkbox"/>	Aerial photograph	<input checked="" type="checkbox"/>
Written description of project area	<input checked="" type="checkbox"/>	General project area photos	<input checked="" type="checkbox"/>		
Previously completed archaeology reports	<input type="checkbox"/>	Interim Report	<input checked="" type="checkbox"/>		
Previously completed historic property reports	<input checked="" type="checkbox"/>	Soil survey data	<input checked="" type="checkbox"/>		
Bridge inspection information	<input type="checkbox"/>	SHAARD	<input checked="" type="checkbox"/>	SHAARD GIS	<input checked="" type="checkbox"/>
				Streetview Imagery	<input checked="" type="checkbox"/>

Minor Projects PA Project Assessment Form

Other (please specify): Indiana Historic Building, Bridges, and Cemeteries Map (IHBBM); “Historic Property Report for Bridge #135-55-01522A (NBI No. 26700) over Indian Creek Replacement & Roadway Reconfiguration Project” (Des. No. 0800163; Kroh; 2014) [Des. No. 1600025]; County GIS data (accessed via <https://morganin.elevatemaps.io/#extent=3272684.375,2979715.625,1616507.1180555555,1472192.8819444445,2245>); project information provided by Metric Environmental, LLC dated 4/11/2022 and on file at INDOT-CRO; Section 2 of the Minor Projects PA for Category B-1, Condition B-ii submitted 7/18/2022 and resubmitted 10/3/2022.

Please specify all applicable categories and condition(s) (conditions that are applicable are highlighted):

B-1. Replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when such projects are associated with roadway work such as surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking, 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 satisfied (*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 Division of Historic Preservation and Archaeology (DHPA) and any archaeological site form information will be entered directly into the State Historic Architectural and Archaeological Database (SHAARD) by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

One of the two conditions listed below must be satisfied (*EITHER Condition i or 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; **OR**
- ii. **Work occurs adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource under one of the two additional conditions listed below (*EITHER Condition a OR Condition b must be met and field work and documentation must be completed as described below*):**
 - a. No unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; **OR**
 - b. **Unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible individual above-ground resource or district and ANY ONE of the conditions (1, 2, or 3) listed below must be fulfilled:**
 1. **Unusual features described above will not be impacted by the project. Firm commitments regarding the avoidance of these features must be listed in the MPPA determination form and the NEPA document and must be entered into the INDOT Project Commitments Database. These**

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projects will also be flagged for quality assurance reviews by INDOT Cultural Resources Office during/after project construction.

2. Unusual features described above have been determined not to contribute to the significance of the historic resource by INDOT Cultural Resources Office in consultation with the SHPO based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.
3. Impacts to unusual features described above have been determined by INDOT Cultural Resources Office to be so minimal that they do not diminish any of the characteristics that contribute to the significance of the historic resource, based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.

Field work and documentation required for fulfillment of condition B-ii:

When the project takes place adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource, it must be field checked by INDOT Cultural Resources Office staff or other qualified professional historian (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) and photographic documentation must be prepared illustrating both the presence and/or absence of any unusual features along the project route adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource. This documentation must be submitted to INDOT Cultural Resources Office for review.

The only exception would be when it is determined that previous projects along the project route have eliminated the possibility that unusual features adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource exist. In this situation, documentation illustrating the modifications made through previous projects, such as replacement of curbs, curb ramps, or sidewalks, including plan sheets or contract documents and current photographs of the project area, must be submitted to the INDOT Cultural Resources Office for review. With such approved documentation, a site visit by a qualified professional is not required, unless questions arise during the review process. INDOT Cultural Resources Office has the discretion to require the project applicant's qualified professional conduct a site visit when it is not clear if unusual features may be present in the project area.

Are there any commitments associated with this project? If yes, please explain and include in the Additional Comments Section below. yes no

Does the project result in a de minimis impact to a Section 4(f) protected historic resource? If yes, please explain in the Additional Comments Section below. yes no

Additional Comments:

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 Morgan County. The following listed resource is present within or adjacent to the project area: Morgantown Historic District; NR-1863 (IHSSI #109-430-66001-038; 1840-1956) listed in the National Register on 6/21/2006 under Criteria A and C.

The *Morgan County Interim Report* (1993; Morgantown Historic District; Morgantown Scattered Sites) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD information was checked against the Interim Report hard copy maps. The following IHSSI resources are recorded adjacent to the project:

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IHSSI #109-430-67022 (House; 280 W. Washington St; c. 1900; “contributing”)
IHSSI #109-430-67023 (House; 260 W. Washington St; c. 1910; “contributing”)
IHSSI #109-430-67027 (House; E. Washington St; c. 1870; “contributing”)
IHSSI #109-430-67028 (House; SR 252; c. 1895; “contributing”)
IHSSI #109-430-67032 (House; 190 E. Washington St; c. 1890; “contributing”)
IHSSI #109-430-67033 (House; 349 W. Washington St; c. 1890; “contributing”)
IHSSI #109-430-67034 (House; 329 W. Washington St; c. 1890; “contributing”)
IHSSI #109-430-67035 (House; W. Washington St; c. 1890; “contributing”)
IHSSI #109-430-67038 (House; 189 S. Marion St; c. 1920; “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.

An INDOT-CRO historian performed a desktop review of the project area. The project is located along a two-lane road through a small town with residential and commercial properties lining the roadway. Due to the scope of work being limited to the current roadbed, sidewalks, and the curbs/curb ramps, only those properties that immediately border the project area have any potential for impacts. It should be noted that this review focuses only on the project areas related to sidewalk reconstruction and curb/curb ramp rehabilitation. The remaining project areas are limited to Category A-4 activities only.

The following project areas fall under Condition B-i of Category B-1 of the MPPA due to their scope of work being limited to curb, curb ramp, and sidewalk construction outside and not adjacent to a National Register-listed or National Register-eligible bridge, property, or historic district. No further review is required of these areas or intersections: 1) East side of SR 135 (Marion St.) from the southern project terminus north to Elm Street; 2) SR 135 (Marion St.) & S. Church Street; 3) SR 135 (Marion St.) & Bloomington Pike; 4) SR 135 (Marion St.) & S. Marion Street; 5) SR 135 (Marion St.) & W. Elm Street; 6) SR 135 (Washington St.) & Ash Street; and 7) SR 135 & E. Washington Street.

For the following project areas, a site visit by a qualified professional (QP) who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61 is required for application of Condition B-ii of Category B-1 of the MPPA to determine the presence of any unusual features such as brick or stone sidewalks, curbs or sidewalks/curb ramps; stepped or elevated sidewalks, curbs or sidewalks/curb ramps; or any other feature whose replacement or modification might constitute an adverse effect.

Within the Morgantown Historic District; NR-1863, properties on the south side of SR 135 (Washington Street) between Marion Street and Church Street (IHSSI #109-430-66019-66022, 66025, and 66026) and properties located east of the intersection of SR 135 & Church Street (IHSSI #109-430-66013-66018 and 66029-66035) will not be affected by the project due to the scope of work being limited to the current roadbed adjacent to these resources. No impact will occur to these properties listed in the National Register as part of the Morgantown Historic District. The other two properties (IHSSI #109-430-66037 and 66038) within the historic district are located along Church Street and are not considered adjacent to the project area.

Marion Street & Washington Street (intersection of SR 135 and SR 252)

The east side of the intersection is within the Morgantown Historic District; NR-1863. Curb ramps will be updated at this intersection and the sidewalk along the north side of SR 135 will be reconstructed. IHSSI #109-430-66001 (180 W. Washington St.; “contributing”) is located in the NE corner. **A clock is present near the existing curb ramp.** IHSSI #109-430-66036 (29 S. Marion St.; “non-contributing”) is located in the SE corner. **Modern aesthetic features of the district, including brick pavers, decorative lamp posts, planters, trash**

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receptacles, and shrubs, are present. In the NW corner, a parking lot of a late twentieth-century commercial property is present. The SW corner contains a twenty-first century gas station.

North side of SR 135 (Washington St.) from Marion Street east to Church Street including SR 135 & Cross Street

This area is entirely within the Morgantown Historic District; NR-1863. The sidewalk along the north side of SR 135 between Marion Street and Church Street will be reconstructed. IHSSI #109-430-66001 through 66003 and IHSSI #109-430-66005-66007, and 66010 are “contributing”-rated resources and IHSSI #109-430-66004 and IHSSI #109-430-66011 are “non-contributing”-rated resources along the north side of the roadway within the Morgantown Historic District. IHSSI #109-430-66008 and 66009 have been demolished as confirmed by the QP historian during the field visit to this project area. **Modern aesthetic features of the district, including brick pavers, decorative lamp posts, planters, trash receptacles, and shrubs, are present. In front of IHSSI #109-430-66001, a clock is present near the existing curb ramp. A bell with brick base from the demolished Morgantown School and flagpole are present in front of IHSSI #109-430-66006. IHSSI #109-430-66007 features a ginkgo tree and a brick paved walkway with a step leading from the back of the existing sidewalk up to the house.**

Right-of-Way and Section 4(f) information

As part of this project, approximately 0.7 acre of temporary right-of-way (ROW) will be needed along the north side of SR 135. This ROW is needed to grade the areas behind the sidewalk to be replaced in order to perpetuate sufficient drainage. None of the area to be temporarily acquired consists of the existing sidewalk; primarily the area consists of concrete walkways. While a portion of the brick walkway of IHSSI #109-430-66007 is within the area of temporary ROW, it will not be disturbed or altered by the project (see commitment below). For the purposes of this determination, INDOT and FHWA consider that the taking of the minimal amount of temporary ROW (approximately 0.7 acre) from the Morgantown Historic District; NR-1863 constitutes a *de minimis* 4(f) use of the property.

SR 135 (Washington St.) & Cross Street

This area is entirely within the Morgantown Historic District; NR-1863. Curb ramps will be updated at this intersection and the sidewalk along the north side of SR 135 will be reconstructed. IHSSI #109-430-66006 (120 W. Washington St.; “contributing”) is present in the NW corner. **A bell with brick base from the demolished Morgantown School and flagpole are present in the sidewalk.** The NE corner contains IHSSI #109-430-66007 (80 W. Washington St.; “contributing”). **The house features a mature ginkgo tree and a brick paved walkway with a step leading from the back of the existing sidewalk up to the house.** A modern wood ramp is present on the west side of the house connecting the wraparound porch to the sidewalk. IHSSI #109-430-66024 (79 W. Washington St.; “contributing”) is located in the SE corner. In the SW corner, IHSSI #109-430-66023 (109 W. Washington St.; “non-contributing”) is present. **Modern aesthetic features of the district, including brick pavers, decorative lamp posts, planters, trash receptacles, and shrubs, are present.**

SR 135 (Washington St.) & Church Street

This area is entirely within the Morgantown Historic District; NR-1863. Curb ramps will be updated at this intersection and the sidewalk along the north side of SR 135 west of Church Street will be reconstructed. In the NW corner, IHSSI #109-430-66011 (Car Lot; “non-contributing”) is present. The NE corner contains IHSSI #109-430-66012 (20 E. Washington St.; “notable”). IHSSI #109-430-66028 (19 E. Washington St.; “notable”) is present in the SE corner. IHSSI #109-430-66027 (7 W. Washington St.; “contributing”) is located in the SW corner. **Modern aesthetic features of the district, including brick pavers, decorative lamp posts, planters, trash receptacles, and shrubs, are present.**

A qualified professional historian from Metric Environmental, LLC who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61 conducted field work on June 15, 2022, as dictated by the fieldwork and documentation requirements of Condition B-ii of Category B-1 of the MPPA when projects are within or adjacent to National Register-listed or eligible resources. During the site visit, the historian surveyed the above-ground resources adjacent to the project area, identifying any previously unsurveyed historic districts or

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individual resources that warrant a “notable” or “outstanding” rating according to the IHSSI criteria. In addition, the historian identified all unusual features along the project route that are adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource. Photographic documentation from the field work is on file at INDOT-CRO. **The following commitments must be made in order for Condition B-ii.b-1 to apply to this project.**

- **Modern aesthetic features of the Morgantown Historic District; NR-1863 including brick pavers, decorative lamp posts, planters, trash receptacles, and shrubs, will be avoided, removed and reset, or replaced in-kind as part of the project unless representatives of Morgantown and/or the Morgantown Historic District indicate otherwise.**
- **The clock near the curb ramps in the NE corner of Marion Street & Washington Street in front of IHSSI #109-430-66001 (180 W. Washington St.; “contributing”) will be avoided or removed and reset as part of the project.**
- **The flagpole and Morgantown School bell with a brick base in front of IHSSI #109-430-66006 (120 W. Washington St.; “contributing”) will be avoided or removed and reset as part of the project.**
- **The ginkgo tree and the brick paved walkway with a step leading from the back of the existing sidewalk up to IHSSI #109-430-66007 (80 W. Washington St.; “contributing”) will be avoided by the project. A note stating “Do Not Disturb” will be added to the plan sheets.**

These commitments will be included in the environmental documentation for this project and entered into INDOT’s Project Commitment Database. If the commitments cannot be maintained, INDOT-CRO will need to reassess this project.

If it is later determined that any feature will be disturbed, INDOT Cultural Resources Office must be consulted prior to proceeding. If damage is discovered or occurs during construction, work should be stopped and INDOT-CRO notified. Notification must be sent to Kelyn Alexander, via both phone (317-519-7759) and email (kalexander3@indot.in.gov).

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

Archaeological Resources

An INDOT Cultural Resources Office (CRO) archaeologist, who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61, reviewed the MPPA request submitted by Metric Environmental, LLC. on April 11, 2022 and conducted a desktop review of the project area and completed an archaeological assessment.

With regard to archaeological resources, the proposed project is limited to a HMA overlay and replacing curbs and sidewalks within the project limits. The existing ROW consists of the State Road (SR) 135 two-lane roadway, turn lanes, shoulders, street parking, road grade and fill soils, road berm, roadside ditch, guardrail, sidewalks, curb, curb-ramps, storm sewers, signs, lights and utilities. The sidewalks and curbs to be updated have been improved in the recent past and any excavation to replace these features will not extend deeper than previous construction disturbance. The remainder of the project consists of HMA overlay within the paved SR 135 roadway. Although a small amount of right of way is being acquired (less than 0.5 acres of right of way) it is located within previously disturbed soils. According to SHAARD GIS, there are no archaeological sites located within or adjacent to the proposed project area. Based upon the disturbed nature of the ROW neither intact nor significant archaeological sites would likely be present. Based upon these considerations, there are no archaeological concerns provided that the project scope does not change.

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Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction within 100 feet of the discovery 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 Patricia Jo Korzeniewski

****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.*



Looking west at the north side of SR 135 within the Morgantown Historic District from Cross Street. From right to left looking at 120 W Washington Street (IHSSI #109-430-66006; “contributing”), 130 W Washington Street (IHSSI #109-430-66005; “contributing”), 140 W Washington Street (IHSSI #109-430-66004; “contributing”), 160 W Washington Street (IHSSI #109-430-66003; “contributing”), 170 W Washington Street (IHSSI #109-430-66002; “contributing”), and 180 W Washington Street (IHSSI #109-430-66001; “contributing”). Modern aesthetic features are visible along both sides of the roadway include brick pavers, trash receptacles, lamp posts, and shrubs. These features will be avoided, removed and reset, or replaced in-kind unless the town does not want them replaced.

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Looking east at 180 W Washington Street (IHSSI # 109-430-66001; “contributing”). The clock will be avoided or removed and reset as part of the project. Modern aesthetic features of the Morgantown Historic District, including pavers, lamp post, shrubs, will be avoided, removed and reset, or replaced in-kind unless the town does not want them replaced.

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Looking north at (from left to right) 140 W Washington Street (IHSSI #109-430-66004; “contributing”), 130 W Washington Street (IHSSI #109-430-66005; “contributing”), and 120 W Washington Street (IHSSI #109-430-66006; “contributing”). The flagpole and Morgantown School bell with brick base, located in front of 120 W Washington, will be avoided or removed and reset as part of the project.

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Looking northwest; house on the right is 80 W Washington Street (IHSSI #109-430-66007; “contributing”). The ginkgo tree and the brick paved walkway with a step leading from the back of the existing sidewalk up to the house will be avoided by the project. A note stating “Do Not Disturb” will be added to the plan sheets.

SR 135 Pavement Rehabilitation (Des No. 2001901)

APPENDIX E: RED FLAG INVESTIGATION & HAZARDOUS MATERIALS





INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
(855) INDOT4U

Eric Holcomb, Governor
Michael Smith, Commissioner

Date: May 31, 2022

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation (INDOT)
100 N Senate Avenue, Room N758-ES
Indianapolis, IN 46204

From: Austin Clarridge
Crawford, Murphy & Tilly, Inc.
8790 Purdue Road
Indianapolis, IN 46268
aclarridge@cmtengr.com

Re: RED FLAG INVESTIGATION
DES # 2001901, State Project
Pavement Rehabilitation
State Road 135 (SR 135), 0.33 miles south of SR 252 to 0.37 miles north of SR 252
Morgan County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The proposed project consists of a pavement rehabilitation of SR 135 in Morgantown, Morgan County, Indiana. The project area also extends approximately 970 feet west along SR 252. The project is located in Sections 24 & 25, Township 11 North, and Range 2 East, on the USGS Morgantown, IN Quadrangle. The project will primarily involve include pavement milling and resurfacing. Storm sewer improvements will occur along the Washington Street corridor. The project will also install Americans with Disabilities Act (ADA) compliant curb ramps at the intersections of Washington Street (SR 135) and Marion Street, Washington and Cross Street, Washington and Church Street, and Marion and Elm Street. Additionally, upgrades will be made to the pedestrian signals at the intersection of SR 135 and SR 252 and will design drainage improvements throughout the project corridor. Several small culverts and drainage pipes are located along the project area will be assessed for potential replacement for drainage improvements. None of the structures are listed in BIAS.

Bridge Work Included in Project: Yes No Structure #(s) _____

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).

Culvert Work Included in Project: Yes No Structure #(s) _____

Proposed right of way: Temporary # Acres _____ Permanent # Acres 0.22, Not Applicable

Type and proposed depth of excavation: Excavation will be required for ditch grading, curb ramp installation, and drainage improvements. Excavation up to 8 feet in depth is anticipated.

Maintenance of traffic (MOT): MOT will involve the use of flaggers and temporary closure of on-street parking. No road closures or detours are anticipated.

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

State Project: LPA:

Any other factors influencing recommendations: Several pipes not included in BIAS are located within the project corridor. Some pipes may be impacted by the project; however, no pipes will be impacted by an impaired river or stream. No impact is expected.

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Indicate the number of items of concern found within the 0.50 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	4*	Recreational Facilities	1
Airports ¹	N/A	Pipelines	1
Cemeteries	3	Railroads	1
Hospitals	N/A	Trails	2
Schools	N/A	Managed Lands	N/A

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

Explanation:

Religious Facilities*: Three (3) religious facilities, one (1) mapped and three (3) unmapped, are located within the 0.5 mile search radius. Two (2) facilities, Morgantown United Methodist and New Beginnings Community Church are located adjacent to the project area. Coordination with these facilities will occur.

Cemeteries: Three (3) cemeteries are located within the 0.5 mile search radius. The nearest cemetery, East Hill Cemetery, is located adjacent to the eastern terminus of the project. A Cemetery Development Plan may be required since this project is within 100 feet of the cemetery. Coordination with INDOT Cultural Resources will occur.

Recreational Facilities: One (1) recreational facility is located within the 0.5 mile search radius. Morgantown Town Park is located adjacent to the project area. Coordination with the Morgantown Park Board will occur.

Pipelines: One (1) pipeline segment is located within the 0.5 mile search radius. The pipeline segment, a natural gas pipeline operated by Indiana Gas Co., is located approximately 0.20 mile east of the project area. No impact is expected.

Railroads: One (1) railroad is located within the 0.50 mile search radius. The railroad segment, operated by the Indiana Railroad Company, crosses the project area. Standard coordination will occur with INDOT Utilities and Railroads by the Project Management Team or their consultant no later than the Ready for Contracts (RFC) date.

Trails: Two (2) trail segments are located within the 0.50 mile radius. The nearest trail segment, the CR700S/CR750S/CR800S/Old Hospital Road Corridors segment of Johnson County Trails, is located approximately 0.26 mile southeast of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
Indicate the number of items of concern found within the 0.50 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	11
Canal Structures – Historic	N/A	Lakes	3
NPS NRI Listed	N/A	Floodplain - DFIRM	19
NWI-Lines	9	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	3	Sinkhole Areas	N/A
Rivers and Streams	13	Sinking-Stream Basins	N/A

If unmapped water features are identified that might impact the project area, direct coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Explanation:

NWI- Lines: Nine (9) NWI line segments are located within the 0.5 mile search radius. Two (2) wetland line segments are located adjacent to the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

IDEM 303d Listed Streams and Lakes: Three (3) 303d Listed Stream segments are located within the 0.5 mile search radius. Long Run and Indian Creek are located adjacent to the project area and are listed as impaired for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

Rivers and Streams: Thirteen (13) river and stream segments are located within the 0.5 mile search radius. Long Run and Indian Creek are located adjacent to the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI - Wetlands: Eleven (11) wetlands are located within the 0.5 mile search radius. The nearest wetland is located approximately 0.05 mile west of the project area. No impact is expected.

Lakes: Three (3) lakes are located within the 0.5 mile search radius. The nearest lake is located approximately 0.30 mile south of the project area. No impact is expected.

Floodplains: Nineteen (19) floodplain polygons are located within the 0.5 mile search radius. The project area is located within five (5) floodplain polygons. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration			
Indicate the number of items of concern found within the 0.50 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	1	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Petroleum Wells: One (1) petroleum well is located within the 0.50 mile search radius. The well is located adjacent to the project area. Coordination with Indiana Department of Natural Resources (IDNR) Oil and Gas Division will occur.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Indicate the number of items of concern found within the 0.50 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	1	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	4*	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	1
Construction Demolition Waste	N/A	Institutional Controls	1*
Solid Waste Landfill	N/A	NPDES Facilities	1
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	2
Leaking Underground Storage (LUST) Sites	3	Notice of Contamination Sites	N/A

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

State Cleanup Sites: One (1) State Cleanup site is located within the 0.5 mile search radius. The site (Hyland and Sycamore Street Soil Contamination Site, intersection of East Sycamore Street and North Highland Street, AID 45293) is located approximately 0.26 mile north of the project area. No impact is expected.

Underground Storage Tank (UST) Sites: Four (4) UST sites, three (3) mapped and one (1) unmapped, are located within the 0.5 mile search radius. Three (3) UST sites are located within the project area.

Ed Green (29 South Marion Street, AID 42023)

This site is adjacent to Marion Street to the east. Three gasoline tanks were removed from this site in November 1992 including post removal soil sampling. All soil sample results were less than 100 parts per million (ppm) Total Petroleum Hydrocarbons (TPH), which was the closure level in effect at that time. No impact is expected.

Richard Clark (19 South Marion Street, AID 44726)

Based on property records, this site is assumed to be adjacent to the project area at the southwest corner of SR 252 and Marion Street and is included with the Ed Green property discussed above; however, there is no indication that these particular USTs were removed, and no soil sampling was completed. These tanks were removed in 1990, and according to the notification form contained water. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

Morgantown Mini Mart (249 West Washington Street, AID 111343)

The unmapped UST site is located on the southwest corner of the intersection of SR 252 and SR 135. IDEM conducted an Underground Storage Tank Inspection on January 21, 2021, and the facility was found to be out of compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9; however, documentation reviewed does not indicate that a release occurred. No impact is expected.

Leaking Underground Storage (LUST) Sites: Three (3) LUST sites are located within the 0.50 mile search radius. The three (3) LUST sites are located adjacent to the project area:

George Reinacker Service Station (339 South SR 135, AI ID 44644)

This facility is located adjacent to the project area to the east side of SR 135. Three (3) petroleum USTs and one (1) waste oil UST were removed from this site in 1990. At the time of tank removal, contaminant levels in soil were below applicable regulatory limits; however, contaminated water was present in the tank cavity. This water was treated on site using bioremediation and pumped to the sanitary sewer. This site received a No Further Action (NFA) by IDEM on December 21, 1990. No impact is expected.

Claudes Service Center (130 South Marion Street, AI ID 43822)

This site is located adjacent to the project area on the west side of SR 135. IDEM issued a No Further Action Approval Determination pursuant to 1994 UST Branch Guidance Manual on March 1, 2021. Soil sample results were non-detect for petroleum constituents, and groundwater samples were not evaluated during investigation of the release. No impact is expected.

Morgantown Service (320 East SR 135, AI ID 41407)

This site is located adjacent to the project area to the north of SR 135 near the eastern terminus of the project and currently operates as Indian Creek Outdoor Power but is the site of a former petroleum service station. In July 2019, two (2) USTs associated with the former service station were removed, two (2) additional tanks were closed in place, and approximately 1,600 tons of soil were removed and disposed of. At the time of closure, several volatile organic compounds (VOCs) and naphthalene were detected in soil above the Remediation Closure Guide (RCG) migration to groundwater screening levels (MTGSLs). Benzene and methyl-tert-butyl ether (MTBE) were detected in groundwater, and groundwater monitoring wells were installed. The latest groundwater sampling event in December 2019 detected benzene concentrations in one monitoring well above RCG residential closure limits, but below commercial/industrial limits. All other samples were below regulatory limits. If excavation occurs in this area, it is possible that petroleum contamination may be encountered. Proper handling, removal, and disposal of soil and/or groundwater may be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination. If groundwater monitoring wells are encountered in the project area, they should be maintained in place. If they cannot be maintained, then the contractor must contact the INDOT Project Manager who will notify the

INDOT Permits Group. The INDOT Permits Group will notify the permit holder that the well must be removed prior to construction. The permit holder is responsible for coordination with IDEM and the INDOT Permits Group for replacement or relocation of the well. If a property owner cannot be found in connection with the monitoring well, then well abandonment will be included in the project contract. All well abandonment activities must be completed by an Indiana Licensed Well Driller in accordance with IAC 312-13-10. Regardless of whether the well is abandoned by the contractor or the property owner, a record of well abandonment, including the well driller's license number, must be provided to the INDOT Project Manager once the well has been abandoned.

Brownfields: One (1) Brownfield site is located within the 0.50 mile search radius. The site is located approximately 0.26 mile north of the project area and is duplicated in "State Cleanup Sites" above. No impact is expected.

Institutional Controls*: One (1) unmapped institutional control site is located within the 0.50 mile search radius.

Morgantown Service (320 East SR 135, AI ID 41407)

Based on residual contamination resulting from the UST release discussed above, an Environmental Restrictive Covenant (ERC) was recorded on the property on June 5, 2020. The ERC specifically prohibits extraction of groundwater on the site. Coordination will be conducted with the IDEM Institutional Controls section (institutionalcontrols@idem.IN.gov) before RFC.

NPDES Facilities: One (1) NPDES facility is located within the 0.50 mile search radius. The site, Water System Improvements Project Contracts A & B (citywide, INR10L037), is located within the project area and is listed as located "citywide". However, the permit was terminated in 2020. No impact is expected.

NPDES Pipe Locations: Two (2) NPDES pipe locations are located within the 0.50 mile search radius. Both sites (IN0020303101 and IN0036820002Z) are operated by the Morgantown Wastewater Treatment Plant (WWTP) and located adjacent to the project area. Coordination with Morgantown WWTP will occur.

ECOLOGICAL INFORMATION SUMMARY

The Morgan County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/nature-preserves/files/np_morgan.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did not indicate the presence of ETR species. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species within 0.50 mile of the project area. Additional investigation to confirm the presence or absence of bats in any culverts affected by the project will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects"

RECOMMENDATIONS SECTION

INFRASTRUCTURE:

Religious Facilities: Two (2) religious facilities, Morgantown United Methodist and New Beginnings Community Church, are located adjacent to the project area. Coordination with these facilities will occur.

Cemeteries: East Hill Cemetery is located adjacent to the eastern terminus of the project. A Cemetery Development Plan may be required since this project is within 100 feet of the cemetery. Coordination with INDOT Cultural Resources will occur.

Railroads: One (1) railroad segment, Indiana Railroad Company, crosses the project area. Standard coordination will occur with INDOT Utilities and Railroads by the Project Management Team or their consultant no later than the RFC date.

Recreational Facilities: Morgantown Town Park is located adjacent to the project area. Coordination with the Morgantown Park Board will occur.

WATER RESOURCES:

A Waters of the US Report is recommended based on the presence of mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur for the following features:

The project area is located within five (5) floodplain polygons.

Two (2) stream segments, Long Run and Indian Creek, flow adjacent to the project area.

Two (2) wetland line segments flow adjacent to the project area.

IDEM 303d Listed Streams and Lakes: Long Run and Indian Creek are located adjacent to the project area and are listed as impaired for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. No pipes within the project area are impacted by impaired streams.

MINING/MINERAL EXPLORATION:

Petroleum Wells: One (1) petroleum well is located adjacent to the project area. Coordination with Indiana Department of Natural Resources (IDNR) Oil and Gas Division will occur.

HAZARDOUS MATERIAL CONCERNS:

Underground Storage Tank (UST) Sites:

Richard Clark (19 South Marion Street, AID 44726)

Based on property records, this site is assumed to be adjacent to the project area at the southwest corner of SR 252 and Marion Street and is included with the Ed Green property discussed above; however, there is no indication that these particular USTs were removed, and no soil sampling was completed. These tanks were removed in 1990, and according to the notification form contained water. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

Leaking Underground Storage (LUST) Sites:

Morgantown Service (320 East SR 135, AI ID 41407)

This site located adjacent to the project area to the north of SR 135 near the eastern terminus of the project and operates as Indian Creek Outdoor Power but is the site of a former petroleum service station. In July 2019, two USTs associated with the former service station were removed, two additional tanks were closed in place, and approximately 1,600 tons of soil removed and disposed of. At the time of closure, several volatile organic compounds (VOCs) and naphthalene were detected in soil above the Remediation Closure Guide (RCG) migration to groundwater screening levels (MTGSLs). Benzene and methyl-tert-butyl ether (MTBE) were detected in groundwater, and monitoring wells were installed. The latest sampling event in December 2019 detected benzene concentrations in one monitoring well above RCG residential closure limits, but below commercial/industrial limits. All other samples were below regulatory limits. If excavation occurs in this area, it is possible that petroleum contamination may be encountered. Proper handling, removal, and disposal of soil and/or groundwater may be necessary. If groundwater monitoring wells are encountered in the project area, they should be maintained in place. If they cannot be maintained, then the contractor

must contact the INDOT Project Manager who will notify the INDOT Permits Group. The INDOT Permits Group will notify the permit holder that the well must be removed prior to construction. The permit holder is responsible for coordination with IDEM and the INDOT Permits Group for replacement or relocation of the well. If a property owner cannot be found in connection with the monitoring well, then well abandonment will be included in the project contract. All well abandonment activities must be completed by an Indiana Licensed Well Driller in accordance with IAC 312-13-10. Regardless of whether the well is abandoned by the contractor or the property owner, a record of well abandonment, including the well driller's license number, must be provided to the INDOT Project Manager once the well has been abandoned.

Institutional Controls:

Morgantown Service (320 East SR 135, AI ID 41407)

Based on residual contamination resulting from the UST release discussed above, an Environmental Restrictive Covenant (ERC) was recorded on the property on June 5, 2020. The ERC specifically prohibits extraction of groundwater on the site. Coordination will be conducted with the IDEM Institutional Controls section (institutionalcontrols@idem.IN.gov) before RFC.

NPDES Pipe Locations: Two (2) NPDES pipe locations, IN0020303101 and IN0036820002Z, are operated by the Morgantown Wastewater Treatment Plant (WWTP) and located adjacent to the project area. Coordination with Morgantown WWTP will occur.

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects". Additional investigation to confirm the presence or absence of bats in any culverts affected by the project will be necessary.

INDOT Environmental Services concurrence:

Nicole Fohey-
Breting

Digitally signed by
Nicole Fohey-Breting
Date: 2022.06.03
06:49:11 -04'00'

(Signature)

Prepared by:

Austin Clarridge
Environmental Scientist
Crawford, Murphy, & Tilly, Inc.

Graphics:

A map for each report section with a 0.50 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

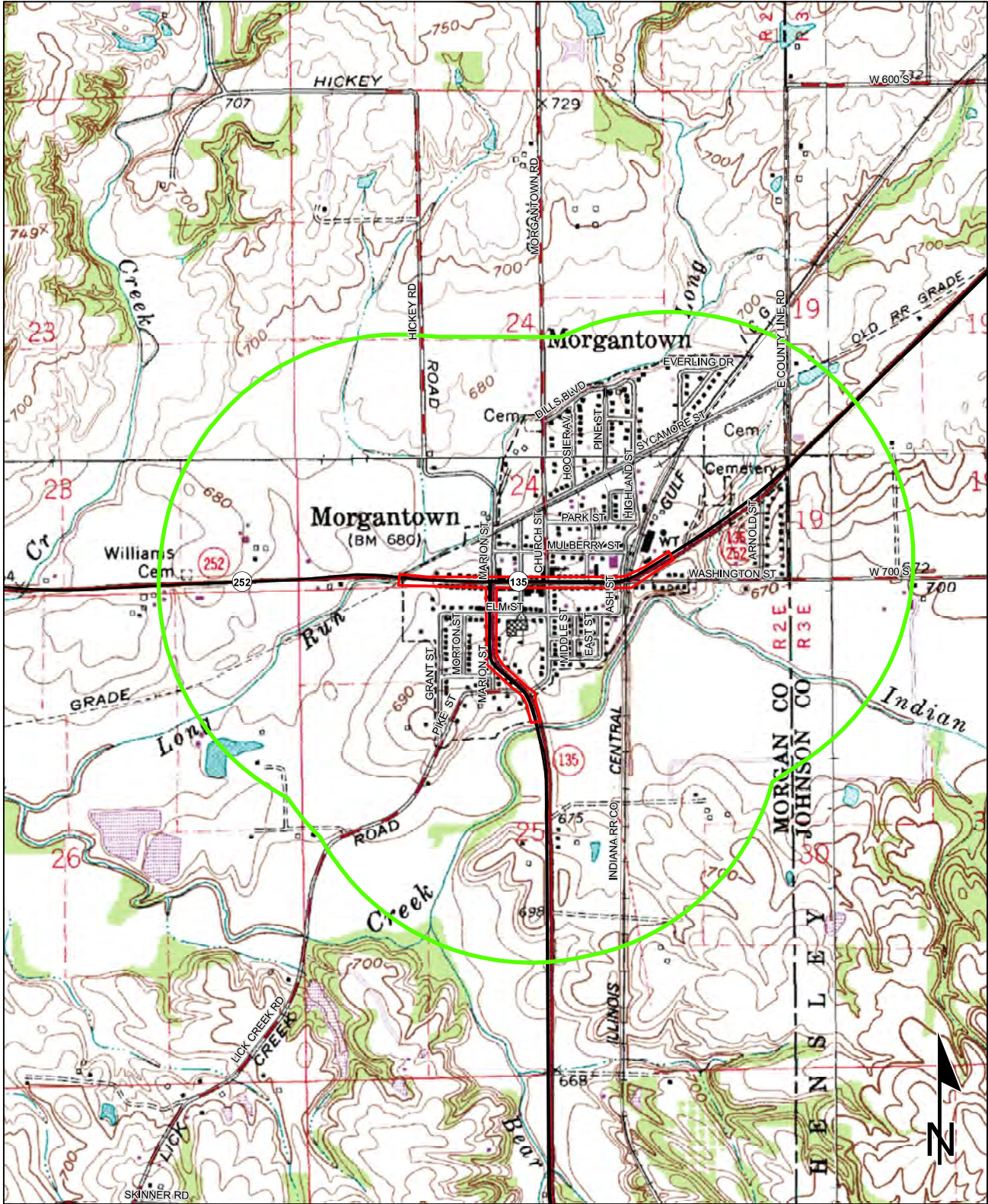
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
 State Road 135 (SR 135)
 Des. No. 2001901, Pavement Rehabilitation
 Morgan County, Indiana



Sources: 0.25 0.125 0 0.25 Miles
 Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
 Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
 Map Projection: UTM Zone 16 N Map Datum: NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

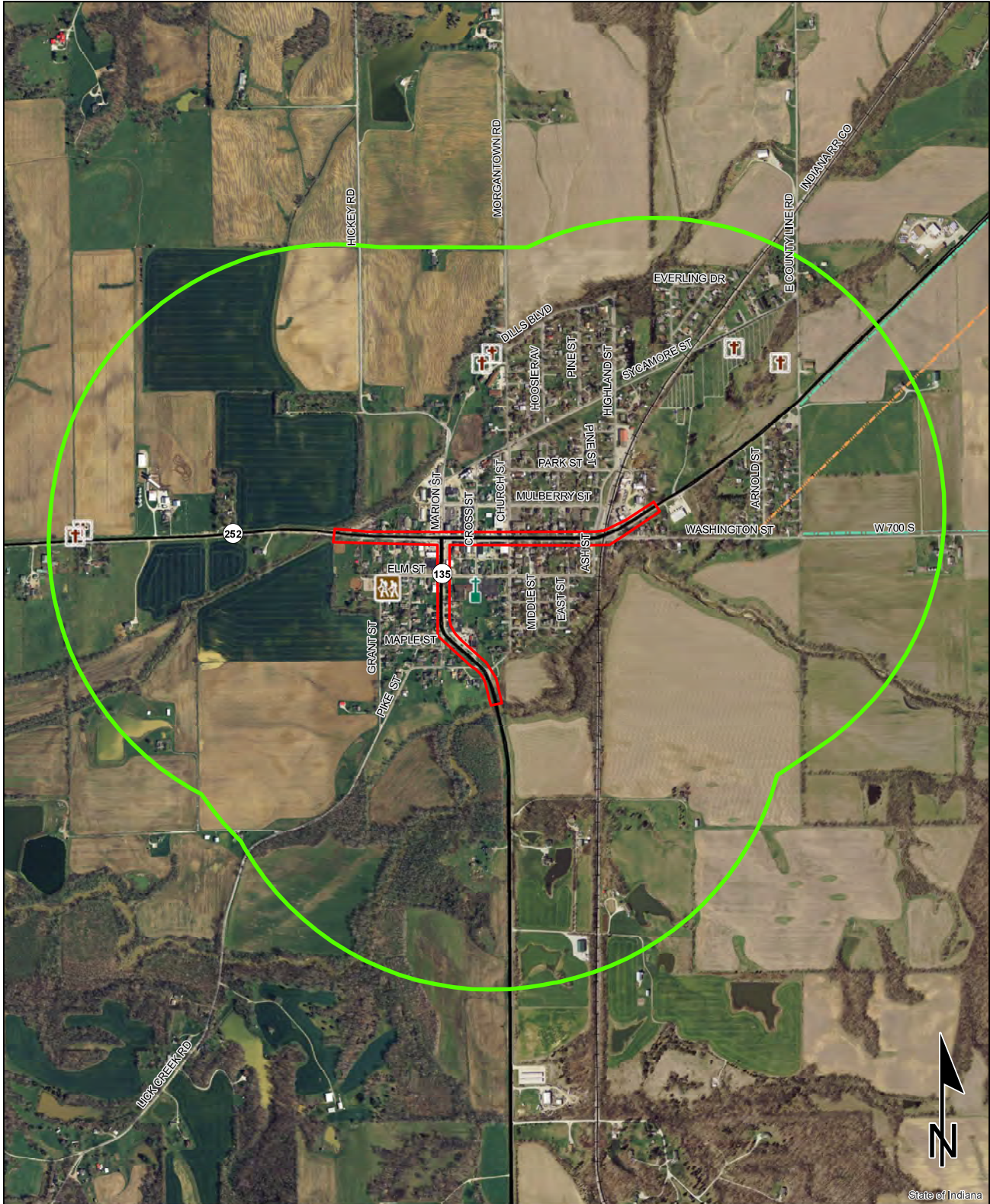
**MORGANTOWN,
 BEANBLOSSOM, TRAFALGAR,
 COPE QUADRANGLES
 INDIANA
 7.5 MINUTE SERIES**

Red Flag Investigation - Infrastructure

State Road 135 (SR 135)

Des. No. 2001901, Pavement Rehabilitation

Morgan County, Indiana



Sources: 0.2 0.1 0 0.2 Miles
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

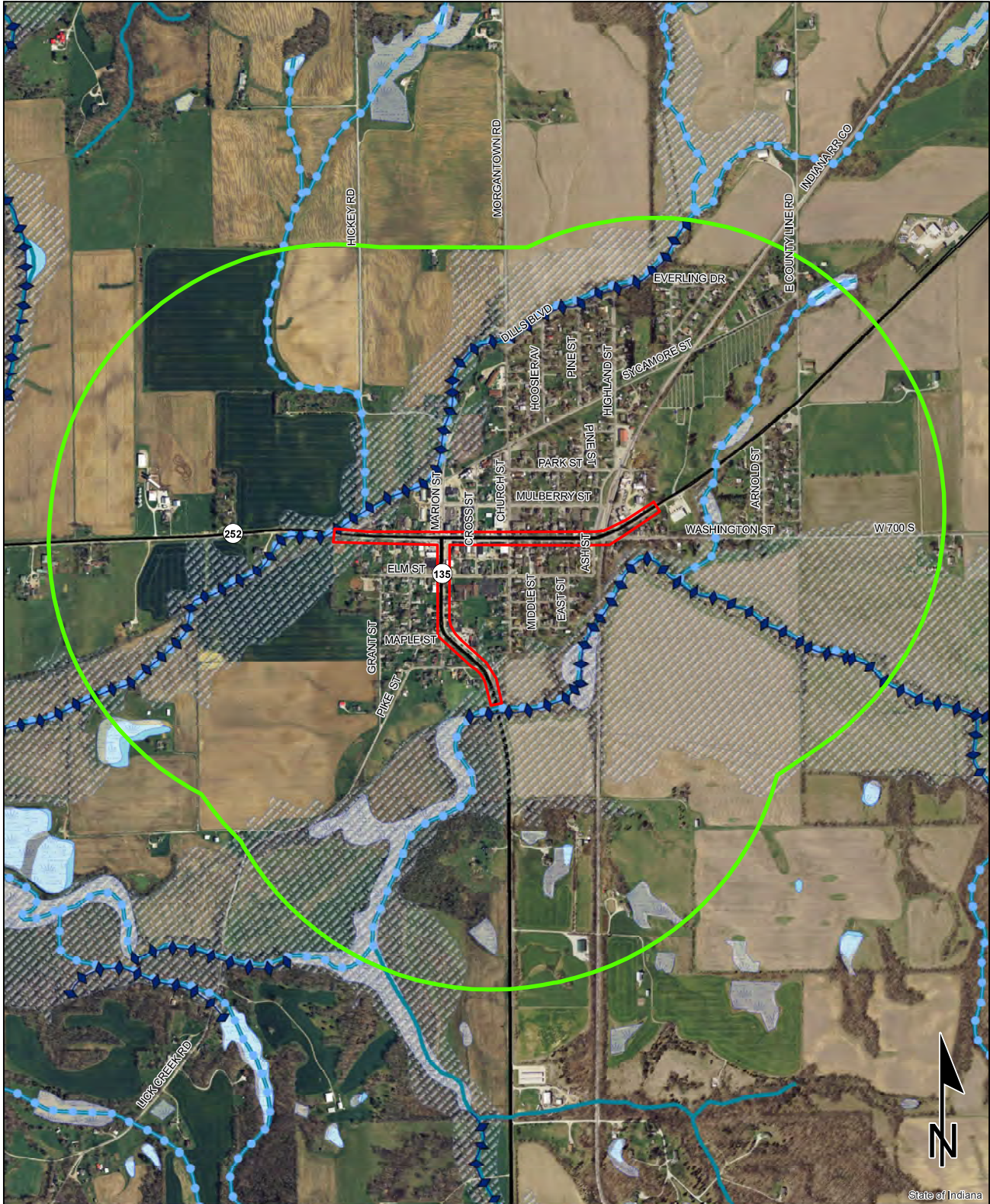
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources

State Road 135 (SR 135)

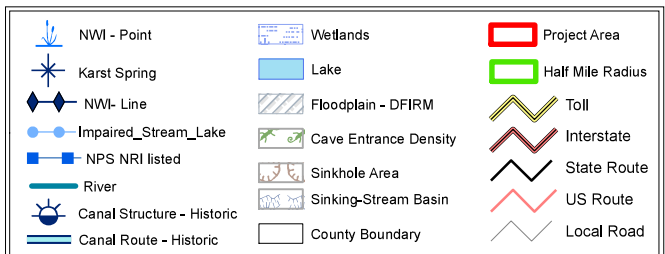
Des. No. 2001901, Pavement Rehabilitation

Morgan County, Indiana

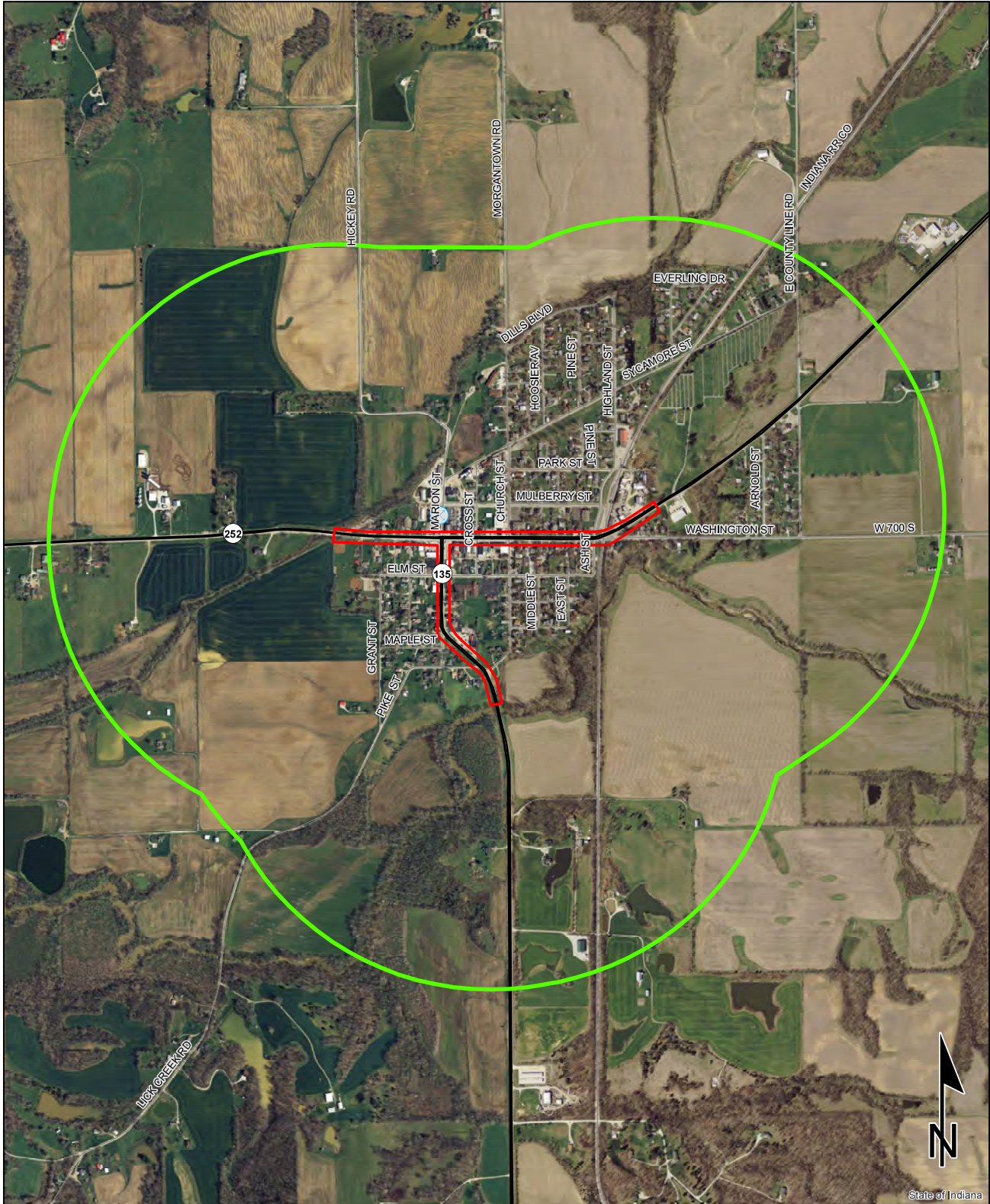


State of Indiana

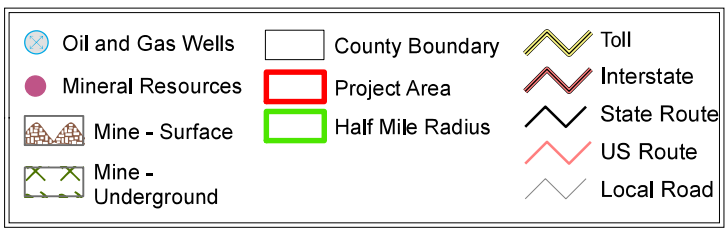
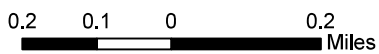
Sources: 0.2 0.1 0 0.2 Miles
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.



Red Flag Investigation - Mining/Mineral Exploration
 State Road 135 (SR 135)
 Des. No. 2001901, Pavement Rehabilitation
 Morgan County, Indiana



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

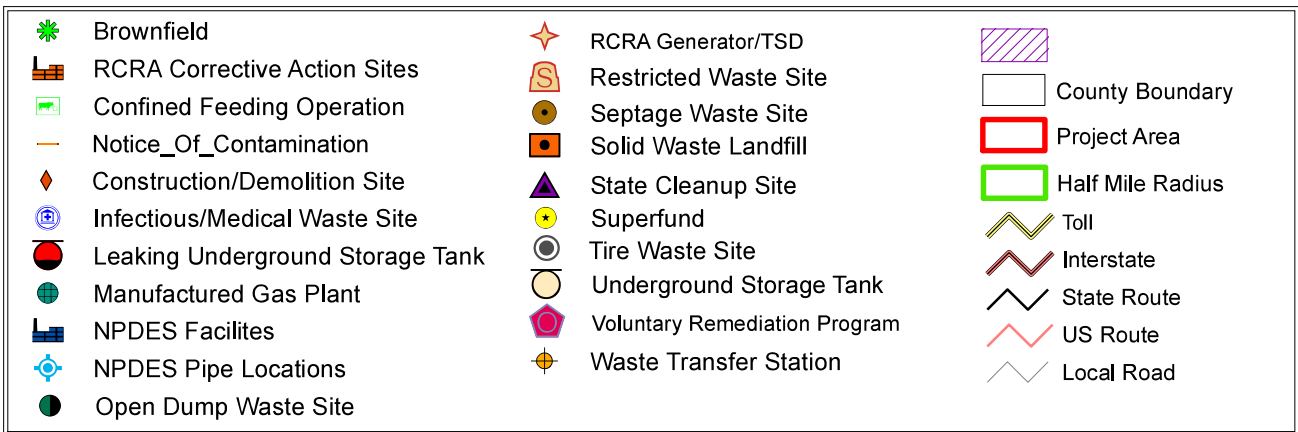


Red Flag Investigation - Hazardous Material Concerns

State Road 135 (SR 135)

Des. No. 2001901, Pavement Rehabilitation

Morgan County, Indiana



0.2 0.1 0 0.2
Miles

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

SR 135 Pavement Rehabilitation (Des No. 2001901)

APPENDIX F: WATER RESOURCES



Waters Report

State Road 135

City of Morgantown, Morgan County, Indiana
Pavement Rehabilitation

DES No: 2001901

COMPLETED DATE: JUNE 21, 2022
INDOT EWPO APPROVAL DATE:

Jacob Burskey
6/27/2022



PREPARED BY:

CRAWFORD, MURPHY & TILLY, INC.
8790 PURDUE ROAD
INDIANAPOLIS, INDIANA 46268

PREPARED FOR:

INDIANA DEPARTMENT
OF TRANSPORTATION
SEYMOUR DISTRICT OFFICE

Waters Report
SR 135 in Morgan County, Indiana
Pavement Rehabilitation
DES No: 2001901

Prepared by: Austin Clarridge
Contact Information: aclarridge@cmtengr.com, 614-468-1214
Company: Crawford, Murphy & Tilly, Inc.
Completed Date: June 21, 2022

PROJECT INFORMATION

Date of Field Reconnaissance: April 20, 2022

Location:

Sections 24 & 25, Township 11 North, Range 2 East
Morgantown Indiana, Quadrangle
Morgan County, Indiana
39.37051 Latitude, -86.26179 Longitude

PROJECT DESCRIPTION

Per the USGS Morgantown, IN Quadrangle Map, the investigated area is situated within Sections 24 & 25, Township 11 North, and Range 2 East.

Proposed improvements include a mill and overlay with patching of the existing State Road (SR) 135 and SR 252 throughout the project area. Mill and overlay depths will range from 1.5 to 4 inches deep. Curb ramps will be replaced to meet requirements of the Americans with Disabilities Act (ADA) as needed throughout the project area. The sidewalks will be replaced along the east side of SR 135 (Marion Street) and along the north side of SR 135 (Washington Street) between Marion Street and Church Street. These same limits will have curb replacement too. Additionally, where existing curbs and/or sidewalks are showing deterioration, those will be repaired. Since stormwater ponding is an issue in the downtown area, additional curb inlets will be installed throughout the project area to improve drainage. An existing 24" pipe culvert will also be replaced at the intersection of SR 135 and Church Street. A culvert headwall repair is expected at the eastern project limits on the north side of SR 135/SR 252. Several other small structures are located along the project area and will be assessed for potential replacement for drainage improvements.

Land use in the vicinity of the project is urban and consists primarily of commercial and residential land uses. Beyond the project area, land use is primarily agricultural.

The project has been programmed by INDOT as SR 135 Pavement Rehabilitation, DES No: 2001901.

The investigated area was established using the anticipated project footprint to construct the proposed improvements. The location of the project within Morgan County and the investigated area are shown on the attached mapping.

DESKTOP RECONNAISSANCE

SOILS

According to the Soil Survey Geographic (SSURGO) Database for Morgan County, Indiana, the investigated area does contain soil areas with nationally listed hydric soils.

Soil Name	Map Abbreviation	NRCS Hydric Soil Category	Hydric Range
Crosby-Miami silt loams, 2 to 4 percent slopes, eroded	CsB2	Predominantly Nonhydric	3%
Fincastle silt loam, tipton till plain, 0 to 2 percent slopes	FcA	Partially Hydric	15%
Genesee silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Ge	Nonhydric	0%
Miami silt loam, 6 to 12 percent slopes, eroded	MnC2	Predominantly Nonhydric	5%
Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Sh	Predominantly Nonhydric	4%
Whitaker Loam	Wr	Predominantly Nonhydric	10%
Xenia silt loam, 2 to 6 percent slopes, eroded	XeB2	Predominantly Nonhydric	5%

NATIONAL WETLAND INVENTORY (NWI) INFORMATION

There are no NWI features identified within the investigated area. There are two (2) NWI riverine features identified near the investigated area.

Wetland Type	Location
Riverine (R2UBH)- Indian Creek	Adjacent to the south project terminus
Riverine (R2UBH)- Long Run	Adjacent to the west project terminus

12 DIGIT HUC

051202011601- Barnes Creek-Indian Creek

FEMA FLOOD INSURANCE RATE MAP (FIRM)

According to the FEMA Flood Insurance Rate Map (FIRM), the western and southern portions of the project site are located within FEMA Flood Zone AE, which corresponds to the 1% annual chance of a flood with base flood elevations known. These flood zones are the FEMA designated 100-year floodplains for Long Run and Indian Creek, respectively.

A total of approximately 750 linear feet and 0.9 acres of the investigated area is located within Zone AE of the floodplain. A total of approximately 200 linear feet and 0.4 acres of the investigated area is located within the floodway.

ATTACHED DOCUMENTS

- Project Mapping (Project Location, Aerial, Topographic, NRCS Soils, NWI, 12 Digit HUC, and Floodplain)
- Photographs with Photo Location Map
- Wetland Data Sheets

FIELD RECONNAISSANCE

Two (2) wetlands, one (1) roadside ditch, one (1) riprap lined ditch, and one (1) drainage swale were identified within the investigated area during the onsite investigation for the presence of wetlands and other Waters of the United States (WOTUS) by Crawford, Murphy and Tilly, Inc (CMT).

The investigation for wetlands was conducted in accordance with the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the August 2010 Midwest Regional Supplement (Version 2.0) Manual*. Supporting materials used for identifying, delineating, and verifying wetlands included the soil survey report and hydric soil list for Morgan County, the State of Indiana 2016 Wetland Plant List and indicator status for the Midwest Region, topography, USGS topo map, NWI map, and the Field Indicators for Hydric Soils of the United States V 8.1, 2017. The wetland boundary was flagged and surveyed using a handheld GPS device with sub-foot accuracy.

The attached WOTUS Map depicts the location of identified surface water resources, including the wetland and upland data point locations, on an aerial photograph. Routine Wetland Determination data forms are attached. Representative photographs are provided.

STREAMS

No streams were observed within the investigated area.

WETLANDS

Two (2) wetlands were identified in the investigated area. A summary of the data points and the wetlands are provided in the tables below. Details on the soil, hydrology and dominant

vegetation for the wetlands are provided on the attached Routine Wetland Determination data forms. Photographs of the wetlands are attached within the WOTUS Photolog.

Data Point Summary Table				
Data Point	Vegetation	Soils	Hydrology	Wetland
A1	Yes	Yes	Yes	Yes
A2	No	No	No	No
B1	Yes	Yes	Yes	Yes
B2	No	No	No	No

Wetland Summary Table							
Wetland Name	WOTUS Photos	Lat/Long	Type	Quality	Likely Water of the U.S.?	Length (LF)	Total Area within Study Area (acres)
Wetland A	1-10	39.36842 °N -86.26274°W	PEM1	Poor	Yes	229'	0.04
Wetland B	13-18	39.367856°N -86.26155 °W	PEM1	Poor	Yes	131	0.02

WETLAND A

Wetland A is a 0.04-acre, palustrine emergent persistent (PEM1) wetland located along the west side of SR 135 within the investigated area. The wetland drains south through a culvert underneath Bloomington Pike to a swale along SR 135, through a culvert east under SR 135 to Wetland B, to RSD 1, then to Indian Creek immediately south of the investigated area. Indian Creek is a tributary to the White River, a Section 10 Traditional Navigable Water (TNW). Based on the connection to a downstream TNW, this wetland is likely federally jurisdictional.

WETLAND DATA POINT A₁

The vegetation was dominated by barnyard grass (*Echinochloa crus-galli*, FACW, 50%) and tussock sedge (*Carex stricta*, OBL, 25%) in the herbaceous layer. The vegetative community had a dominance test of >50%; therefore, the vegetation is hydrophytic. From the surface to 18 inches deep, the soil matrix had a color of 10YR 2/2 with 10% redox features with a color of

7.5YR 5/6. The soil at this site was clay loam and met the depleted matrix hydric soil indicator. Wetland A exhibited five primary hydrology indicators including aquatic fauna, algal mat, high water table, 4 inches of surface water and saturation to the surface. Wetland A also exhibited two secondary wetland hydrology indicators including drainage patterns and geomorphic position. All three wetland criteria including, vegetation, soils, and hydrology were met at this data point; therefore, data point A1 is within a wetland. Based on soil, hydrology, and vegetation modifications from the construction of SR 135, mowing, heavy stormwater inputs, and low diversity, Wetland A is a poor-quality wetland.

UPLAND DATA POINT A₂

Upland point A₂ was taken within a lawn west of Wetland A, to determine the boundary of Wetland A. The vegetation in this area failed to meet the requirements for the dominance test or the prevalence index and, therefore, is not hydrophytic. The soil profile failed to meet any hydric soil indicators. No wetland hydrology indicators were observed. None of the three wetland criteria were met; therefore, data point A₂ is not within a wetland. The boundary of Wetland A was determined by geomorphic position, the presence of hydrophytic plants and hydrology indicators. The shape of Wetland A was defined by a depression and area within the roadside drainage.

WETLAND B

Wetland B is a 0.02-acre, palustrine emergent persistent (PEM1) wetland located along the east side of SR 135 within the investigated area. The wetland drains south through RSD 1, then to Indian Creek immediately south of the investigated area. Indian Creek is a tributary to the White River, a TNW. Based on the connection to a downstream TNW, this wetland is likely federally jurisdictional.

WETLAND DATA POINT B₁

The vegetation was dominated by black willow (*Salix nigra*, OBL, 20%) in the sapling/shrub layer and by barnyard grass (*Echinochloa crus-galli*, FACW, 40%), hybridized cattail (*Typha x glauca*, 15%, OBL), and creeping jenny (*Lysimachia nummularia*, FACW, 15%) in the herbaceous layer. The vegetative community had a dominance test of >50%; therefore, the vegetation is hydrophytic. From the surface to 18 inches deep, the soil matrix had a color of 7.5YR 3/2 with 20% redox features with a color of 7.5YR 5/6. The soil at this site was clay loam and met the depleted matrix hydric soil indicator. Wetland B exhibited four primary hydrology indicators including algal mat, 3 inches of surface water, saturation to the surface, and hydrogen sulfide odor. Wetland B also exhibited three secondary wetland hydrology indicators including, geomorphic position, drainage patterns and a positive FAC-neutral test. All three wetland criteria including, vegetation, soils, and hydrology were met at this data point; therefore, data point B₁ is within a wetland. Based on soil, hydrology, and vegetation modifications from the construction of SR 135, heavy stormwater inputs, and 25% coverage of invasive species in the herbaceous layer, Wetland B is a poor-quality wetland.

UPLAND DATA POINT B₂

Upland point B2 was taken along a slope east of the wetland, to determine the boundary of Wetland B. The vegetation in this area failed to meet the requirements for the dominance test or the prevalence index and, therefore, is not hydrophytic. The soil profile failed to meet any hydric soil indicators. No wetland hydrology indicators were observed. None of the three wetland criteria were met; therefore, data point B2 is not within a wetland. The boundary of Wetland B was determined by geomorphic position, the presence of hydrophytic plants and hydrology indicators. The shape of Wetland B was defined by a depression and area within the roadside drainage.

OPEN WATER

No open water areas were observed within the investigated area.

OTHER FEATURES

ROADSIDE DITCHES

One (1) roadside ditch, Roadside Ditch 1 (RSD1), was identified within the investigated area during the field investigation. RSD1 is located within the investigated area along the east side of SR 135. The roadside ditch flows for approximately 3 feet within the investigated area. RSD1 is approximately 250 feet in length and connects Wetland B to Indian Creek. No water was observed in the ditch at the time of the field investigation. The substrate consists primarily of silt and much of RSD1 is vegetated. Portions of RSD1 are concrete or riprap lined. It is expected that the ditch flows for less than three months out of the year. RSD1 drains into Indian Creek, which drains west into the White River, a Section 10 TNW. Although RSD1 connects wetlands and Indian Creek and could impact the chemical, physical and/or biological integrity of the TNW, it does not have an OHWM or bed and bank and does not transport relatively permanent flow; therefore, RSD1 is likely not jurisdictional.

DRAINAGE SWALE

One (1) drainage swale without an OHWM was located within the investigated area along the west side of SR 135. This drainage swale was mostly vegetated. No surface water was observed within the drainage swale. The swale was formed by the construction of SR 135 and Bloomington Pike and is 66 feet in length. This drainage swale is expected to contain water only during heavy rain events. The drainage swale drains Wetland A into Wetland B, which ultimately flows into the White River, a Section 10 TNW. Although the drainage swale connects wetlands and the White River and could impact the chemical, physical and/or biological integrity of the TNW, it does not have an OHWM or bed and bank and does not transport relatively permanent flow; therefore, the drainage swale is likely not jurisdictional.

RIPRAP LINED DITCH

One (1) riprap lined ditch was located within the investigated area. The ditch is located within the investigated area along the north side of SR 252. The ditch is 48 feet in length and drains east along SR 252. The ditch was created from the construction of SR 252. No water was

observed in the ditch at the time of the field investigation. This ditch is expected to contain water only during heavy rain events. The ditch does not have an OHWM, and the substrate is entirely riprap. The ditch is assumed to drain to the stormwater system and eventually to Indian Creek, which ultimately flows into the White River, a Section 10 TNW. Although the ditch drains into Indian Creek and could impact the chemical, physical and/or biological integrity of the TNW, it does not have an OHWM or bed and bank and does not transport relatively permanent flow; therefore, the ditch is likely not jurisdictional.

CONCLUSIONS

Two (2) wetlands, one (1) non-jurisdictional roadside ditch, and one (1) non-jurisdictional drainage swale were identified within the investigated area. A total of two (2) wetlands (0.06 acres) are likely Waters of the U.S. Mitigation for wetland impacts is not anticipated for this project. These two wetlands are likely Waters of the U.S. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the Corps.

ACKNOWLEDGEMENT

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



Austin Clarridge
Environmental Scientist
Crawford, Murphy & Tilly, Inc.

Date: June 21, 2022

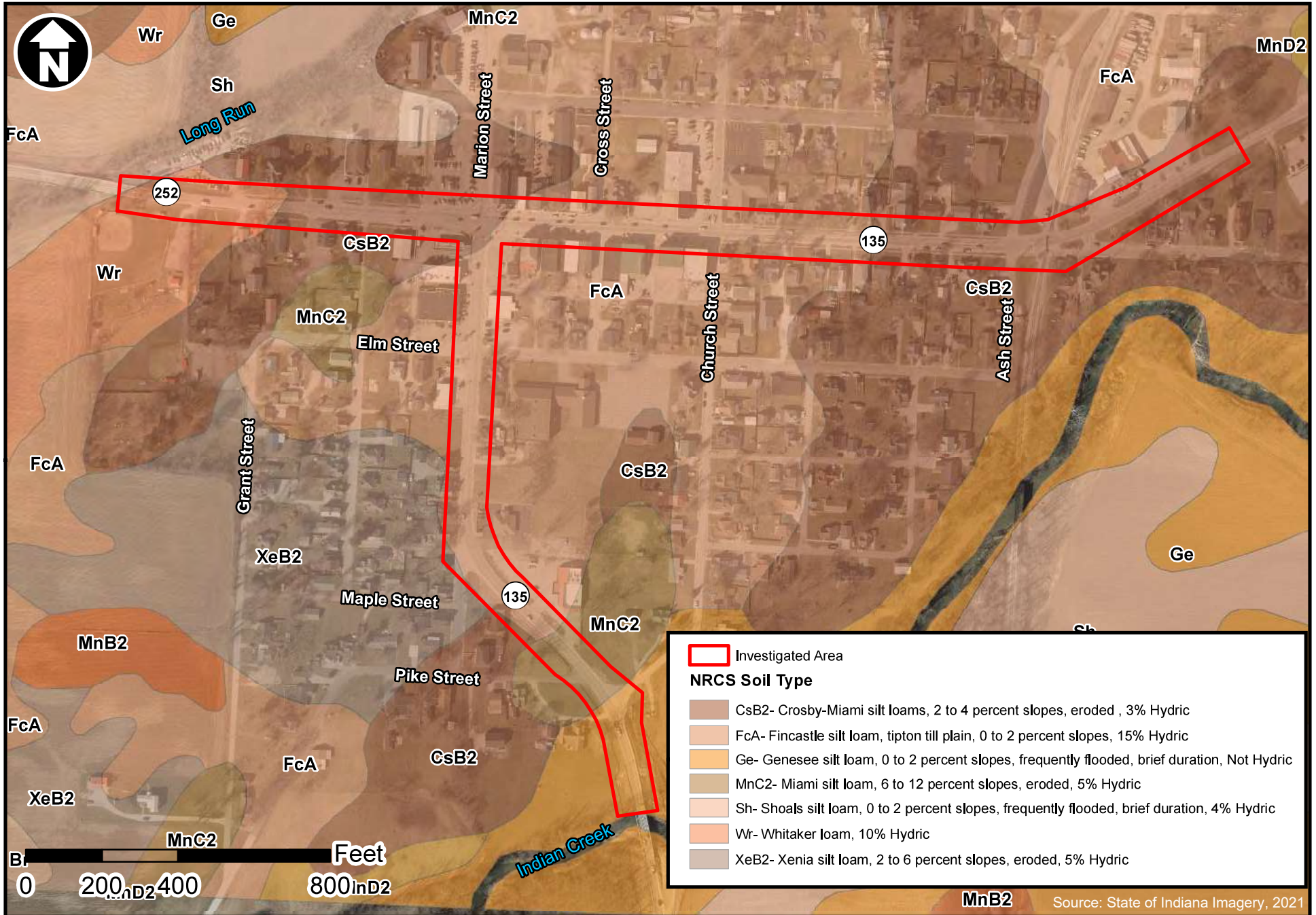


Alexandra Zelles - Reviewer
Environmental Scientist
Crawford, Murphy & Tilly, Inc.

Date: June 21, 2022

SUPPORTING DOCUMENTATION

- Maps
- Photos
- Wetland Delineation Data Sheets



SR 135 Pavement Rehabilitation (Des No 2001901)- Morgantown, IN

NRCS Soils Map

Author: Austin Clarridge; 5/16/22



SR 135 Pavement Rehabilitation (Des No 2001901)- Morgantown, IN

National Wetlands Inventory (NWI) Map

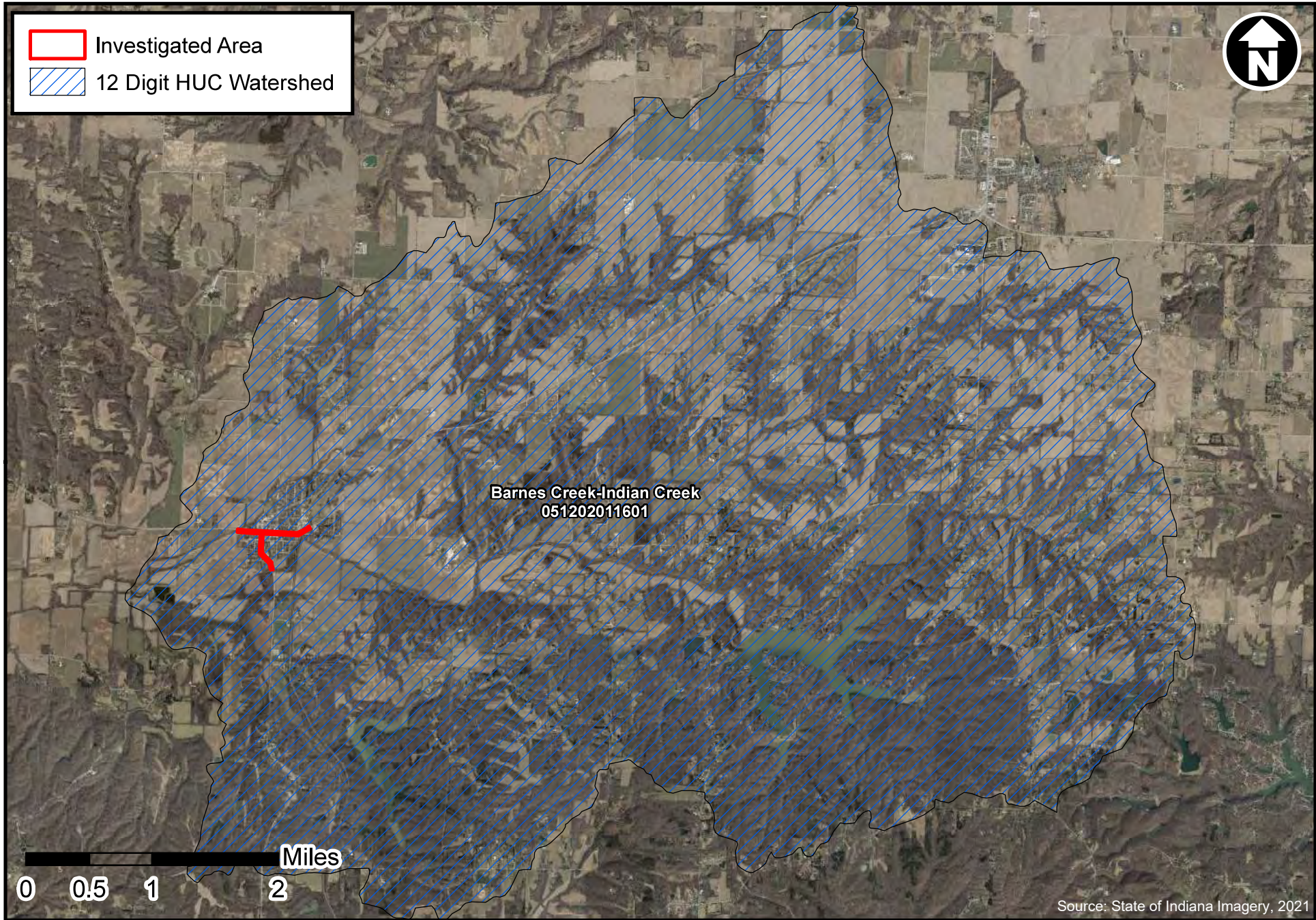
Author: Austin Clarridge; 5/16/22



SR 135 Pavement Rehabilitation (Des No 2001901)- Morgantown, IN

FEMA FIRM Floodplain Map

Author: Austin Clarridge; 5/16/22

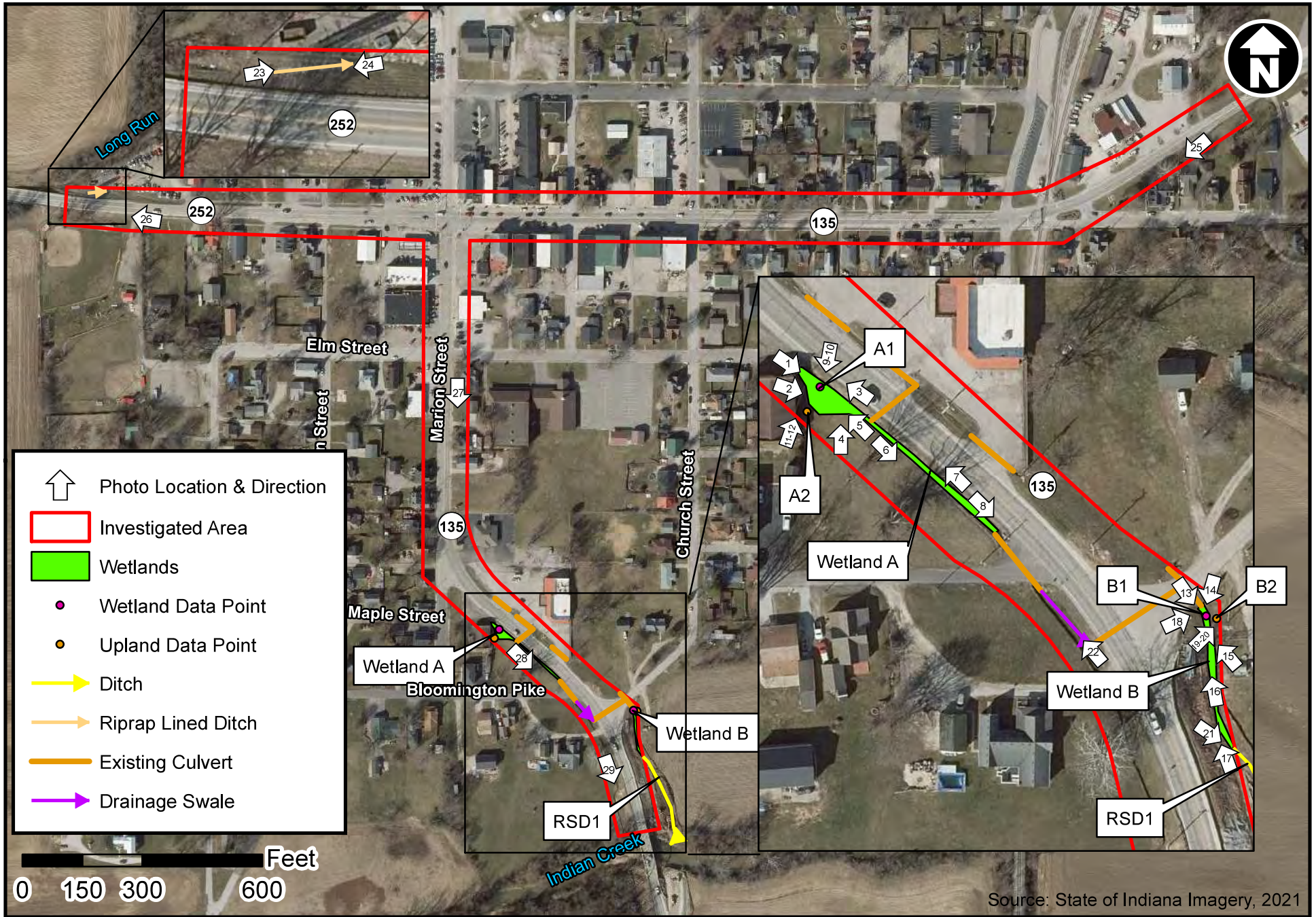


SR 135 Pavement Rehabilitation (Des No 2001901)- Morgantown, IN

12 Digit Hydrologic Unit Code (HUC) Watershed Map

Author: Austin Clarridge; 5/16/22

F-14



SR 135 Pavement Rehabilitation (Des No 2001901)- Morgantown, IN
Waters of the United States (WOTUS) Photo Key

Author: Austin Clarridge; 5/20/2022



1. View of Wetland A and surrounding terrain looking southeast along SR 135.
4/20/2022



2. View of Wetland A and surrounding terrain looking southeast along SR 135.
4/20/2022



3. View of Wetland A looking northwest along SR 135.
4/20/2022



4. View of Wetland A looking north.
4/20/2022



5. View of Wetland A looking northwest.
4/20/2022



6. View of Wetland A looking southeast.
4/20/2022



7. View of Wetland A looking northwest along SR 135.
4/20/2022



8. View of Wetland A looking southeast along SR 135.
4/20/2022



9. View of wetland data point A1 soil profile and close up of hydric features. The soil met the criteria for the Depleted Matrix hydric soil indicator. 4/20/2022



10. View of surface water and high water table at wetland data point A1. 4/20/2022



11. View of upland data point A2 soil profile to 12" due to a rock restrictive layer.
4/20/2022



12. View of upland data point A2 and surrounding vegetation.
4/20/2022



13. View of Wetland B and surrounding terrain looking southeast along SR 135.
4/20/2022



14. View of Wetland B looking southwest.
4/20/2022



15. View of Wetland B looking northwest.
4/20/2022



16. View of Wetland B looking north. Note surface water and algal crust.
4/20/2022



17. View of Wetland B looking north.
4/20/2022



18. View of wetland data point B1 soil profile and close up of hydric features. The soil met the criteria for the Depleted Matrix hydric soil indicator. 4/20/2022



19. View of upland data point B2 soil profile.
4/20/2022



20. View of upland data point B2 and surrounding vegetation.
4/20/2022



21. View of RSD1 looking southeast.
4/20/2022



22. View of drainage swale connecting Wetland A to Wetland B,
looking northwest along SR 135.
4/20/2022



23. View of riprap lined ditch looking east along SR 252.
4/20/2022



24. View of riprap lined ditch looking west along SR 252.
4/20/2022



25. Representative photo of upland areas looking southwest along SR 135.
4/20/2022



26. Representative photo of upland areas looking west along SR 252.
4/20/2022



27. Representative photo of residential lawns looking south along SR 135.
4/20/2022



28. View of upland maintained lawn along Wetland A.
4/20/2022



29. Representative photo of upland areas looking south along SR 135.
4/20/2022

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): June 1, 2022

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Austin Clarridge
8790 Purdue Road
Indianapolis, IN 46268

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAP-OP-R-_____

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: _____
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)**

State: IN County: Morgan City: Morgantown,
Center coordinates of site (lat/long in degree decimal format):
Lat. 39.38122 ° N, Long. -86.26321 ° W
Universal Transverse Mercator: 787400 m Easting (x) 118110 m
Northing (y) Name of nearest waterbody: Indian Creek/Long Run

Identify (estimate) amount of waters in the review area:

Non-wetland waters: N/A linear feet: _____ width (ft) and/or _____ acres.
Cowardin Class: _____
Stream Flow: _____
Wetlands: 0.06 acres.
Cowardin Class: PEM1

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: N/A
Non-Tidal: N/A

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

Office (Desk) Determination. Date: 5/26/22
 Field Determination. Date(s): 4/20/22

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring “pre-construction notification” (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant’s acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

This preliminary JD finds that there “*may be*” waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: General location map, aerial photograph, USGS topographic map, picture key map, NRCS soils map, NWI map, NHD map, 12 Digit HUC map, FEMA map
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. _____
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: _____
- Corps navigable waters' study: _____
- U.S. Geological Survey Hydrologic Atlas: _____.
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000; Morgantown, IN Quad
- USDA Natural Resources Conservation Service Soil Survey. Citation: _____
<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- National wetlands inventory map(s). Cite name:
<http://www.fws.gov/wetlands/Data/Mapper.html>
- State/Local wetland inventory map(s): _____
- FEMA/FIRM maps: _____
- 100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Indiana Aerial Photography 2021.
 Other (Name & Date): Site photographs 4/20/22.
- Previous determination(s). File no. and date of response letter: _____
- Other information (please specify): _____

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



6/1/2022

Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining the signature
is impracticable)

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
1 – Wetland A	39.36842 °N	-86.26274°W	PEM1	0.04	Subject to 404 jurisdiction - wetland
2 – Wetland B	39.36786°N	-86.26155 °W	PEM1	0.02	Subject to 404 jurisdiction - wetland

Austin Clarridge

From: Burskey, Jacob L <JBurskey@indot.IN.gov>
Sent: Monday, June 27, 2022 8:56 AM
To: Austin Clarridge
Cc: Curry, Jennifer; Nick Batta; Williamson, Brad
Subject: Approved WOTUS Report - Des No. 2001901 - SR 135 Morgantown
Attachments: 2001901 Waters Report Approved 6.27.2022.pdf

External Message: This email was sent from someone outside of CMT. Please use caution with links and attachments from unknown senders or receiving unexpected emails.

Austin,

Thank you for submitting the waters report for SR 135 pavement rehabilitation project in Morgan County, Designation 2001901. The approved report is attached and can also be found on Projectwise through this [link](#). *It is the responsibility of the Project Manager to forward a copy of this report to the Project Designer.*

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

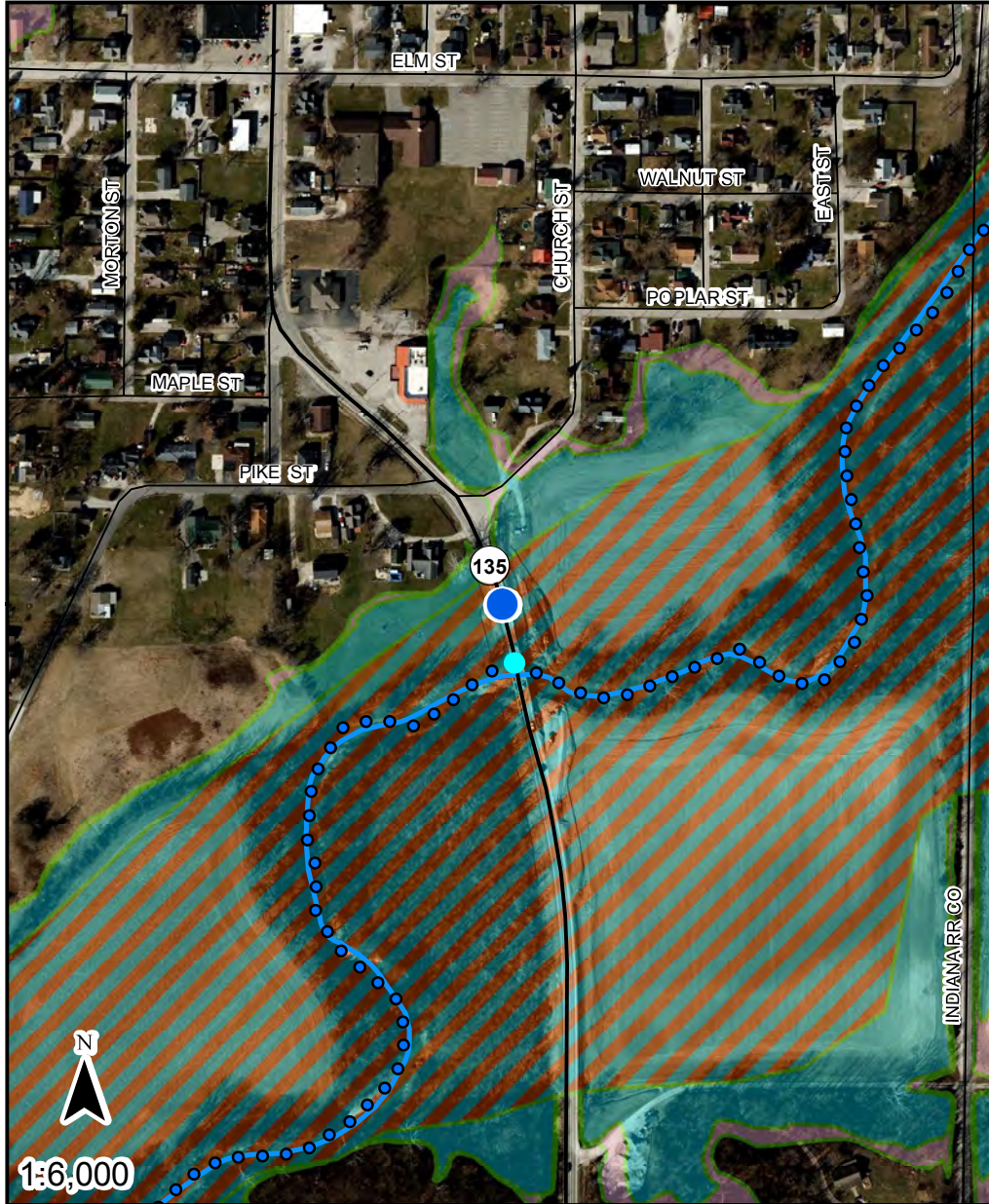
The Project Manager should notify the Ecology and Waterway Permitting Office if there is any change to the project footprint presented in this report. Such changes may require additional fieldwork and submittal of an updated waters report covering areas not previously investigated. *This report is only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

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

Jacob Burskey
Ecology and Waterway Permitting Specialist
100 N Senate Ave, N758 – Environmental Services
Indianapolis, IN 46204-2216
Phone: 317-646-2266
Email: jburskey@indot.in.gov



From: Austin Clarridge <aclarridge@cmtengr.com>
Sent: Tuesday, June 21, 2022 2:34 PM
To: Burskey, Jacob L <JBurskey@indot.IN.gov>
Cc: Curry, Jennifer <JCurry1@indot.IN.gov>; Nick Batta <nbatta@cmtengr.com>; Williamson, Brad <BWILLIAMSON@indot.IN.gov>
Subject: RE: WOTUS Report - Des No. 2001901 - SR 135 Morgantown



- Point of Interest
- Base Flood Elevation Point
- Flood Elevation Points**
 - STUDIED STREAM
- Rivers and Streams at least 1 square mile**
- Drainage Area (sq. miles)**
 - 10 - 100
- FEMA Zone AE Floodway; FEMA Administrative Floodway
- FEMA Zone AE
- Additional Floodplain Area; DNR .2 Percent Flood Hazard

Point of Interest Coordinates (WGS84)
 Long: **-86.2615699375**
 Lat: **39.3673241217**

The information provided below is based on the point of interest shown in the map above.

County: **Morgan**

Approximate Ground Elevation: **669.5 feet (NAVD88)**

Stream Name:
Indiancreek

Base Flood Elevation: **665.9 feet (NAVD88)**

Drainage Area: **Not available**

Best Available Flood Hazard Zone: **FEMA Zone AE Floodway**

National Flood Hazard Zone: **FEMA Zone AE Floodway**

Is a Flood Control Act permit from the DNR needed for this location? **yes**

Is a local floodplain permit needed for this location? **yes-**

Floodplain Administrator: **Laura Parker**

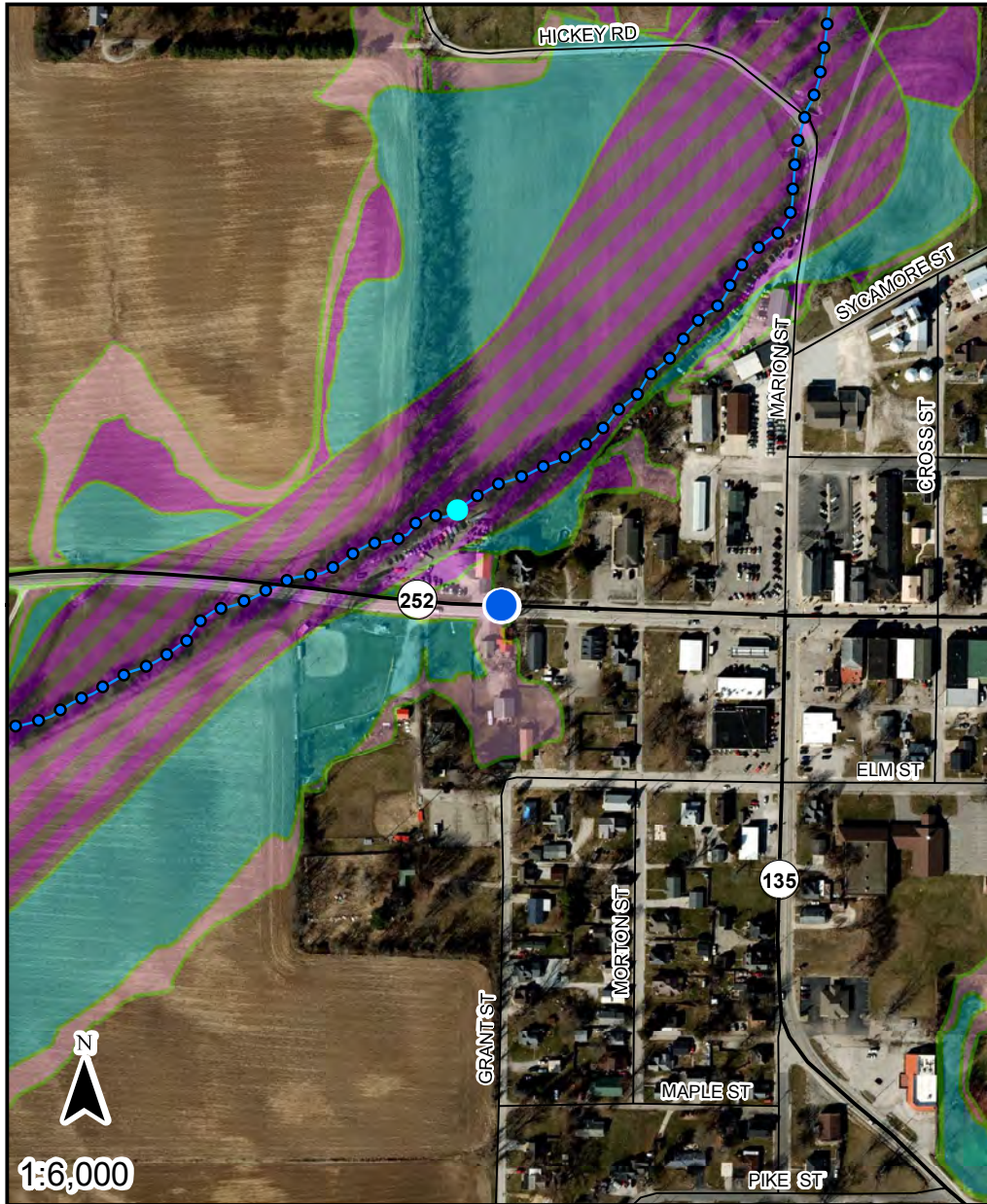
Community Jurisdiction: **Morgan County, County proper**

Phone: **(765) 342-1060**

Email: **lparker@morgancounty.in.gov**

US Army Corps of Engineers District: **Louisville**

Date Generated: 2/2/2023



- Point of Interest
- Base Flood Elevation Point
- Flood Elevation Points**
 - STUDIED STREAM
- Rivers and Streams at least 1 square mile**
- Drainage Area (sq. miles)**
 - 1 - 10
- DNR Approximate Floodway
- FEMA Zone AE
- DNR Approximate Fringe
- Additional Floodplain Area; DNR .2 Percent Flood Hazard

Point of Interest Coordinates (WGS84)
 Long: **-86.2653044476**
 Lat: **39.3713292373**

The information provided below is based on the point of interest shown in the map above.

County: **Morgan**

Approximate Ground Elevation: **669.2 feet (NAVD88)**

Stream Name:

Base Flood Elevation: **665.8 feet (NAVD88)**

Long Run

Drainage Area: **Not available**

Best Available Flood Hazard Zone: **0.2 PCT ANNUAL CHANCE FLOOD HAZARD**

National Flood Hazard Zone: **0.2 PCT ANNUAL CHANCE FLOOD HAZARD**

Is a Flood Control Act permit from the DNR needed for this location? **See following pages**

Is a local floodplain permit needed for this location? **Contact your local Floodplain Administrator-**

Floodplain Administrator: **Jeff Downey, DPW Manager**

Community Jurisdiction: **Town Of Morgantown, City proper**

Phone: **(812) 597-4626**

Email: **jdowney.mtowndpw@aol.com**

US Army Corps of Engineers District: **Louisville**

Date Generated: 2/2/2023

SR 135 Pavement Rehabilitation (Des No. 2001901)

APPENDIX G: PUBLIC INVOLVEMENT





INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Land & Aerial Survey Office
Division of Materials & Tests Building
120 South Shortridge Road
Indianapolis, Indiana 46219-6705

PHONE: (317) 610-7251
FAX: (317) 356-9351

Eric J. Holcomb, Governor
Joe McGuinness, Commissioner

06/02/2021

Town Of Morgantown
P O Box 416 Morgantown, In 46160

NOTICE OF SURVEY

Dear Property Owner:

The Indiana Department of Transportation (INDOT) has selected USI Consultants Inc., to perform a survey for the proposed Road Improvement project on SR 135 & SR 252, Des No2001901, in Morgan County, Indiana. A portion of this survey work may be performed on your property in order to provide design engineers information for project design. The survey work will include mapping the location of features such as trees, buildings, fences, drives, ground elevations, etc. The survey is needed for the proper planning and design of this highway project.

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

Indiana Code 8-23-7-26 allows the USI Consultants Inc., as the authorized employees of INDOT, *Right of Entry* to the project site (including private property) upon proper notification. A copy of a Notice of Survey discussion sheet, as found on INDOT's website (<http://www.in.gov/indot/2888.htm>), is attached to this letter. Pursuant to Indiana Code 8-23-7-27, this letter serves as written notification that we will be performing the above noted survey in the vicinity of your property after 06/02/2021.

USI Consultants will show you their identification, if you are available, before coming onto your property.

If you own but are not the tenant of this property (i.e., rental, sharecrop), please inform us so that we may also contact the actual tenant of the property prior to commencement of our work. If you have any questions or concerns regarding our proposed survey work or schedule, please contact the Survey Manager. This contact information is as follows:

Mark Schepers, PLS
Survey Manager
8415 E. 56th St. Suite A
Indianapolis, IN 46216
mschepers@usiconsultants.com
317-522-2486



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Land & Aerial Survey Office
Division of Materials & Tests Building
120 South Shortridge Road
Indianapolis, Indiana 46219-6705

PHONE: (317) 610-7251
FAX: (317) 356-9351

Eric J. Holcomb, Governor
Joe McGuinness, Commissioner

Under Indiana Code 8-23-7-28, you have a right to compensation for any damage that occurs to your land or water as a result of the entry or work performed during the entry. To obtain such compensation, you should contact the Seymour District Real Estate Manager. The District Real Estate Manager can provide you with a form to request compensation for damages. Once you fill out this form, you can return it to the District Real Estate Manager for consideration. If you are not satisfied with the compensation that INDOT determines is owed to you, Indiana Code 8-23-7-28 provides the following:

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

Thank you in advance for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark A. Schepers', is written over a horizontal line.

Mark Schepers, PLS
Survey Manager

SR 135 Pavement Rehabilitation (Des No. 2001901)

APPENDIX H: AIR QUALITY



Indiana Department of Transportation (INDOT)
 State Preservation and Local Initiated Projects FY 2024 - 2028

SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Morgan County																	
Indiana Department of Transportation	39791 / 1593119	Init.	SR 44	Bridge Deck Overlay	Seymour	0	STBG	\$2,141,000.00	Bridge Construction	CN	\$1,410,400.00	\$352,600.00	\$1,763,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: 5.10 miles E of SR 37 over South Prong Stotts Creek																	
Comments:Include DES 1593119																	
Indiana Department of Transportation	41467 / 1900067	Init.	SR 67	Small Structure Replacement with Bridge	Seymour	0	NHPP	\$8,982,537.00	Bridge Consulting	PE	\$101,760.00	\$25,440.00	\$127,200.00				
									Bridge Construction	CN	\$4,296,148.14	\$1,074,037.03	\$5,370,185.18				
Performance Measure Impacted: Bridge Condition																	
Location: 5.88 mi N of SR 39																	
Comments:Include DES: 1801040, 1801041, 1801042, 1900067, 1900088, 1902163, and 2001541																	
Morgan County	41920 / 1802881	Init.	IR 5020	Replace Superstructure	Seymour	.02	STBG	\$1,199,000.00	Local Funds	CN	\$0.00	\$186,000.00	\$186,000.00				
									Local Bridge Program	CN	\$745,000.00	\$0.00	\$745,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: Robb Hill RD over Sycamore Creek																	
Comments:Include DES 1802881																	
Martinsville	41990 / 1802868	Init.	ST 5320	Bike/Pedestrian Facilities	Seymour	.57	STBG	\$1,478,000.00	Local Transportation Alternatives	CN	\$1,175,000.00	\$0.00	\$1,175,000.00				
									Local Funds	CN	\$0.00	\$294,000.00	\$294,000.00				
Performance Measure Impacted: Reliability and Freight Reliability																	
Location: Along Pike St. beginning at Graham St. then 7 blocks to the east to the intersection of 2nd St.																	
Comments:Include DES 1802868, 1802869																	
Indiana Department of Transportation	42218 / 1802998	Init.	SR 44	Replace Superstructure	Seymour	0	STBG	\$1,600,478.00	Bridge Construction	CN	\$1,461,600.00	\$365,400.00	\$1,827,000.00				
									Bridge Consulting	PE	\$64,800.00	\$16,200.00	\$81,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: 10.70 miles E of SR 37																	
Comments:Include DES 1802998, 1900153																	
Indiana Department of Transportation	43333 / 2001901	Init.	SR 135	HMA Overlay Minor Structural	Seymour	.71	STBG	\$2,310,000.00	Road Construction	CN	\$1,214,400.00	\$303,600.00			\$1,518,000.00		
									Road ROW	RW	\$196,000.00	\$49,000.00	\$245,000.00				

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

SR 135 Pavement Rehabilitation (Des No. 2001901)

APPENDIX I: ADDITIONAL STUDIES



Land and Water Conservation Fund Summary Report

Indiana; Morgan County

(Unofficial report; contact us to learn where to find official information: <https://lwcf.tplgis.org/contact>)

January 26, 2023

Number of projects funded:

4

Year range of funding:



1972 - 2012

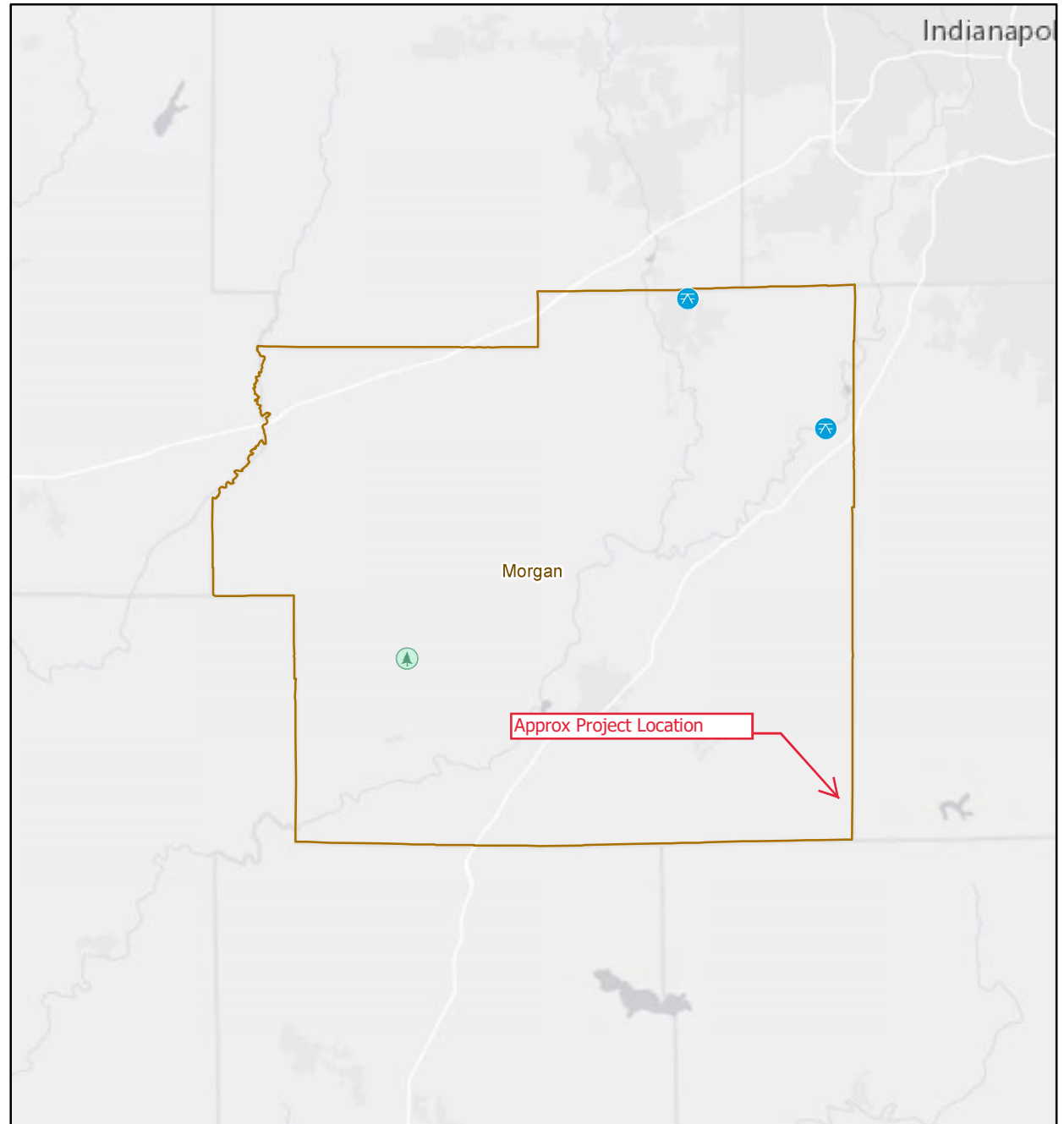
Total funding received (estimate):

\$2,600,000

Legend

Project funded by LWCF

-  State and Local Assistance Program (3)
-  Forest Legacy Program (1)



This report was created on January 26, 2023 using the Land and Water Conservation Fund interactive mapping site. It is for informational purposes only. The providers of this report disclaim any and all warranties, express or implied, including fitness for a particular purpose or merchantability, and make no representation that the report is complete, accurate, or error free. Use and reliance on this report is at the sole risk of the party using same.
© 2023 The Trust for Public Land.

Program	Municipality	Sponsor or agency	Project name	Other project name	Unit or area name	Project purpose	Project type	Year funded	LWCF funding by selected filter	Total LWCF funding to unit/area
Forest Legacy Program		USFS	Shawnee Hills	Hurricane Hills			AQEA	2004	2300000	2300000
State and Local Assistance Program		Mooreville								
State and Local Assistance Program	Mooreville	Park Board	Pioneer Park		Pioneer Park		DEV	1972	52100	
State and Local Assistance Program		Mooreville				Improvements				
State and Local Assistance Program	Mooreville	Park Board	Pioneer Park		Pioneer Park	& Expansion	AQDV	1993	75000	
State and Local Assistance Program			White River		White River					
State and Local Assistance Program			Greenway		Greenway		AQDV	2012	200000	



ENGINEERING ASSESSMENT

SR 135 PAVEMENT REPLACEMENT
0.33 MILES S OF W JCT OF SR 252 TO 0.37 MILES N. OF
W JCT SR 252 (RP 111+0.97 TO 112+0.69)

MORGANTOWN, IN



DECEMBER 2019



8440 Allison Pointe Blvd.
Suite 200
Indianapolis, IN 46250
Ph: 317-895-2585
Fax: 317-895-2596
www.ucindy.com

Purpose of Report

The purpose of this report is to document the engineering assessment phase of project development for the SR 135 pavement rehabilitation project in Morgantown. The document details the existing, relevant background data and provides information from a preliminary scoping field check. Feasible project alternatives that will address the project's purpose and need are presented. A preferred alternative will be identified. Additionally, information regarding environmental impacts, right-of-way impacts, utility impacts, and necessary permits anticipated for the succeeding design phases is provided.

Project Location

The proposed project is in the town of Morgantown in Morgan County. The site is located on the United States Geological Survey (USGS) Quadrangle Map, Morgantown, Sections 24 and 25, Township 11 North, Range 2 East. The limits of the project are from 0.33 mi south of the west junction of SR 135/SR 252 to 0.37 mi north of the west junction of SR 135/SR 252. The length of the proposed project is approximately 0.7 miles. The project is in the Indiana Department of Transportation's Seymour District. The latitude and longitude of the project are 39° 22' 16" North, 86° 15' 47" West.



Figure 1 – Project Location Map

Project Purpose and Need

The need for the project is due to the deteriorating pavement condition along SR 135. The pavement currently has intermittent longitudinal and transverse cracking which left untreated, will continue to degrade after several more winter seasons. The deterioration of the pavement is worse in select areas of the project area with known ponding issues.

The purpose of the project is to extend the service life of the existing pavement and correct minor drainage issues within the project limits.

Existing Facility

The existing roadway is a two-lane facility that is classified as a minor arterial. The roadway is on the National Truck Network and the National Highway 3R System. Terrain in the vicinity of the project is level. The entire segment is free flowing except for an all-way stop controlled intersection at the SR 135/N. Marion St and SR 252/Washington St intersection. The posted speed limit exiting the bridge over Indian Creek is 40 mph. However, the speed limit drops approximately 200 feet north of the bridge and remains at 30 mph for the remainder of the project limits. A collection of site photos can be found in Appendix A.

The existing roadway can be divided into four distinct sections: South Project Limits to S. Marion St, S. Marion St to SR 252/Washington St, West Jct SR 135/SR 252 to N. Church St, and N. Church St to East Project Limits. The details of each roadway segment can be found in the sections below.

South Project Limits to S. Marion St

This section of SR 135 starts after the Indian Creek bridge and consists of two lanes with no parking; there are shoulders but no sidewalk or curb and gutter. There is a 2-foot shoulder on the west side, a 4-foot shoulder on the east side, and 12-foot lanes. For the Indian Creek bridge, there is 250 feet of guardrail on the east side of the roadway and 125 feet on the west side.

This section includes intersections with S. Church Street and Bloomington Pike, which are both two-way stop-controlled (TWSC) intersections. The intersection with S. Marion Street is also a stop-controlled intersection on the minor approach. The speed limit is 30 mph north of S. Church Street, and 40 mph south of S. Church Street.

Per design plans for Des. No. 1600025 (bridge project at Indian Creek), just north of the bridge, the alignment uses a 649-foot horizontal curve to the west, followed by a 300-foot horizontal curve to the north. The result is a 475-foot shift of SR 135 to the west as it enters the Town of Morgantown. Per IDM Figure 43-3A(3), a radius of 649 feet corresponds to a Superelevation rate of 7.4% at 40 mph for open roadway conditions. As SR 135 enters Morgantown, low-speed urban criteria apply due to the drop in posted speed limit to 30 mph and the more urban nature of a small town. The second 300-foot horizontal curve meets the radius for adverse crown per IDM Figure 43-3D. The existing roadway profile is level through this portion of the project.

Surface drainage in this section of the project is conveyed south to Indian Creek via roadside ditches. Existing culverts convey water under SR 135 at the Bloomington Pike and S. Church Street intersections to the existing ditches along SR 135. Additionally, there is headwall failure and significant erosion at SR 135 between S. Marion Street and Bloomington Pike.

S. Marion St to SR 252/Washington St

The existing roadway section contains two 14-foot lanes, 1-foot of curb offset, curb, and sidewalk. There are no horizontal curves through this portion of the project. The profile is relatively level, with a high point at S. Marion Street and a low point near the intersection with Elm Street. From the intersection with S. Marion Street north to Elm Street, the exposed curb height on the east side of SR 135 is approximately 1.5 inches in height. Existing sidewalk on the east side of the roadway is in poor condition with widths of less than four feet in many areas. The existing curb height on the west side of SR 135 is approximately 6 inches in height.

From Elm Street to SR 252/Washington Street, the existing roadway section changes to 13-foot lanes with curb and gutter. The exposed curb height on the west side of SR 135 reduces to approximately 1.5 inches in height. The existing business adjacent to SR 135 at this location requires vehicles to drive over the sidewalk and curb and gutter to access parking on the east side of the building. Sidewalks and curb and gutter along the east side of SR 135 are of appropriate height or width and in good condition.

Surface drainage north of S. Marion Street is conveyed via the existing curb line north to the intersection with Elm Street. Grate inlets are present on the minor approaches of Elm Street to SR 135. No existing inlets are present along this section of SR 135 and there are known ponding issues in the vicinity of the intersection.

The TWSC intersection at Elm Street has curb ramps with detectable warning surfaces (DWS) but no marked crosswalks. The All Way Stop Control (AWSC) intersection of SR 135/N. Marion St and SR 252/Washington Street has crosswalks and curb ramps with DWS (reconstructed in 2013). The posted speed limit of this section is 30 mph. From Elm Street to Washington Street, the existing sidewalk on the east side of SR 135 contains a narrow band of decorative pavers. The paver band is approximately 2 feet in width and is adjacent to the back of curb. Additional information regarding the intersection of SR 135/N. Marion Street and SR 252/Washington Street can be found in the following section.

West Jct SR 135/SR 252 to N. Church St

Following the west junction with SR 252, SR 135 continues through Morgantown as a two-lane section with 12-foot lanes. An 8-foot parallel parking lane exists on the northside of the roadway and a 16-foot angled parking lane on the south side. This section has curb and gutter with wide sidewalks which extend to the existing adjacent building faces. Existing decorative street lighting is also present in this section of the project. There are no horizontal curves through this portion of the project. Based on existing contour information, the profile of SR 135 is very flat but continues to increase in elevation from the west junction with SR 252 to the intersection of N. Church Street.

Existing surface drainage is collected via combined curb and gutter inlets at the intersection corners and grate inlets located within the gutter line. Along this section of the project, the north curb line of SR 135/SR 252 has a curb height of approximately 1.5 inches between N. Marion Street and Cross Street. The reduced curb height has resulted in a portion of the existing curb box becoming ineffective. Traditionally, at locations on grade, the curb box acts as a factor of safety in cases where the grate becomes clogged with debris and unable to drain water from the roadway. This factor of safety has been reduced or eliminated at these locations.

In addition, at locations of reduced curb height, significant ponding will introduce flooding onto the adjacent sidewalk. During a site visit, a trench drain was noted in the sidewalk just east of the west junction of SR 135 and SR 252. Ponding issues were noted by a Morgantown representative during the field check at the intersection of SR 135 and N. Church Street.

Utilizing existing plan sets for projects in the vicinity, the ultimate outlet for the existing storm sewer system in Morgantown is anticipated to be Long Run Creek located 900 feet west of the west junction of SR 135 and SR 252. The existing plan set shows an existing 48-inch pipe outlet along the north side of SR 252 and an existing 36-inch pipe outlet along the south side of SR 252 at this location. Additional sewer maps were unavailable at the time of this report.

The intersection of SR 135/N. Marion Street and SR 252/Washington Street exists as an all-way stop flasher. Existing curb ramps in all quadrants were reconstructed in 2013 and contain detectable warning surfaces. In select quadrants, the usable sidewalk width in some areas was reduced due to the presence of signs, street lighting and utilities. TWSC intersections exist at

Cross St and N. Church St. These locations include curb ramps with DWS and marked crosswalks. The speed limit of this section is 30 mph.

N. Church St to East Project Limits

From N. Church Street east to Highland Street/Ash Street, the roadway section narrows. This section of SR 135 contains two 12-foot lanes with curb and gutter. On street parking is available from Church St to Highland St/Ash St on the south side of the roadway. There is existing sidewalk and a four-foot grass buffer on either side of SR 135 from N. Church Street to Highland Street/Ash Court. At this TWSC intersection, prior to the railroad crossing, curb ramps convey pedestrians across the minor approaches. The existing sidewalk on the north side of the road ends at the railroad crossing just east of Highland Street. The existing sidewalk located on the south side of SR 135 crosses over the existing railroad and continues east along Washington Street. The pedestrian crossing over the railroad occurs within the limits of the existing railroad warning devices.

East of the railroad crossing, SR 135 splits from Washington Street via a 675-foot horizontal curve and continues to the northeast. Given the urban nature of this section of SR 135, low-speed urban criteria were used to evaluate the horizontal curve. For a posted speed of 30 mph, the horizontal curve meets normal crown criteria per IDM Figure 43-3D.

A large, landscaped island exists at the divergence point just east of the railroad crossing. SR 135 continues as a two-lane roadway with 12-foot lanes and four-foot shoulders. Several large, unpaved drives exist along the north side of SR 135 at this location.

Surface drainage from N. Church Street to the railroad crossing does not encounter any existing curb inlets. The existing roadway profile increases in elevation from west to east in this portion of the project at a profile grade of approximately 1.5%. It is anticipated that the lack of inlets through this section of the project contributes to the drainage problems noted at the N. Church Street intersection. Drainage east of the railroad tracks is conveyed via roadside ditches south to Indian Creek. There is headwall failure and significant erosion at the SR 135 & Washington Street divergence point adjacent to the railroad tracks.

Utilities

The known utilities located within the project limits are listed below:

- AT&T Distribution
- AT&T Transmission
- Brown County Water
- Duke Energy
- Intelligent Fiber Network
- Town of Morgantown Utilities
- Vectren (Franklin)
- Zayo Bandwidth

There are numerous utilities within the limits of this proposed project which include power, water, gas, sewer, and telecommunications facilities. Significant relocation work may be required, and

as the design progresses, there will need to be further utility coordination to verify locations, analyze potential conflicts, and determine if utility relocations and/or adjustments are required.

Duke Energy power poles are located on the west side of SR 135 from the Indian Creek bridge to S. Church Street. The power lines then transition to the east side of SR 135 from S. Church Street to just south of S. Marion Street. A line of utility poles/telecommunication facilities also exist through this section of SR 135. Additionally, there appear to be underground telecommunication facilities on the east side of SR 135 at the S. Marion Street intersection. Town of Morgantown water and Vectren/Center Point Energy gas lines are located along the east side of SR 135 south of the intersection with S. Marion Street.

The design inquiry ticket indicates that the telecommunications facilities include AT&T (both transmission and distribution lines), Intelligent Fiber Network, and Zayo Bandwidth. The power poles resume along the west side of SR 135 from S. Marion Street to approximately 150' south of Elm St. These poles are located just behind the existing sidewalk and have a telecommunication underbuild on them.

There are no power or telecommunications lines above ground from north of Elm Street to the west junction of SR 135/SR 252. From the SR 252 intersection east to N. Church Street the electrical service for buildings in this area originates in the alleys north and south of SR 135. Extending east from the SR 135/SR 252 intersection, Morgantown Water lines and Vectren/Center Point Energy gas lines are located on the south side of SR 135.

Existing power and telecommunications lines are located on poles on the south side of SR 135 from N. Church Street to railroad tracks. Underground telecommunications facilities exist on the south side of SR 135 in the vicinity of the railroad tracks at the east end of the project.

There are also ten overhead power and telecommunication lines crossing SR 135 throughout the length of this project. Several of these crossings appear to be low and will need to be evaluated during the design phase to determine if they meet the minimum clearance above SR 135.

A lift station is located between the Indian Creek bridge and S. Church Street on the east side of SR 135 with signs of sanitary sewer manholes at the intersection of Bloomington Pike and SR 135 as well as Cross Street and SR 135.

Railroad

At the eastern end of the project, there is a railroad crossing for the Indiana Railroad Company. The crossing is at grade and is only used by freight trains. The crossing typically has two trains passing through during the day and two trains at night. Trains pass through the crossing at 30 to 40 mph. The crossing has advance warning signs, two cantilevered flashing light structures, and two mast mounted flashing lights.

Pavement History

Year	Location	Work Type
1934	Entire Segment	Bituminous Mixture
1952	South of SR 135/SR 252 Jct	Concrete Overlay
1963	South of SR 135/SR 252 Jct	Concrete Overlay
1971	South of SR 135/SR 252 Jct	Asphalt Overlay

1977	South of SR 135/SR 252 Jct	Asphalt Overlay
1993	South of SR 135/SR 252 Jct	Wedge and Level
1994	South of SR 135/SR 252 Jct	Partial 3-R
2004	South of SR 135/SR 252 Jct	Wedge and Level
1941	East of SR 135/SR 252 Jct	Concrete Overlay
1958	East of SR 135/SR 252 Jct	Concrete Overlay
1968	East of SR 135/SR 252 Jct	Asphalt Overlay
1980	East of SR 135/SR 252 Jct	Asphalt Overlay
2013	From Indian Creek to Washington St.	Asphalt Overlay

The most recent resurface was completed under Des No. 1297526 in 2013.

Field Check

A site visit was made on November 15, 2019 to observe and note the existing condition of the facility. A field check was held on November 26, 2019 with representatives from INDOT, Town of Morgantown, and UNITED. The field check entailed discussion regarding the existing conditions, drainage concerns, and pavement recommendations. Meeting minutes from the field check can be found in Appendix C.

Traffic Data

The INDOT Traffic Count Database System was used to obtain traffic data for the roadway. A capacity analysis was not warranted for the project scope; therefore, a capacity analysis was not completed. Traffic data is provided for the section south of the SR 135/SR 252 intersection (Table 1) and the section east of the SR 135/SR 252 intersection (Table 2). An annual traffic growth rate of 0.5% was used since historical data indicated an average growth rate of between 0% and 1% from 2010-2018.

Table 1: Traffic Data South of SR 135/SR 252 Intersection

Year	AADT	DHV
2016	6,661	756
2017	6,694	---
2018	6,721	---
2019	6,755	---
2025*	6,960	696
2045*	7,690	769

Table 2: Traffic Data East of SR 135/SR 252 Intersection

Year	AADT	DHV
2016	6,288	538
2017	6,319	---
2018	6,344	---
2019	6,376	---
2025*	6,569	657
2045*	7,258	726

*Estimated annual traffic growth rate of 0.5% and DHV of 10%.

Crash Data and Analysis

The INDOT Crash Location Report from January 2010 to December 2018 is summarized and tabulated below for the project limits. The Crash Location Report can be found in Appendix C.

Table 4: Crash Data

YEAR	TOTAL CRASHES	CRASH TYPE		
		FATAL/INCAPACITATING	NON- INCAPACITATING	PROPERTY DAMAGE ONLY
2010	0	0	0	0
2011	1	0	0	1
2012	1	0	0	1
2013	4	0	2	2
2014	7	1	1	5
2015	1	0	0	1
2016	5	0	0	5
2017	2	1	0	1
2018	0	0	0	0
Totals		2	3	16

There was a fatal crash in 2014 when a motorist was struck by a train at the railroad crossing. There were two crashes involving a train and a vehicle, nineteen crashes involving only vehicles, and zero crashes where an animal was involved. The primary factor for seven of the crashes was failure to yield right of way, and other primary factors included driver distracted, following too closely, and running off the road.

Only one crash can be attributed to the roadway geometry. Poor sight distance was a factor in a crash at SR 135 and S. Church St near the south end of the proposed project. RoadHAT software was run for years 2016-2018 in the project area and split by segment and intersection (Appendix C). For the applicable segments and intersections, the Index Crash Frequency (ICF) range is – 1.09 to 0.19 while the Index of Crash Cost (ICC) range is -0.84 to 0.90.

Design Alternatives and Project Recommendations

This project will be developed as a 3R Pavement Resurfacing project in conformance with Indiana Design Manual Chapter 55 and other applicable design standards. Open Roads (Practical Design) procedures will be followed.

Design Alternatives

- No-Build Alternative
- Alternative 1 – Pavement Resurfacing
- Alternative 2 – Pavement Replacement

No-Build Alternative

The no-build alternative is not recommended as it does not address the pavement deterioration on this roadway. The no-build alternative would have no cost and entail no disruption to traffic as well as the homes and businesses along the route, but it would not improve the condition of the roadway.

Alternative 1a – Pavement Resurfacing

This alternative would entail a mill and overlay with patching throughout the project area. There would be a 1.5" mill and overlay from the south project limits to the SR 135/SR 252 west junction. A 1.5" mill and overlay will also be used to resurface SR 252 from the SR 135/SR 252 west junction to the east approach of the Long Run bridge. A 4" mill and overlay is recommended from the SR 135/SR 252 west junction to the east project limits as requested by INDOT Seymour District Pavement. The increased milling and overlay depth is based on the pavement condition and will eliminate the need for partial depth patching. Curb ramps will be checked for ADA compliance, but are expected to be replaced as part of the project.

From the SR 135/SR 252 west junction to the west approach of Cross Street, the existing parallel parking lane on the north side will be milled and resurfaced at a 4% cross slope. The entire width of this segment will receive a 4" mill and overlay. The increased cross slope of the parking lane and the reconstruction of the north curb line will allow for an increase in exposed curb height and the installation of additional inlets. Proposed inlets will tie into the existing storm sewer system and a new outlet will not be required. The sidewalk adjacent to the reconstructed north curb line will be replaced. The existing right-of-way offset on the north side of SR 135 is approximately 3.5 feet behind the north curb line. The installation of the new curb line and inlets will require additional right-of-way. The existing southern parking lane will be milled 4" and the existing cross slope maintained.

Additional minor drainage improvements through the installation of curb inlets at select locations and at the intersections of Elm Street and N. Church Street will also be included. An existing 24" pipe culvert will be replaced at the intersection of SR 135 and S. Church St. A culvert headwall repair is expected at the eastern project limits on the north side of SR 135/SR 252.

This alternative addresses the needs of the project and is therefore the recommended alternative.

Alternative 1b – Pavement Resurfacing and Replacement

This alternative would entail a combination of mill and overlay with patching and a full depth pavement replacement within the project area. A 1.5" mill and overlay is proposed from the south project limits to the SR 135/SR 252 west junction, as well as SR 252 from the SR 135/SR 252 west junction to the Long Run bridge. Minor drainage improvements through the installation of additional curb inlets will be made at the Elm Street intersection.

From the SR 135/SR 252 west junction to the west approach of Cross Street, the roadway would be reconstructed to facilitate a profile adjustment to allow for improved profile grades and an increased curb height along the north side of SR 135. The sidewalk and curb line along both the north and south sides of SR 135 will be reconstructed. Existing pavement cores through this section of the project show 4" of HMA pavement over concrete pavement.

Drainage improvements will be made through the installation of additional inlets through this section of the project. Proposed inlets will tie into the existing storm sewer system and a new outlet will not be required. A pipe replacement will occur at the intersection of SR 135 and S. Church St. The existing four-way flasher located at the west junction of SR 135 and SR 252 is

anticipated to be impacted by the reconstruction of sidewalk and curb ramps. Alternative flasher configurations, including post mounted flashers, should be analyzed during design if existing signal poles and foundations cannot be retained.

The existing right-of-way offset on the north side of SR 135 is approximately 3.5 feet behind the north curb line. The reconstruction of the roadway and corresponding sidewalk, curb, and inlet installation will require additional right-of-way.

From the intersection of N. Church Street to the east project limits, a 4-inch mill and overlay of the roadway is proposed. Additional curb inlets are proposed for the east approach of the N. Church Street intersection to combat the significant change in profile grade through this area. Additional minor drainage improvements, such as headwall repair are expected at the eastern project limits.

This alternative addresses the needs of the project however has an increased impact and construction cost due to the reconstruction section. Therefore, this alternative is not recommended.

Alternative 2 – Pavement Replacement

This alternative would entail total reconstruction of the pavement throughout the entire project limits. From the SR 135/SR 252 west junction to the west approach of Church Street, the roadway reconstruction would include a profile adjustment to allow for improved profile grades and an increased curb height along the north side of SR 135. Drainage improvements would be made through the installation of additional inlets. The existing condition of the pavement does not warrant a full reconstruction to extend the pavement life and fulfill the purpose and need of the project. Therefore, this alternative is not recommended.

Project Recommendations

The proposed project layout, right-of-way limits, and other project features are detailed on the conceptual layouts included in Appendix B.

South Project Limits to S. Marion Street

This section will have a 1.5-inch mill and overlay with minor full depth patching. No changes to the horizontal alignment or vertical profile of the roadway are anticipated. No drainage improvements are anticipated. The existing sub-standard guardrail end treatments at the Indian Creek Bridge will be replaced as a part of Des. No. 1600025.

S. Marion Street to Elm Street

This section will have a 1.5-inch mill and overlay with minor full depth patching anticipated. Between S. Marion Street and Elm Street, the width of the existing northbound lane will be reduced to 13 feet to facilitate the installation of new curb and gutter and a 4-foot sidewalk within the existing right-of-way. Temporary right-of-way is anticipated along the east side of SR 135 to facilitate grading behind the sidewalk. Curbs and sidewalk along the west side of SR 135 are not anticipated to require replacement.

Surface drainage through this portion of the project is generally conveyed north to the intersection of SR 135 and Elm Street which is the localized low point for surface drainage. Existing inlets on

the minor approaches do not adequately capture water during rain events. Therefore, the installation of additional inlets on the north and south approaches of SR 135 is recommended. Resurfacing efforts at this location should include intersection spot grading to introduce adequate grades toward both existing and proposed inlet locations.

The curb ramps at the intersection with Elm St will be replaced. Additional right-of-way is anticipated for the installation of ADA compliant curb ramps at this location.

Elm Street to SR 252/Washington St

This section will have a 1.5-inch mill and overlay with minor full depth patching anticipated. Existing lane widths and curb lines are maintained through this section of the project. Although sub-standard sidewalk cross slopes and curb heights were noted during the on-site field check, replacement of these items was deemed outside of the scope of the project.

At the west junction of SR 135 and SR 252 non-compliant curb ramps will be replaced. Relocation of existing lighting is also anticipated at this intersection. Existing lighting was noted to reduce the clear width of the existing sidewalk below the 4 feet required by the Indiana Design Manual (IDM). The acquisition of proposed right-of-way is anticipated for the installation of ADA compliant curb ramps at the intersection. Alternative flasher configurations, including post mounted flashers, should be analyzed during design if existing signal poles and foundations cannot be retained.

SR 135/SR 252 West Jct to N. Church St

This section will have a 4-inch mill and overlay with minor full depth patching anticipated. The cross slope of the northern parallel parking lane will be increased to 4% and the existing northern curb and gutter will be replaced. Utilizing an existing roadway cross slope of 2%, the increased cross slope of the parking lane will facilitate a proposed curb height of 4 inches. The replacement of sidewalk adjacent to the northern curb line is anticipated. The acquisition of right-of-way is anticipated at this location.

The existing cross slope of the southern travel and parking lane will be maintained. Existing locations of reduced curb height along the southern curb line will be replaced with new curb and gutter to increase the curb height to a standard 6-inch curb. Sidewalk adjacent to the areas of proposed curb and gutter will be reconstructed.

The profile grade through this portion of the project is extremely flat. Existing ponding issues at the intersection of SR 135/SR 252 and N. Church Street exhibit the need for additional inlets through this section of the project. For cost estimating purposes, an inlet spacing of 75 feet was utilized. The curb ramps at the Washington St/Marion St intersection, Cross St, and N. Church St intersections will be replaced.

N. Church St to East Project Limits

This section will have a 4-inch mill and overlay with minor full depth patching anticipated. A paving exception will occur at the existing railroad crossing. No curb or sidewalk work is anticipated for this section of the project. However, a reconfiguration and reconstruction of the curb ramps will occur at the intersection of SR 135/SR 252 and Highland Street. The curb ramp and sidewalk on the northeast corner of Washington St and Highland St will be removed. The other curb ramps at Washington St and Highland St/Ash St will be replaced and reconfigured to cross pedestrians

from the north side of SR 135/SR 252 to the south side of the roadway. Pedestrians can then access the existing pedestrian railroad crossing and continue east on Washington Street. Advance signing and crosswalk pavement markings will be installed at the pedestrian crossing.

The existing profile grade of the roadway flattens significantly at the intersection with N. Church Street. The addition of inlets at the transition of the profile grade near the intersection is recommended to reduce the drainage area contributing to the existing inlets and reduce the potential for ponding. No changes will be made to the existing drainage structures or ditches east of the railroad tracks.

At the existing railroad crossing, a railroad flagging agreement is anticipated to allow work within 25 feet of the tracks.

Design Criteria Table

The design standards, from IDM Figure 55-3F (See Appendix C) are as follows:

Design Classification:	Urban Arterial, 2 Lane, Built-up
Design Forecast Period:	20 Years
Design Speed:	Posted, 30 MPH
Access Control:	None
Level of Service:	Desirable: C; Minimum: D
Travel Lane Width:	Desirable: 12 ft, Minimum: 10ft
Curb Offset:	Desirable: 2 ft, Minimum: 1 ft
Shoulder Width Paved:	Desirable: 6 ft, Minimum: 2 ft
Travel Lane Cross Slope:	2%
Shoulder Cross Slope:	Paved Width ≤ 4 ft 2%-3%; Paved Width > 4 ft 4%-6%
Auxiliary Lane Width:	Desirable: 12 ft; Minimum: 10 ft
Auxiliary Shoulder Width:	Desirable: Same as Next to Travel Lane Minimum: 2 ft
Side Slopes, Cut, Foreslope:	N/A
Side Slopes, Cut, Backslope:	N/A
Side Slopes, Fill:	N/A

There are no design exceptions anticipated.

Maintenance of Traffic

The maintenance of traffic will consist of flagging operations for the section from the SR 135/SR 252 west junction to the south project limits. The section from the SR 135/SR 252 west junction to the east project limits will use phased construction since there is more available width in areas where on street parking is available. Maintained traffic will not be allowed on a 4-inch milled section due to the reduced section strength and potential damage to the base layer.

Pavement Design

It is anticipated that a mill and resurface will occur within the project limits. The pavement section utilized for cost estimating purposes is as follows:

1.5" Mill and Overlay –

- Milling, Asphalt, 1.5"
- 165 lb/sys QC/QA-HMA, 2, 64, Surface, 9.5 mm

4" Mill and Overlay –

- Milling, Asphalt, 4"
- 165 lb/sys QC/QA-HMA, 2, 64, Surface, 9.5 mm
- 275 lb/sys QC/QA-HMA, 2, 64, Intermediate, 19.0 mm

Cost Estimate

The preliminary quantities and construction cost estimate are included in Appendix D. A summary of estimated project costs is included in the table below:

Item Description	Project Cost – Alt 1a	Project Cost – Alt 1b
Road Construction (CN)	\$1,100,000	\$1,250,000
Miscellaneous (Contingency 15%)	\$165,000	\$187,500
Construction Total	\$1,265,000	\$1,437,500
Right-of-Way (RW)	\$90,000	\$90,000
Utility Relocations	\$40,000	\$40,000
Railroad Agreement	\$10,000	\$10,000
Preliminary Engineering (PE)*	\$200,500	\$227,500
Project Total	\$1,605,500	\$1,805,000

*Includes Road Design, Utility Coordination, Railroad Coordination, Environmental, and Permits

Environmental Services

A preliminary Red Flag Investigation (RFI) has been completed for the SR 135 Pavement Replacement project. The purpose of the investigation was to gain an understanding of the project area and identify areas that may require additional environmental investigation. Areas of investigation included community and infrastructure resources, water and ecological resources, hazardous material concerns, historic resources, noise sensitive areas, cultivated areas, karst features and mineral resources. The preliminary review indicated the presence of hazardous material concerns within the proposed project area. Findings of the review have been summarized below. A detailed environmental document will be required at the design phase.

Environmental impacts could result from the presence of hazardous material concerns within the proposed project area. Three (3) leaking underground storage tank (LUST) sites were identified during the preliminary review. Further investigation into the presence and/or extent of hazardous material contamination will be necessary. A map of hazardous material concerns can be found in Appendix C.

The proposed project is located within a National Register of Historic Places (NRHP) listed Historic District (NR-1863). Right-of-way (ROW) acquisition is anticipated for the project. The acquisition of right-of-way from within the boundaries of the Historic District will require full Section 106 Coordination and a Section 4(f) Evaluation will be needed. Further coordination with INDOT Cultural Resources Office (CRO) will be required. A map of noted historical places and districts can be found in Appendix C.

Permits

As a result of anticipated roadway work within limits of the floodway of Indian Creek, an Indiana Department of Natural Resources (IDNR) Construction in a Floodway Permit will be required. No additional regulatory waterway permits will be required for this project. A map of the hydraulic features in the vicinity of the project can be found in Appendix C.

As a result of soil disturbance greater than 1.0 acre, an Indiana Department of Environmental Management (IDEM) Rule 5 Permit will be required.

Minor drainage improvements are anticipated to connect to the existing storm sewer system within the Town of Morgantown. The acquisition of additional drainage permits is not anticipated.

Survey Requirements

The survey limits for the project will begin approximately 0.33 miles south of the Marion St/Washington St intersection and end approximately 0.37 miles east of the Marion St/Washington St intersection. An additional 900 feet will be required along SR 252 west of the west junction with SR 135. The required survey width will be 80 feet west and east of the centerline. A total survey length of approximately 4,600 feet is anticipated.

Right-of-Way Impacts

The apparent existing right-of-way width varies throughout the project corridor. The following table is a description of the apparent widths as determined from the Morgan County Elevate Map G.I.S. website.

SR 135 Street Name	Beginning Limit	Ending Limit	Total Apparent R/W Width	Width each side of centerline
SR 135	South terminus (Indian Creek)	Marion Street	60 feet	30 feet each side
Marion Street	SR 135	Washington Street	40 feet	20 feet each side
Washington Street	Marion Street	Church Street	66 feet	40 feet south side 26 feet north side
Washington Street	Church Street	East terminus	60 feet	30 feet each side

Appendix C is an exhibit showing platted subdivisions/additions with dedicated existing rights of way along the project corridor.

Right-of-Way acquisition is expected at intersections to facilitate the reconstruction of curb ramps. Additional right-of-way will also be required along the north side of SR 135 from the west junction with SR 252 to the intersection with N. Church Street. The additional right-of-way will facilitate the reconstruction of the curb line, adjacent sidewalk, and the installation of new inlets and corresponding storm sewer pipe.

Utility Impacts

The utility impacts described in the following paragraphs are for the purposes of scoping the project. Full utility coordination, verification of the existing utilities, and analysis of potential conflicts within the project limits will be required during the subsequent design phase to determine if adjustments or relocations are required.

From the southern project limits to the intersection of SR 135 and S. Marion Street, the only utility impact anticipated is a small pipe replacement. The existing 24" pipe that outlets southeast of the S. Church St and SR 135 intersection will be replaced with a 30" pipe. Through this section of the project limits, a 1.5-inch mill and overlay will not require the relocation of existing overhead utility poles. Excavation is not expected in this portion of the project, thus underground telecommunication and gas lines will not require relocation.

North of the intersection of SR 135 & S. Marion Street to Elm Street, the reconstruction of the existing east curb line and adjacent sidewalk will require minor excavation in addition to the 1.5-inch mill and overlay of the pavement. Excavation depths for the reconstruction of the curb are not expected to exceed the depth of the anticipated full depth pavement patching. Existing gas, water, and telecommunication lines located along the east curb line may be impacted during construction. Overhead utility poles located along the west curb line will not be impacted.

At the intersection of SR 135 & Elm Street, the reconstruction of curb ramps and installation of inlets and pipe will require excavation. Underground utilities present at the intersection will be impacted by construction. Depths of existing underground lines will determine the need for relocation.

At the west junction of SR 135 and SR 252, the reconstruction of curb ramps will require minor excavation behind the curb line. From the west junction to the intersection of SR 135/SR 252 & Cross Street the existing north curb line and sidewalk will be reconstructed. In addition, the installation of additional inlets and storm sewer pipe will occur. Underground utilities present at the intersection will be impacted by construction. Depths of existing underground lines will determine the need for relocation. The Morgantown Water lines and Vectren/Center Point Energy gas lines are located on the south side of SR 135. Impacts to these utilities will be dependent on the connections between proposed storm sewer inlets and pipe and the existing storm sewer network.

Curb ramp reconstruction at the intersections with N. Church Street and Highland Street will require minor excavation at these locations. The existing overhead utility pole in the southeast corner of SR 135/SR 252 & Highland Street will likely require relocation due to the curb ramp

reconstruction. Underground utilities present at the intersection will be impacted by construction. Depths of existing underground lines will determine the need for relocation.

Related Projects

At the time of the issue of this Engineering Assessment, the only known project in the vicinity is a bridge project at Indian Creek adjacent to the south limits of the project, Des. No. 1600025. The anticipated schedule for construction is unknown.

Conclusions/Concurrence

The recommended alternative, alternative 1a, will extend the service life of the roadway through a mill and overlay of the existing pavement with minor full depth patching. A 1.5" mill and overlay will occur from the south project limits to the SR 135/SR 252 west junction, a 1.5" mill and overlay will also occur from the SR 135/SR 252 west junction to the Long Run bridge, and there will be a 4" mill and overlay from the SR 135/SR 252 west junction to the east project limits.

Drainage concerns will be addressed through the installation of additional drainage structures at select locations throughout the project limits. A pipe replacement will occur at the intersection of SR 135 and S. Church St. Locations of reduced curb height were investigated and will be replaced at critical locations to provide improved drainage conditions. Curb ramps will be checked for ADA compliance, but are expected to be replaced as part of the project. The acquisition of right-of-way will be required.

Traffic will be maintained by flagging operations on the south portion and phased construction on the east portion of the project. This project will be designed using current INDOT Design Standards for 3R Projects.

Alternative 1a addresses the needs of the project and is therefore the recommended alternative.

Prepared By:

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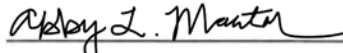
Design QA/QC Review:

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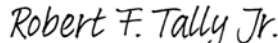
INDOT District Scoping Concurrence:

Abby Mantsch, P.E.
INDOT Seymour District



INDOT Technical Services Concurrence:

Robert F. Tally Jr., P.E.
Technical Services, System Asset Manager



Memorandum for Pavement Design

DATE: December 28, 2022

TO: Greg Wendling, P.E. - USI Consultants, Inc. (USI)

FROM: Chibuike U. Ogbo, Ph.D., E.I.T. - Terracon Consultants, Inc. (Terracon)

CC: Nick Batta, P.E. - Crawford, Murphy & Tilly (CMT)
Kellen P. Heavin, P.E. - Terracon
Vladimir H. Abou Sejaan, M.S., E.I. - Terracon
Pankaj Patel, P.E. - INDOT

SUBJECT: Pavement Analysis and Design

DES NO.: 2001901

RE: SR 135 Pavement Improvements
Morgan County, Seymour District
Terracon Project No. CJ215038



WORK CATEGORY: District Pavement Project (Non-I)

COST: \$2,258,523 from INDOT Full Project Listing dated 12/13/2022

We have completed our analysis and design of the pavement improvements for the referenced project. Our analyses were performed using AASHTOWare Pavement ME (Pavement ME) in accordance with the Indiana Design Manual (IDM) applicable at the time of this report. This letter documents our understanding of the project, our rationale, the results of our analyses, and our recommendations for the pavement improvements.

It should be noted that falling weight deflectometer (FWD) testing results were not available at the time of this writing.

PROJECT DESCRIPTION

INDOT is planning to make improvements to SR 135 in Morgan County from RP 111+97 to RP 112+80 for a length of about 0.69 mi. The improvements also extend into SR 252 for a length of about 0.15 mi. Per the preliminary field check (PFC) plans prepared by CMT, these improvements primarily include a preventive maintenance (PM) Hot Mix Asphalt (HMA) overlay from Sta. 653+08 to Sta. 669+87, Line "PR-B" and from Sta. 20+92 to Sta. 28+80, Line "PR-A". In addition, a minor structural (MS) HMA overlay is planned from Sta. 28+80 to Sta. 48+55, Line "PR-A". As part of this project, realignment and replacement of the existing curbs and gutters and sidewalks are planned in isolated sections. Refer to Table 1 below for details of the existing typical sections and planned improvements per the PFC plans.

TABLE 3: SUMMARY OF PROVIDED PAVEMENT HISTORY FOR SEGMENT ON SR 252

Year	Description	Width (ft)
1928	Stone	12
1939	Mix bituminous on stone graded & drained	18
1954	Mix bituminous surface treatment	20
1957	Mix bituminous surface treatment with B.C.A	20
1959	Mix Bituminous	20
1963	Bituminous coated blended aggregate resurface (no binder)	20
1971	Type III surface	20
1984	Hot asphalt emulsion binder and surface	20

It should be noted that there is a gap in historical information after 1984 on both SR 135 and SR 252.

PAVEMENT OBSERVATIONS

GeoSolutions, Inc. (GSI) performed 10 pavement cores as part of their geotechnical evaluation for this project. Per the GSI geotechnical evaluation report (abridged report dated September 23, 2022, is attached), 7 of the pavement cores consisted of a full-depth HMA pavement section while the remaining consisted of a composite section [i.e., HMA over Portland Cement Concrete Pavement (PCCP)]. It should be noted that all cores exhibiting composite pavement were observed along SR 135 between Sta. 28+80 and Sta. 48+55, Line "PR-A" (i.e., between RP 112+31 and RP 112+80), which is consistent with the pavement history. The following table summarizes the pavement thicknesses per the geotechnical evaluation report.

TABLE 4: SUMMARY OF THE PAVEMENT THICKNESSES BY GSI

Pavement Type	HMA Thicknesses (in.)	PCCP Thicknesses (in.)	Subbase Type
HMA	8 to 9 ¹ (Average 8½)	---	Crushed stone ²
Composite	3 to 8½ (Average 5)	6½ to 6¾ (Average 6½)	---

1. HMA thicknesses outside this range (i.e., 4½ and 12½) were observed at Pavement Cores PC-3 and PC-5, respectively. These pavement cores were located at Sta.663+00, Line "PR-B", 6 ft left and Sta. 21+90, Line "PR-A", 7.5 ft right, respectively.
2. Crushed stone subbase was only observed at the pavement cores performed along Line "PR-B".

In general, the asphalt layers were in fair to good condition. Low severity moisture damage (i.e., delamination, fracture and/or partial stripping) was observed in most of the pavement cores. The PCCP, where observed, exhibited horizontal fracture and in some cases with vertical fracture.

Based on our pavement distress survey, the pavement surface of the mainline was typically in fair to good condition. In general, most of the observed pavement distresses included moderate to high severity transverse and fatigue cracking. Existing patches were also observed in isolated locations and some of these patches were starting to exhibit distresses.

PAVEMENT ANALYSIS

Based on the information provided by INDOT and the PFC plans, we used the data summarized in the table below in our analyses.

Per the IDM, it should be noted that ESAL category 2 is required for the QC/QA-HMA mixture based on our design number of ESALs. However, per our correspondence with INDOT, we understand that the Seymour District does not use ESAL category 2. Thus, we recommend ESAL Category 3.

COST/LANE-MILE/YEAR EVALUATION

The associated cost of our recommended improvement alternative is as follows:

Present worth cost = \$637,571

Cost/lane-mile/year = \$25,003

PAVEMENT LIFE AND PREDICTED DISTRESS MODES

Note that the functional and structural lives are directly dependent on routine maintenance being performed.

Design Life: 12 yrs minimum

Functional Service Life: about 15 years based on the discussion of our rationale above.

Structural Service Life: about 30 years, per Pavement ME.

Attachments -

Patch Tables

Summary of HMA Patching, Full-Depth

Attachments contained in a separate document -

Pavement ME Analysis

DES No. 2001901 - 2PM

DES No. 2001901 - 4MS

DES No. 2001901 - Parking - 8 in. 3 CA II (25%)

Abbreviated PFC Plans

Photographs of Representative Pavement Conditions

Cost Analysis for Alternatives

INDOT Full Project Listing (12/13/2022)

Abbreviated Engineering Assessment report (03/21/2022)

Abbreviated Geo Rpt 2001901 for Roadway Services (09/23/2022)

Pavement History

PG Binder Selection Report - SR 135 Pavement Improvements