

FHWA-Indiana Environmental Document
CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM
GENERAL PROJECT INFORMATION

Road No./County:

US 52/Dearborn County

Designation Number(s):

2000090 & 2001948

Project

Description/Termini:

DES No: 2000090: Slide Correction Project, approximately 1.4 miles west of SR 46

DES No: 2001948: US 52 Small Structure Replacement, approximately 1.5 miles west of SR 46

| | |
|----------|---|
| X | Categorical Exclusion, Level 2 – Required Signatories: INDOT DE and/or INDOT ESD |
| | Categorical Exclusion, Level 3 – Required Signatories: INDOT ESD |
| | Categorical Exclusion, Level 4 – Required Signatories: INDOT ESD and FHWA |
| | Environmental Assessment (EA) – Required Signatories: INDOT ESD and FHWA |
| | Additional Investigation (AI) – The proposed action included a design change from the original approved environmental document. Required Signatories must include the appropriate environmental approval authority |

Approval

INDOT DE Signature and Date

INDOT ESD Signature and Date

FHWA Signature and Date

Release for Public Involvement

DGD

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INDOT DE Initials and Date

INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Name and Organization of CE/EA Preparer:

Kia Gillette, HNTB Corporation

Indiana Department of Transportation

County Dearborn Route US 52 Des. No. 2000090 & 2001948

Note: Refer to the most current INDOT CE Manual, guidance language, and other ESD resources for further guidance regarding any section of this form.

Part I – Public Involvement

Every Federal action requires some level of public involvement, providing for early and continuous opportunities throughout the project development process. **The level of public involvement should be commensurate with the proposed action.**

| | | |
|---|-------------------------------------|---|
| Does the project have a historic bridge processed under the Historic Bridges PA*? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| If No, then: Opportunity for a Public Hearing Required? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

*A public hearing is required for all historic bridges processed under the Historic Bridges Programmatic Agreement between INDOT, FHWA, SHPO, and the ACHP.

Discuss what public involvement activities (legal notices, letters to affected property owners and residents (i.e. notice of entry), meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.

Notice of Entry letters were mailed to potentially affected property owners within the project area on September 21, 2021, and August 11, 2022, notifying them about the projects and that individuals responsible for land surveying and field activities may be seen in the area. Sample copies of the Notice of Entry letters are included in Appendix G, page 1-2.

The projects will meet the minimum requirements described in the current *Indiana Department of Transportation (INDOT) Project Development Public Involvement Procedures Manual* which requires the project sponsor to offer the public an opportunity to submit comments and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

Public Controversy on Environmental Grounds

Discuss public controversy concerning community and/or natural resource impacts, including what is being done during the project to minimize impacts.

At this time, there is no substantial public controversy concerning impacts to the community or to natural resources.

Part II - General Project Identification, Description, and Design Information

Sponsor of the Project: INDOT INDOT District: Seymour

Local Name of the Facility: US 52

Funding Source (mark all that apply): Federal ☒ State ☒ Local ☐ Other* ☐

*If other is selected, please identify the funding source: _____

PURPOSE AND NEED:

The need should describe the specific transportation problem or deficiency that the project will address. The purpose should describe the goal or objective of the project. The solution to the traffic problem should NOT be discussed in this section.

Need: The need for these projects is due to the continued erosion of the roadway embankment on the south side of US 52. The erosion of the embankment slope has undermined the structural integrity of the existing pavement, guardrail, and utilities along this

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section of US 52, posing safety hazards to the traveling public. According to the geotechnical engineering evaluation conducted by INDOT in May 2022 (Appendix I, pages 2-31), there was visual evidence that the destabilized slope has caused the soil to slide towards the Whitewater River, impacting adjoining roadway, guardrail, utilities, and structures. INDOT has completed repaving of the roadway pavement, but such routine maintenance activities are unable to address the underlying slope instability hazards. The projects will also address the poor condition of the larger existing culvert at the western end of the project limits, which exhibits significant spalling and cracking on the interior and exposed rebar. The culvert is also misaligned with the drainage channel, contributing to erosion along the north side of the road, and undermining of the south side headwall has also occurred.

Purpose: The purpose of the projects is to restore slope stability along this section of US 52 and restore the rideability of US 52 to minimize safety hazards to the traveling public. The purpose is also to maintain a vehicular crossing and provide hydraulic function at the larger culvert location within the project area.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Dearborn Municipality: Harrison Township

Limits of Proposed Work: US 52, from 1.4 miles west of SR 46 to 1.54 miles west of SR 46

Total Work Length: 0.14 Mile(s) Total Work Area: 1.42 Acre(s)

Is an Interstate Access Document (IAD)¹ required?

If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?

Yes¹

No

Date:

X

¹If an IAD is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IAD.

Describe location of project including township, range, city, county, roads, etc. Existing conditions should include current conditions, current deficiencies, roadway description, surrounding features, etc. Preferred alternative should include the scope of work, anticipated impacts, and how the project will meet the Purpose and Need. Logical termini and independent utility also need discussed.

INDOT and the Federal Highway Administration (FHWA) intend to proceed with slide correction and culvert replacement projects along US 52 in Dearborn County, Indiana.

Location: The projects are located on US 52, approximately 1.4 miles west of SR 46, and approximately 4 miles northwest of the town of West Harrison in Dearborn County, Indiana. More specifically, the projects are in Section 4, Township 7 North, Range 1 West in Harrison Township, as shown in the United State Geological Survey (USGS) Harrison and Cedar Grove, Indiana Topographic Quadrangles (Appendix B, page 2).

Existing Conditions: This section of US 52 is a 2-lane principal arterial with a speed limit of 55 miles per hour. The existing roadway has 12-foot lanes with 2-foot aggregate shoulders and guardrail along the south roadway edge (Appendix B, page 8). This section of roadway has been impacted by erosion and a landslide on the south side of US 52, where the Whitewater River parallels the road. Erosion has impacted the alignment of the guardrail and utility poles within the project limits, and the guardrail is in poor condition and does not appear to meet height requirements.

Drainage on the north side of the road is conveyed through side ditches to two reinforced concrete box culverts (RCBs) that outfall down the south slope adjacent to US 52. The culvert near the western project limit is a 4-foot by 4-foot RCB and its structure number is CV 052-015-166.97. The culvert near the eastern project limit is a 3-foot by 3-foot RCB and its structure number is CLV-91076. These culverts convey unnamed tributary (UNT) 4 to Whitewater River and UNT 3 to Whitewater River under US 52, respectively. The larger structure at the north end of the project area is in poor condition, and the channel on the inlet side (north side of US 52) is not in line with the structure, causing moderate erosion along the north side of the road. A large scour hole is present on the south side, where undermining of the headwall has occurred. The smaller structure at the east end exhibits spalling

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and cracking at the culvert's inlet and outlet. Land use in the vicinity is largely forested on both sides of US 52 with a residence at the southeast end.

Preferred Alternative: The preferred alternative will stabilize the landslide along the south side of US 52. Proposed project activities include excavation of the slope south of US 52 and installation of a 725-foot-long soil nail wall south of US 52, with a height of 12 feet and an outward-facing 1:2 slope (Appendix B, pages 7-15). Steel wire mesh encased in shotcrete will be placed against the excavated slope. The heads of the soil nail anchors will also be encased in shotcrete. Any undisturbed slope that is showing signs of erosion within the project limits will be repaired. The roadway within the project area will be milled and overlaid. The aggregate shoulder on the north side of US 52 will be maintained. Guardrail will be replaced along the eastbound lane to meet the current guardrail standard.

The preferred alternative will also replace the existing 4-foot by 4-foot RCB conveying UNT 4 to Whitewater River below US 52 with a larger 5-foot by 4-foot RCB. Riprap will be placed at the culvert inlet and outlet. No work will occur at the 3-foot by 3-foot RCB. The aboveground utility lines along the south edge of the roadway, will be reset or relocated.

The proposed maintenance of traffic (MOT) plan includes the closure of US 52 within the project limits due to roadway constraints. Consequently, a detour will be provided (Appendix B, page 10-11). Additional MOT detail can be found in the "Maintenance of Traffic during Construction" section of this document.

The projects have been designed to minimize impacts, and no residential relocations will be required. Impacts will be reduced by minimizing work on the culverts, minimizing tree removal, as well as implementing temporary measures such as directing temporary lighting from suitable bat habitat during the active bat season. Due to the nature of the drainage patterns through the area and the need to stabilize the slope adjoining the roadway, it is not practicable to avoid all work within UNTs 3 and 4 to Whitewater River, but the level of impact is not anticipated to exceed thresholds requiring mitigation.

The proposed work will meet the purpose and need of the projects by reinforcing the failed slope, stabilizing the roadway embankment south of US 52, and replacing the RCB at the western project limit. This will minimize the potential for future slide activity and improve traffic mobility and safety for the traveling public.

Logical Termini/Independent Utility: The projects extend from 1.4 miles west of SR 46 to 1.54 miles west of SR 46 and is approximately 800 feet long. The termini of the projects provide the logical beginning and end points necessary to complete the slide correction and are of sufficient length to address potential environmental impacts on a broad scope. The projects are independent of any other action and able to be constructed without relying on the completion of any other project.

OTHER ALTERNATIVES CONSIDERED:

Provide a header for each alternative. Describe all discarded alternatives, including the No Build Alternative. Explain why each discarded alternative was not selected. Make sure to state how each alternative meets or does not meet the Purpose and Need and why.

French Drains: This alternative would involve the installation of a French drain system and concrete lined ditches along a cutoff trench parallel to and on the north side of the roadway (Appendix I, page 8). The 6-inch perforated drain would be installed below the bedrock profile to intercept ground water prior to reaching the roadway. The 6-inch non-perforated outlet pipes would be installed perpendicular to, and carrying drainage south under US 52, and would be installed via open cut trench in 100-foot spacing.

Consequently, full depth reconstruction of the roadway would be required at each trench location. The aggregate shoulder along the north side of the roadway would be replaced due to French drain construction and to improve shoulder definition.

The French Drain alternative was dismissed from consideration as it would require additional maintenance/monitoring of the drainage system and would provide a lower level of stability to the sliding earth mass, compared to the Preferred Alternative.

Combination of French Drains/Soil Nail Wall: The combination of French Drains/Soil Nail Wall alternative will combine the corrective work outlined in Alternative 1 and the preferred alternative (Appendix I, page 9). This alternative was dismissed from consideration as the preferred alternative provides a high level of stability to the sliding earth mass, rendering the addition of the French drain unnecessary.

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No Build: This alternative would not involve any improvements to the roadside slope or pavement in this section of US 52 (Appendix I, page 9). This alternative does not meet the purpose and need of the projects to restore slope stability along this section of US 52 and restore the rideability of US 52 to minimize safety hazards to the travelling public. It does not address the existing and recurring slope failures that undermine the existing roadway. This alternative was dismissed from further consideration because it does not meet the purpose and need of the projects. The No Build alternative would also not address the deteriorating condition and structural deficiencies of the culvert at the western end of the project area. If no action is taken, the culvert will continue to deteriorate until it fails, which could potentially damage the roadway and be a hazard to the traveling public.

The No Build Alternative is not feasible, prudent or practicable because (Mark all that apply)

It would not correct existing capacity deficiencies;

It would not correct existing safety hazards;

It would not correct the existing roadway geometric deficiencies;

It would not correct existing deteriorated conditions and maintenance problems; or

It would result in serious impacts to the motoring public and general welfare of the economy.

Other (Describe):

☒☒☒

ROADWAY CHARACTER:

If the proposed action includes multiple roadways, complete and duplicate for each roadway.

| | | | | | |
|----------------------------|---------------------------|----------------------|------------------|--------------|------------|
| Name of Roadway | <u>US 52</u> | | | | |
| Functional Classification: | <u>Principal arterial</u> | | | | |
| Current ADT: | <u>4,480</u> | VPD (2025) | Design Year ADT: | <u>4,591</u> | VPD (2045) |
| Design Hour Volume (DHV): | <u>449</u> | Truck Percentage (%) | <u>9.4%</u> | | |
| Designed Speed (mph): | <u>55</u> | Legal Speed (mph): | <u>55</u> | | |

| Existing | | | Proposed | | |
|------------------|-----------------------|-----|-----------------------|--|-----|
| Number of Lanes: | 2 | | 2 | | |
| Type of Lanes: | 12-foot through lanes | | 12-foot through lanes | | |
| Pavement Width: | 24 | ft. | 24 | | ft. |
| Shoulder Width: | 2-foot (aggregate) | ft. | 2-foot aggregate | | ft. |
| Median Width: | 0 | ft. | 0 | | ft. |
| Sidewalk Width: | 0 | ft. | 0 | | ft. |

Setting:

Topography:

☐
☐Urban
Level☐
☒Suburban
Rolling☒
☐Rural
Hilly

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BRIDGES AND/OR SMALL STRUCTURE(S):

If the proposed action includes multiple structures, complete and duplicate for each bridge and/or small structure. Include both existing and proposed bridge(s) and/or small structure(s) in this section.

Structure/NBI Number(s): CV 052-015-166.97 Sufficiency Rating: N/A
(Rating, Source of Information)

| | Existing | | Proposed | |
|---------------------------|----------------------|-----|----------------------|-----|
| Bridge/Structure Type: | 4-foot by 4-foot RCB | | 5-foot by 4-foot RCB | |
| Number of Spans: | N/A | | N/A | |
| Weight Restrictions: | N/A | ton | N/A | ton |
| Height Restrictions: | N/A | ft. | N/A | ft. |
| Curb to Curb Width: | N/A | ft. | N/A | ft. |
| Outside to Outside Width: | N/A | ft. | N/A | ft. |
| Shoulder Width: | N/A | ft. | N/A | ft. |

Describe impacts and work involving bridge(s), culvert(s), pipe(s), and small structure(s). Provide details for small structure(s): structure number, type, size (length and dia.), location and impacts to water. Use a table if the number of small structures becomes large. If the table exceeds a complete page, put it in the appendix and summarize the information below with a citation to the table.

CV 052-015-166.97 is a 54-foot long, 4-foot by 4-foot reinforced concrete box culvert that conveys roadside drainage and UNT 4 to Whitewater River under US 52 at the west end of the project area. Under DES No. 2001948, this culvert will be replaced with a 42-foot long, 5-foot by 4-foot RCB. The existing culvert is in poor condition, with significant spalling and cracking on the interior and exposed rebar. The channel on the inlet side (north side) is not in line with the structure, causing moderate erosion, and riprap will be required at the inlet. Riprap will also be placed at the culvert inlet and outlet. The culvert replacement and riprap placement will result in 90 feet of permanent impacts to UNT 4 to Whitewater River. Temporary dewatering to provide a dry working area will result in 15 feet linear feet of temporary impacts to UNT 4 to Whitewater River.

Structure/NBI Number(s): CLV-91076 Sufficiency Rating: N/A
(Rating, Source of Information)

| | Existing | | Proposed | |
|---------------------------|------------------|-----|----------|-----|
| Bridge/Structure Type: | 3-foot by 3-foot | | N/A | |
| Number of Spans: | N/A | | N/A | |
| Weight Restrictions: | N/A | ton | N/A | ton |
| Height Restrictions: | N/A | ft. | N/A | ft. |
| Curb to Curb Width: | N/A | ft. | N/A | ft. |
| Outside to Outside Width: | N/A | ft. | N/A | ft. |
| Shoulder Width: | N/A | ft. | N/A | ft. |

Describe impacts and work involving bridge(s), culvert(s), pipe(s), and small structure(s). Provide details for small structure(s): structure number, type, size (length and dia.), location and impacts to water. Use a table if the number of small structures becomes large. If the table exceeds a complete page, put it in the appendix and summarize the information below with a citation to the table.

CLV-91076 is a 3-foot by 3-foot RCB that conveys roadside drainage and UNT 3 to Whitewater River under US 52 at the east end of the project area. No work will occur at this culvert.

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MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

| | Yes | No |
|--|----------|----------|
| Is a temporary bridge proposed? | | X |
| Is a temporary roadway proposed? | | X |
| Will the project involve the use of a detour or require a ramp closure? (describe below) | X | |
| Provisions will be made for access by local traffic and so posted. | X | |
| Provisions will be made for through-traffic dependent businesses. | X | |
| Provisions will be made to accommodate any local special events or festivals. | X | |
| Will the proposed MOT substantially change the environmental consequences of the action? | | X |
| Is there substantial controversy associated with the proposed method for MOT? | | X |
| Will the project require a sidewalk, curb ramp, and/or bicycle lane closure? (describe below) | | X |
| Provisions will be made for access by pedestrians and/or bicyclist and so posted (describe below). | | |

Discuss closures, detours, and/or facilities (if any) that will be provided for maintenance of traffic. Any known impacts from these temporary measures should be quantified to the extent possible, particularly with respect to properties such as Section 4(f) resources and wetlands. Discuss any pedestrian/bicycle closures. Any local concerns about access and traffic flow should be detailed as well.

The MOT for the projects will require a closure of this section of US 52 during construction. A detour will be provided during the closure. The detour route will use US 52, I-74, and SR 1 and will be approximately 20 miles long (Appendix B, page 10-11). The detour is expected to last three months.

The closures/lane restrictions will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated, and all inconveniences and delays will cease upon project completion.

ESTIMATED PROJECT COST AND SCHEDULE:

| | | | | | |
|--------------|-----------------------|---------------|------------------|---------------|---------------------|
| | \$ 204,700 (Pre 2024) | Right-of-Way: | \$ 30,000 (2024) | Construction: | \$ 3,016,803 (2027) |
| | (slide) | | (slide), | | (slide) |
| Engineering: | \$175,000 (Pre 2024) | | \$10,000 (2024) | | \$359,006 (2027) |
| | (culvert) | | (culvert) | | (culvert) |

Anticipated Start Date of Construction: Fall 2026

RIGHT OF WAY:

| Land Use Impacts | Amount (acres) | |
|------------------|----------------|-------------|
| | Permanent | Temporary |
| Residential | 0 | 0 |
| Commercial | 0 | 0 |
| Agricultural | 0 | 0 |
| Forest | 1.18 | 0.02 |
| Wetlands | 0 | 0 |
| Other: | 0 | 0 |
| Other: | 0 | 0 |
| TOTAL | 1.18 | 0.02 |

Describe both Permanent and Temporary right-of-way and describe their current use. Typical and Maximum right-of-way widths (existing and proposed) should also be discussed. Any advance acquisition, reacquisition or easements, either known or suspected, and their impacts on the environmental analysis should be discussed.

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The existing right-of-way (ROW) on the north and south side of US 52 is forest. The ROW limits follow the edge of pavement throughout the project limits, with a width of 24 feet.

The projects require 1.18 acres of permanent ROW. Approximately 0.32 acre of permanent ROW will be acquired north of US 52 for construction access, and approximately 0.86 acre of permanent ROW will be acquired south of US 52 for construction access, slide correction activities, and the culvert replacement. Approximately 0.02 acre of temporary right-of-way will be acquired for the projects for access and grading to replace the culvert. The proposed ROW width varies from 83 feet to 90 feet.

If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.

Part III – Identification and Evaluation of Impacts of the Proposed Action

SECTION A - EARLY COORDINATION:

List the date(s) coordination was sent and all resource agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received.

Early coordination letters were sent on March 8, 2023 (Appendix C, pages 1-3).

| Agency | Date Sent | Date Response Received | Appendix |
|---|-----------|------------------------|------------------------|
| INDOT Seymour District Project Manager | 3/8/23 | None | N/A |
| INDOT Seymour District Environmental Section Manager | 3/8/23 | None | N/A |
| Federal Highway Administration (FHWA) | 3/8/23 | None | N/A |
| Midwest Regional Office, National Park Service (NPS) | 3/8/23 | None | N/A |
| U.S. Department of Housing and Urban Development | 3/8/23 | None | N/A |
| Natural Resources Conservation Service (NRCS) | 3/8/23 | 3/9/23 | Appendix C, page 8 |
| U.S. Army Corps of Engineers (USACE) | 3/8/23 | None | N/A |
| Indiana Department of Environmental Management (IDEM), Groundwater Section | 3/8/23 | 3/15/23 | Appendix C, pages 9-10 |
| Indiana Geological and Water Survey (IGWS) | 3/8/23 | 3/8/23 | Appendix C, page 12-13 |
| Indiana Department of Natural Resources, Div. of Fish and Wildlife (IDNR DFW) | 3/8/23 | 4/6/23 | Appendix C, pages 4-7 |
| Indiana Department of Transportation, Utilities and Railroads | 3/8/23 | None | N/A |
| Ohio-Kentucky Indiana Regional Council of Governments | 3/8/23 | None | N/A |
| Dearborn County Highway Department | 3/8/23 | None | N/A |
| Dearborn County Commissioner's Office | 3/8/23 | None | N/A |
| Dearborn County Council | 3/8/23 | None | N/A |
| Floodplain Administrator and Dearborn County Planning and Zoning | 3/8/23 | None | N/A |
| Dearborn County Surveyor's Office | 3/8/23 | 3/13/23 | Appendix C, page 11 |
| Dearborn County Emergency Management Agency | 3/8/23 | None | N/A |
| Dearborn County Sheriff's Department | 3/8/23 | None | N/A |
| Harrison Township Fire Department | 3/8/23 | None | N/A |
| Harrison Town Council | 3/8/23 | None | N/A |
| Sunman-Dearborn Community Schools | 3/8/23 | None | N/A |
| Harrison Sand and Gravel Company, Inc. | 6/5/23 | None | N/A |

All applicable recommendations are included in the Environmental Commitments section of this CE document.

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SECTION B – ECOLOGICAL RESOURCES:

Streams, Rivers, Watercourses & Other Jurisdictional Features

Federal Wild and Scenic Rivers
State Natural, Scenic or Recreational Rivers
Nationwide Rivers Inventory (NRI) listed
Outstanding Rivers List for Indiana
Navigable Waterways

Presence

| |
|---|
| X |
| |
| |
| |
| X |
| X |

Impacts

| Yes | No |
|-----|----|
| X | |
| | |
| | |
| | |
| | X |
| | X |

Total stream(s) in project area: 1,685 Linear feet Total impacted stream(s) 90 Linear feet

| Stream Name | Classification | Total Size in Project Area (linear feet) | Impacted linear feet | Comments (i.e. location, flow direction, likely Water of the US, appendix reference) |
|---------------------------|--|--|----------------------|---|
| Whitewater River | Riverine, lower perennial, unconsolidated bottom permanently flooded (R2UBH) | 410 | 0 | - Located south of US 52, along eastern half of project area - Flows southeast - Traditional navigable water (TNW) - Likely a Water of the U.S. (Appendix B, page 3) |
| UNT 1 to Whitewater River | Riverine, intermittent, streambed, sand (R4SB3) | 390 | 0 | - Located south of US 52, along western half of project area - Flows southeast into Whitewater River - Likely a Water of the U.S. (Appendix B, page 3) |
| UNT 2 to Whitewater River | Riverine, ephemeral (R6) | 190 | 0 | - Located south and north of US 52, east of the project area - Flows southwest under US 52 and into the Whitewater River, south of the investigated area. - Likely a Water of the U.S. (Appendix B, page 3) |
| UNT 3 to Whitewater River | R6 | 300 | 0 | - Located south and north of US 52, at the east end of the project area - Flows southwest into Whitewater River, it is parallel to US 52 then flows under the road - Likely a Water of the U.S. (Appendix B, page 3) |
| UNT 4 to Whitewater River | R6 | 245 | 90 | - Located south and north of US 52, at the west end of the project area - Flows southwest under US 52 and into UNT 1 to Whitewater River, which flows into Whitewater River - Likely a Water of the U.S. (Appendix B, page 3) |
| UNT 5 to Whitewater River | R6 | 150 | 0 | - Located south and north of US 52, west of the project area - Flows southwest into UNT 1 to Whitewater River, which flows into Whitewater River - Likely a Water of the U.S. (Appendix B, page 3) |

Describe all streams, rivers, watercourses and other jurisdictional features adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if the streams or rivers are listed on any federal or state lists for Indiana. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, pages 1-11), there are 17 river and stream segments located within the 0.5-mile search radius. There are two river and stream segments, both associated with Whitewater River, within or adjacent to the project area. That number was updated to six streams by the site visit on November 1, 2022, by Little River Consultants.

A *Waters of the U.S. Determination/Wetland Delineation Report* was approved by INDOT Ecology, Waterway Permitting, and

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Stormwater Office on March 28, 2023. Please refer to Appendix F, pages 1-24 for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that there are six likely jurisdictional streams (Whitewater River and UNTs 1-5 to Whitewater River) within the investigated area. The USACE makes all final determinations regarding jurisdiction.

There are no streams listed as a Federal Wild and Scenic River, a State Natural, Scenic, and Recreational River, nor are there any National Rivers Inventory waterways present in the investigated area. The Whitewater River is listed on the Indiana Register of Outstanding Rivers and Streams in Dearborn County. It is under the following categories: rivers identified in state inventories or assessments, state heritage program sites, canoe trails, and state study rivers. The projects will not impact the Whitewater River.

Whitewater River

Whitewater River flows southeast directly south of the project area. A portion of the Whitewater River is within the investigated area. Whitewater River is illustrated as perennial on the USGS 1994 Cedar Grove Quadrangle Map (Appendix B, page 2). Based on field observations, Whitewater River appears to be perennial. Whitewater River is sinuous, with riffle-pool complexes, and moderate riparian cover within the investigated area. Per the USGS Streamstats Database (<https://water.usgs.gov/osw/streamstats/indiana.html>), the upstream drainage area of Whitewater River is 1328.003 square miles. Approximately 410 feet of the Whitewater River flows adjacent to the southwestern portion of the investigated area. Drainage is conveyed towards Whitewater River via a roadside ditch and UNTs.

The Whitewater River is outside of the construction limits and will not be impacted by the projects. The Whitewater River will be marked as “Do Not Disturb” on the roadway plans.

Whitewater River is listed as impaired for Impaired Biotic Communities (IBCs) and Polychlorinated Biphenyls (PCBs). Concerning IBCs, Best Management Practices (BMPs) will be used to avoid further degradation to the stream. Concerning PCBs, exposure to PCBs in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. Workers will be informed.

UNT 1 to Whitewater River

UNT 1 to Whitewater River flows southeast into the Whitewater River within the investigated area. UNT 1 to Whitewater River is not shown on the USGS 1994 Cedar Grove Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 1 to Whitewater River appears to be intermittent as it did not have flowing water during the site visit. UNT 1 to Whitewater River exhibits a maximum ordinary high water mark (OHWM) of 17 feet wide by 1 foot deep. StreamStats reports the upstream drainage area of UNT 1 to Whitewater River as 0.129 square mile. Approximately 390 feet of UNT 1 to Whitewater River flows through the southwestern portion of the investigated area.

UNT 1 to Whitewater River is outside of the construction limits and will not be impacted by the projects. UNT 1 to Whitewater River will be marked as “Do Not Disturb” on the roadway plans.

UNT 2 to Whitewater River

UNT 2 to Whitewater River flows southwest, under US 52, into the Whitewater River within the investigated area. UNT 2 to Whitewater River is not shown on the USGS 1994 Cedar Grove Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 2 to Whitewater River appears to be ephemeral. UNT 2 to Whitewater River is not shown in StreamStats. UNT 2 to Whitewater River exhibits a maximum OHWM of 3 feet 2 inches wide by 10 inches deep. Approximately 190 feet of UNT 2 to Whitewater River are within the investigated area.

UNT 2 to Whitewater River is outside of the construction limits and will not be impacted by the projects. UNT 2 to Whitewater River will be marked as “Do Not Disturb” on the roadway plans.

UNT 3 to Whitewater River

UNT 3 to Whitewater River flows adjacent to US 52 then southwest, under US 52 via a culvert, into the Whitewater River within the investigated area. UNT 3 to Whitewater River is not shown on the USGS 1994 Cedar Grove Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 3 to Whitewater River appears to be ephemeral. UNT 3 to Whitewater River is not shown in StreamStats. UNT 3 to Whitewater River exhibits a maximum OHWM of 3 feet 8 inches wide by 1 foot 1 inch deep. Approximately 300 feet of UNT 3 to Whitewater River are within the investigated area.

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Approximately 80 feet of UNT 3 to Whitewater River is within the construction limits; however, no work will be completed within the stream or to the RCB and it will not be impacted by the projects. UNT 3 to Whitewater River will be marked as “Do Not Disturb” on the roadway plans.

UNT 4 to Whitewater River

UNT 4 to Whitewater River flows adjacent to US 52 then southwest, under US 52 via a culvert, into UNT 1 to Whitewater River within the investigated area. UNT 4 to Whitewater River is not shown on the USGS 1994 Cedar Grove Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 4 to Whitewater River appears to be ephemeral. StreamStats reports the upstream drainage area of UNT 4 to Whitewater River as 0.044 square mile. UNT 4 to Whitewater River exhibits a maximum OHWM of 11 feet wide by 1 foot deep. Approximately 245 feet of UNT 4 to Whitewater River are within the investigated area.

The projects will result in approximately 90 linear feet of permanent impacts to UNT 4 to Whitewater River due to culvert replacement and riprap installation. Approximately 30 linear feet of UNT 4 to Whitewater River will be temporarily impacted due to stream dewatering.

UNT 5 to Whitewater River

UNT 5 to Whitewater River flows southwest, under US 52 via a culvert, into UNT 1 to Whitewater River within the investigated area. UNT 5 to Whitewater River is not shown on the USGS 1994 Cedar Grove Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 5 to Whitewater River appears to be ephemeral. UNT 5 to Whitewater River is not shown in Stream Stats. UNT 5 to Whitewater River exhibits a maximum OHWM of 5 feet wide by 12 feet 5 inches deep. Approximately 150 feet of UNT 5 to Whitewater River are within the investigated area.

UNT 5 to Whitewater River is outside of the construction limits and will not be impacted by the projects. UNT 5 to Whitewater River will be marked as “Do Not Disturb” on the roadway plans.

The projects are anticipated to require USACE Section 404 and IDEM Section 401 permits. Impacts to UNT 4 to Whitewater River are not anticipated to meet the threshold requiring mitigation. Avoidance alternatives are not practical due to the scope of activities required to repair the landslide and replace the culvert.

IDNR DFW responded on April 6, 2023, with recommendations for bank stabilization, structures and wildlife crossings, minimizing in-channel disturbance, not working in the waterway from April 1 – June 30, not excavating in the low flow area, not constructing temporary runarounds, using six-inch grade riprap, not using broken concrete as riprap, underlaying riprap with well graded aggregate or geotextile, erosion and sediment measures (Appendix C, pages 4-7). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Open Water Feature(s)

Reservoirs
Lakes
Farm Ponds
Retention/Detention Basin
Storm Water Management Facilities
Other: _____

Presence

| |
|--|
| |
| |
| |
| |
| |
| |

Impacts

| Yes | No |
|-----|----|
| | |
| | |
| | |
| | |
| | |

Describe all open water feature(s) identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, pages 2-3), there are no open water features located within the 0.5-mile search radius. This was confirmed by the site visit on November 1, 2022, by Little River Consultants. Therefore, no impacts are expected.

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A *Waters of the U.S. Determination/Wetland Delineation Report* was approved by INDOT Ecology, Waterway Permitting, and Stormwater Office on March 28, 2023. Please refer to Appendix F, pages 1-24 for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that there are no open features within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

Presence**Impacts****Yes****No****Wetlands**Total wetland area: 0 Acre(s) Total wetland area impacted: 0 Acre(s)

(If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

| Wetland No. | Classification | Total Size (Acres) | Impacted Acres | Comments (i.e. location, likely Water of the US, appendix reference) |
|-------------|----------------|--------------------|----------------|--|
| N/A | N/A | N/A | | |

Documentation**ESD Approval Dates****Wetlands (Mark all that apply)**

Wetland Determination

Wetland Delineation

USACE Isolated Waters Determination

☒

March 28, 2023

Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain):

Substantial adverse impacts to adjacent homes, business or other improved properties;

Substantially increased project costs;

Unique engineering, traffic, maintenance, or safety problems;

Substantial adverse social, economic, or environmental impacts, or

The project not meeting the identified needs.

Describe all wetlands identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, page 3), there are 17 wetlands within the 0.5-mile search radius. There are three wetlands mapped within or adjacent to the project area. That number was updated to one wetland within the project area by the site visit on November 1, 2022, by Little River Consultants.

A *Waters of the U.S. Determination/Wetland Delineation Report* was approved by INDOT Ecology, Waterway Permitting, and Stormwater Office on March 28, 2023. Please refer to Appendix F, pages 1-24 for the *Waters of the U.S. Determination/Wetland Delineation Report*. Although one jurisdictional wetland was identified during the site visit, it is within the OHWM of the Whitewater River, and is considered an in-stream feature. The in-stream feature is within the Whitewater River and outside of the construction limits for the projects. Therefore, no impacts are expected. The USACE makes all final determinations regarding jurisdiction.

IDNR DFW responded on April 6, 2023, with a recommendation to not excavate or place fill in any riparian wetland (Appendix C, pages 4-7). All applicable recommendations are included in the Environmental Commitments section of this CE document.

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Terrestrial Habitat

Presence

☒

Impacts

Yes

NO

☒

☐

Total terrestrial habitat in project area: 0.98 Acre(s) Total tree clearing: 0.63 Acre(s)

Describe types of terrestrial habitat (i.e. forested, grassland, farmland, lawn, etc) adjacent or within the project area. Include whether or not impacts will occur to habitat identified. Include total terrestrial habitat impacted and total tree clearing that will occur. Discuss measure to avoid, minimize, and mitigate if impacts will occur.

Based on a desktop review, a site visit on November 1, 2022, by Little River Consultants, and the aerial map of the project area (Appendix B, page 3) there is maintained roadside habitat and forested habitat on the adjacent slopes. Dominant vegetation within the project area includes boxelder maple (*Acer negundo*), silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), green ash (*Fraxinus pennsylvanica*), black walnut (*Juglans nigra*), calico aster (*Symphotrichum lateriflorum*), Canada goldenrod (*Solidago canadensis*), and daisy fleabane (*Erigeron strigosus*).

The projects will require approximately 0.98 acre of habitat disturbance for construction access, slide correction activities, and the culvert replacement. Of that 0.98 acre, 0.63 acre is tree clearing. Avoidance alternatives are not feasible as the project limits are required for the correction of the landslide and replacement of the culvert. Terrestrial habitat impacts have been minimized to the smallest extent possible to complete the proposed scope of work. Mitigation for terrestrial habitat impacts is not anticipated. All disturbed areas will be reseeded according to the current INDOT standard specifications.

IDNR DFW responded on April 6, 2023, with recommendations pertaining to riparian habitat mitigation, post-construction revegetation measures, minimizing tree and brush clearing, using erosion control blankets that minimize the entrapment and snaring of small-bodied wildlife (Appendix C, pages 4-7). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Protected Species

Federally Listed Bats

Information for Planning and Consultation (IPaC) determination key completed

Section 7 informal consultation completed (IPaC cannot be completed)

Section 7 formal consultation Biological Assessment (BA) required

Yes

☒

No

☐

☒

☒

Determination Received for Listed Bats from USFWS: NE ☐ NLAA ☒ LAA ☐

Other Species not included in IPaC

Additional federal species found in project area (based on IPaC species list)

State species (not bird) found in project area (based upon consultation with IDNR)

Yes

☒

No

☐

☐

Migratory Birds

Known usage or presence of birds (i.e. nests)

State bird species based upon coordination with IDNR

Yes

☐

No

☒

☒

Discuss IDNR coordination and species identified. Describe USFWS Section 7 consultation and determination received for Indiana bat and northern long-eared bat impacts. Discuss if other federally listed species were identified. If so, include consultation that has occurred and the determination that was received. Discuss if migratory birds have been observed and any impacts.

Based on a desktop review and the RFI report (Appendix E, pages 1-11), completed by HNTB on June 8, 2023, the IDNR Dearborn County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR DFW early coordination response letter dated April 6, 2023 (Appendix C, pages 4-7), the Natural Heritage Program's Database has been checked and the state endangered variegate darter (*Etheostoma variatum*) has been documented within 0.5 mile of the project area. IDNR DFW stated no impacts to the above-mentioned darter should occur as long as proper erosion and sediment control measures are in place.

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An INDOT 0.5-mile bat review occurred on June 23, 2022, and did not indicate the presence of endangered bat species (Appendix C, page 26).

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages 14-25). The projects are within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*). No additional species were generated in the IPaC species list other than the Indiana bat and NLEB.

The projects qualify for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. Culvert inspections occurred on August 18, 2022, and there were no bats/birds or signs of bats/birds found using the structures (Appendix C, pages 41-42). An effect determination key was completed on March 29, 2023, and based on the responses provided, the projects were found to “*may affect – not likely to adversely affect*” the Indiana bat and/or the NLEB (Appendix C, pages 27-40). INDOT reviewed and verified the effect finding on March 29, 2023, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. The USFWS provided Avoidance and Minimization Measures (AMMs) pertaining to tree removal, temporary lighting, and operator, employee, and contractor awareness of environmental commitments and AMMs while working in bat habitat area. AMMs and/or commitments are included as firm commitments in the Environmental Commitments section of this document.

Culvert inspections occurred on August 18, 2022, and no bats or signs of bats found using the structures (Appendix C, pages 41-42). USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after August 18, 2024, an inspection of the structures by a qualified individual, must be performed. Inspection of the structures should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the Environmental Commitments of this document.

The IPaC project description included 1.19 acres of tree clearing. This number was conservative and has been reduced to 0.63 acre of tree clearing. The “*may affect – not likely to adversely affect*” finding has not changed.

This precludes the need for further consultation on these projects as required under Section 7 of the Endangered Species Act, as amended. If new information on endangered species at the site becomes available, or if project plans are changed, USFWS will be contacted for consultation.

Geological and Mineral Resources

Project located within the Indiana Karst Region
Karst features identified within or adjacent to the project area
Oil/gas or exploration/abandoned wells identified in the project area

| Yes | No |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Date Karst Evaluation reviewed by INDOT EWPO (if applicable): _____

Discuss if project is located in the Indiana Karst Region and if any karst features have been identified in the project area (from RFI). Discuss response received from IGWS coordination. Discuss if any mines, oil/gas, or exploration/abandoned wells were identified and if impacts will occur. Include discussion of karst study/report was completed and results. (Karst investigation must comply with the current Protection of Karst Features during Planning and Construction guidance and coordinated and reviewed by INDOT EWPO)

Based on a desktop review and the Indiana Karst Region map, the projects are located in the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topo map of the project area (Appendix B, page 2), the RFI report (Appendix E, pages 1-11), and the site visit on November 1, 2022, by HNTB, there are no karst features identified within or adjacent to the project area. In the early coordination response dated March 8, 2023, the IGWS did not indicate that karst features exist in the project area (Appendix C, pages 12-13). IGWS also stated that there is high liquefaction potential, a floodway, potential slope instability, low potential for bedrock resources, high potential for

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sand and gravel resources, and no documented active or abandoned mineral resources extraction sites located within the project area. The response from IGWS was shared with the designer on February 19, 2024. No impacts are expected.

Based on the RFI report (Appendix E, pages 1-11), one mineral resource facility, Harrison Sand and Gravel Company, Inc., is located within the 0.5-mile search radius. This sand and gravel facility is 0.26 mile northwest of the project area. An early coordination letter was sent to Harrison Sand and Gravel Company, Inc. on June 5, 2023. No response was received. No impact is expected.

SECTION C – OTHER RESOURCES

Drinking Water Resources

Wellhead Protection Area(s)
Source Water Protection Area(s)
Water Well(s)
Urbanized Area Boundary
Public Water System(s)

Presence

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|--|
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| |

Impacts

Yes

No

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Is the project located in the St. Joseph Sole Source Aquifer (SSA):

If Yes, is the FHWA/EPA SSA MOU Applicable?

If Yes, is a Groundwater Assessment Required?

Yes

No

| | |
|--|---|
| | X |
| | |
| | |

Check the appropriate boxes and discuss each topic below. Provide details about impacts and summarize resource-specific coordination responses and any mitigation commitments. Reference responses in the Appendix.

The projects are in Dearborn County, which is not within the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/EPA Sole Source Aquifer Memorandum of Understanding is not applicable to these projects, a detailed groundwater assessment is not needed, and no impacts are expected.

In an early coordination letter dated March 15, 2023, IDEM stated the projects are not located within a Wellhead Protection Area or Source Water Assessment Area (Appendix C, pages 9-10). No impacts are expected.

The IDNR Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on July 8, 2023, by HNTB. No wells are located near these projects. Therefore, no impacts are expected.

Based on a desktop review of the INDOT MS4 Mapper (<https://entapps.indot.in.gov/MS4/>) by HNTB on June 23, 2023, these projects are not located within an Urban Area Boundary location. No impacts are expected.

Based on a desktop review, a site visit on November 1, 2022, by Little River Consultants, and the aerial map of the project area (Appendix B, page 3), no public water systems were identified. Therefore, no impacts are expected.

Floodplains

Project located within a regulated floodplain
Longitudinal encroachment
Transverse encroachment
Homes located in floodplain within 1000' up/downstream from project

Presence

| |
|---|
| X |
| X |
| |
| |

Impacts

Yes

No

| | |
|---|--|
| X | |
| X | |
| | |
| | |

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If applicable, indicate the Floodplain Level?

Level 1 ☐ Level 2 ☒ Level 3 ☐ Level 4 ☐ Level 5 ☐

Use the IDNR Floodway Information Portal to help determine potential impacts. Include floodplain map in appendix. Discuss impacts according to the classification system. If encroachment on a flood plain will occur, coordinate with the Local Flood Plain Administrator during design to insure consistency with the local flood plain planning.

Based on the desktop review of the IDNR Indiana Floodway Information Portal website (<https://secure.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/>) by HNTB, on June 23, 2023, a small portion of the project construction limits are within a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, page 9). An early coordination letter was sent on March 8, 2023, to the local Floodplain Administrator. The floodplain administrator did not respond within the 30-day time frame. The projects qualify as a Category 2 per the current INDOT CE Manual because the culvert to be replaced is not within the floodplain. Category 2 states:

- Category 2 – “This project will not involve the replacement or modification of any existing drainage structures or the addition of any new drainage structures. As a result, this project will not affect flood heights or floodplain limits. This project will not increase flood risks or damage, and it will not adversely affect existing emergency services or emergency routes; therefore, it has been determined that this encroachment is not substantial.”

Farmland

Agricultural Lands
Prime Farmland (per NRCS)

Presence

☐
☐

Impacts

| Yes | No |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |

Total Points (from Section VII of CPA-106/AD-1006*) _____

*If 160 or greater, see CE Manual for guidance.

Discuss existing farmland resources in the project area, impacts that will occur to farmland, and mitigation and minimization measures considered.

Based on a desktop review, a site visit on November 1, 2022, by Little River Consultants, and the aerial map of the project area (Appendix B, page 3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to these projects; therefore, no impacts are expected.

An early coordination letter was sent on March 8, 2023, to the NRCS. The NRCS responded on March 9, 2023, stating that the projects will not cause a conversion of prime farmland (Appendix C, page 8).

SECTION D – CULTURAL RESOURCES

Minor Projects PA

Category(ies) and Type(s)

Category B, Types 3, 9, and 10

INDOT Approval Date(s)

January 22, 2024

N/A

Full 106 Effect Finding

No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect ☐

This is page 16 of 25 Project name: US 52 Slide Correction/Small Structure Replacement Date: September 5, 2024

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Eligible and/or Listed Resources Present

NRHP Building/Site/District(s) ☐ Archaeology ☐ NRHP Bridge(s) ☐

Documentation Prepared (mark all that apply)

APE, Eligibility and Effect Determination
800.11 Documentation
Historic Properties Report or Short Report
Archaeological Records Check and Assessment **X**
Archaeological Phase Ia Survey Report **X**
Archaeological Phase Ic Survey Report
Other:

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ESD Approval Date(s)

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|------------------|
| |
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| |
| January 22, 2024 |
| January 22, 2024 |
| |
| |

SHPO Approval Date(s)

| |
|-----|
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| |
| N/A |
| N/A |
| |
| |

Memorandum of Agreement (MOA)

☐

MOA Signature Dates (List all signatories)

| |
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|--|

If the project falls under the MPPA, describe the category(ies) that the project falls under and any approval dates. If the project requires full Section 106, use the headings provided. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of the paper(s) and the comment period deadline. Include any further Section 106 work which must be completed at a later date, such as mitigation from a MOA or avoidance commitments.

On January 22, 2024, the INDOT Cultural Resource Office (CRO) determined that these projects fall within the guidelines of Category B, Types 3, 9, and 10 under the Minor Projects Programmatic Agreement (Appendix D, pages 1-7).

MPPA Category B-3 projects include construction of added travel, turning, auxiliary lanes (e.g. bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening in undisturbed soils when an archaeological investigation determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area.

MPPA Category B-9 projects include the installation, replacement, repair, lining, or extension of culverts and other drainage structures when work occurs in undisturbed soils and an archaeological investigation determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area.

MPPA Category B-10 projects include slide corrections, slope repairs, and other erosion control measures, in undisturbed soils when an archaeological investigation determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area.

A Phase Ia archaeological survey was completed on December 4, 2023, by Cultural Resource Analysts, Inc. A records review was conducted, and no previously conducted studies or previously recorded archaeological sites were found within the project area. During the field reconnaissance, three previously unrecorded archaeological sites were located, each of which were recommended not eligible for inclusion in the National Register of Historic Places (NRHP). One of the sites could not be fully assessed for inclusion; however, the right-of-way and construction limits for the proposed projects are outside of the site boundary and no further work is recommended at the site in association with these projects (Appendix D, pages 8-10).

No further consultation is required. This completes the Section 106 process and responsibilities of the FHWA under Section 106 have been fulfilled.

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SECTION E – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES

| | <u>Presence</u> | <u>Use</u> | |
|--|----------------------|----------------------|----------------------|
| | | Yes | No |
| Parks and Other Recreational Land | | | |
| Publicly owned park | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Publicly owned recreation area | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Other (school, state/national forest, bikeway, etc.) | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Wildlife and Waterfowl Refuges | | | |
| National Wildlife Refuge | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| National Natural Landmark | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| State Wildlife Area | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| State Nature Preserve | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Historic Properties | | | |
| Site eligible and/or listed on the NRHP | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| <u>Evaluations Prepared</u> | | | |
| Programmatic Section 4(f) | <input type="text"/> | | |
| "De minimis" Impact | <input type="text"/> | | |
| Individual Section 4(f) | <input type="text"/> | | |
| Any exception included in 23 CFR 774.13 | <input type="text"/> | | |

Discuss Programmatic Section 4(f) and "de minimis" Section 4(f) impacts in the discussion below. Individual Section 4(f) documentation must be included in the appendix and summarized below. Discuss proposed alternatives that satisfy the requirements of Section 4(f). FHWA has identified various exceptions to the requirement for Section 4(f) approval. Refer to 23 CFR § 774.13 - Exceptions.

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife / waterfowl refuges, and NRHP eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, pages 1-11), there is a potential Section 4(f) resource (a historic canal, Whitewater Canal) within the 0.5-mile search radius. According to additional research and the Phase 1a archaeological investigation performed, by Cultural Resource Analysts, Inc., no archaeological resources are anticipated to be impacted by the projects and no further archaeological work is recommended. Therefore, no use is expected.

Section 6(f) Involvement

Section 6(f) Property

| | <u>Presence</u> | <u>Use</u> | |
|--|----------------------|----------------------|----------------------|
| | | Yes | No |
| | <input type="text"/> | <input type="text"/> | <input type="text"/> |

Discuss Section 6(f) resources present or not present. Discuss if any conversion would occur as a result of this project. If conversion will occur, discuss the conversion approval.

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use.

A review of 6(f) properties on the INDOT ESD website (<https://www.in.gov/indot/2523.htm>) revealed a total of three properties in Dearborn County (Appendix I, page 1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

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SECTION F – Air Quality

STIP/TIP and Conformity Status of the Project

Is the project in the most current STIP/TIP?

Yes

☒

No

Is the project located in an MPO Area?

☒

Is the project in an air quality non-attainment or maintenance area?

☒

If Yes, then:

Is the project in the most current MPO TIP?

Is the project exempt from conformity?

If No, then:

Is the project in the Transportation Plan (TP)?

Is a hot spot analysis required (CO/PM)?

Location in STIP:

FY 2024-2028 STIP Amendment 7

Name of MPO (if applicable):

Ohio-Kentucky-Indiana Regional Council of Governments

Location in TIP (if applicable):

FY 2024-2027 TIP Administrative Modification #5

Level of MSAT Analysis required?

Level 1a ☒ Level 1b ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Level 5 ☐

Describe if the project is listed in the STIP and if it is in a TIP. Describe the attainment status of the county(ies) where the project is located. Indicate whether the project is exempt from a conformity determination. If the project is not exempt, include information about the TP and TIP. Describe if a hot spot analysis is required and the MSAT Level.

The projects are included in the Fiscal Year (FY) 2024-2027 Ohio-Kentucky-Indiana Regional Council of Governments (OKI) Transportation Improvement Program (TIP) in Administrative Modification #5 (November 7, 2023) which is directly incorporated in the FY 2024-2028 Statewide Transportation Improvement Program (STIP) via Amendment 7 (Appendix H, pages 1-5).

The projects are located in Dearborn County, but is outside of the Lawrence Township maintenance area for the 2008 8-hour ozone standard, according to IDEM's Current and Historical List of Nonattainment Areas by County ([IDEM: State Implementation Plans: Requests for Redesignation and Maintenance Plans](#)). Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

The projects are of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(c) or exempt under the Clean Air Act conformity rule under 40 CFR 93.126, and as such, a Mobile Source Air Toxics analysis is not required.

SECTION G - NOISE

Noise

Yes

No

Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?

☐☒

Date Noise Analysis was approved/technically sufficient by INDOT ESD: _____

Describe if the project is a Type I or Type III project. If it is a Type I project, describe the studies completed to date and if noise impacts were identified. If noise impacts were identified, describe if abatement is feasible and reasonable and include a statement of likelihood.

These projects are Type III projects. In accordance with 23 CFR 772 and the current *Indiana Department of Transportation Traffic Noise Analysis Procedure*, this action does not require a formal noise analysis.

This is page 19 of 25 Project name: US 52 Slide Correction/Small Structure Replacement Date: September 5, 2024

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SECTION H – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

Will the proposed action comply with the local/regional development patterns for the area?

Yes

☒

No

Will the proposed action result in substantial impacts to community cohesion?

☐

☒

Will the proposed action result in substantial impacts to local tax base or property values?

☐

☒

Will construction activities impact community events (festivals, fairs, etc.)?

☐

☒

Does the community have an approved transition plan?

☒

☐

If No, are steps being made to advance the community's transition plan?

☐

☐

Does the project comply with the transition plan? (explain in the discussion below)

☒

☐

Discuss how the project complies with the area's local/regional development patterns; whether the project will impact community cohesion; and impact community events. Discuss how the project conforms with the ADA Transition Plan.

The projects will ultimately be beneficial to local businesses and properties due to mitigating the potential for future slide activity along US 52 within the project limits. Overall, the negative impacts to property owners within the project area will be minimal and will consist primarily of short-term construction impacts. Property owners will be provided access throughout the duration of construction to reduce impacts to the greatest extent feasible. The projects are not anticipated to result in substantial impacts to community cohesion, because it will not change access to properties within the area. The projects are not expected to impact the surrounding community or cause economic impacts to the surrounding area. If these project improvements are not implemented, there would be continued sliding of the roadway slope and eventual failure of the road, which would incur long standing adverse community and economic impacts.

Per the 2021 Indiana Festival Guide (<https://indianafestivals.org/>) accessed on June 23, 2023 by HNTB, there are two scheduled festivals in Dearborn County, which are located at the opposite (southeast) end of the county, at least 15 miles away in Lawrenceburg and Aurora. The projects will close US 52 and utilize a detour during construction, which will last approximately three months.

The MOT may pose delays and temporary inconveniences to traveling motorists; however, all inconveniences will cease upon project completion.

Dearborn County has an approved Americans with Disabilities Act (ADA) Transition Plan. However, the projects are within a rural portion of the County without pedestrian facilities and is not included in the ADA Transition Plan.

Public Facilities and Services

Discuss what public facilities and services are present in the project area and impacts (such as MOT) that will occur to them. Include how the impacts have been minimized and what coordination has occurred. Some examples of public facilities and services include health facilities, educational facilities, public and private utilities, emergency services, religious institutions, airports, transportation or public pedestrian and bicycle facilities.

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 2), there are no public facilities within the 0.5-mile search radius, which was confirmed by the site visit on November 1, 2022, by Little River Consultants. Therefore, no impact is expected. Access to all properties will be maintained during construction.

Early coordination letters were sent to Sunman-Dearborn Community Schools, Dearborn County Commissioner's Office, Dearborn County Council, Dearborn County Highway Department, Dearborn County Planning and Zoning, Dearborn County Emergency Management Agency, Dearborn County Surveyor's Office, Dearborn County Sheriff's Department, Harrison Township Fire Department, and the Harrison Town Council on March 8, 2023. To date, no response was received from these entities, other than the Dearborn County Surveyor's Office, who indicated that they were not aware of any concerns.

It is the responsibility of the projects' sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access.

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Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

Will the project result in adversely high and disproportionate impacts to EJ populations?

| Yes | No |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| | |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Indicate if EJ issues were identified during project development. If an EJ analysis was not required, discuss why. If an EJ analysis was required, describe how the EJ population was identified. Include if the project has a disproportionately high or adverse effect on EJ populations and explain your reasoning. If yes, describe actions to avoid, minimize and mitigate these effects.

Under FHWA Order 6640.23A, FHWA and INDOT, as recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Preparation Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre or greater of additional permanent ROW. These projects do not require relocations but will require approximately 1.18 acres of new permanent ROW. Therefore, an EJ analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exist and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city, or town and is called the community of comparison (COC). In these projects, the COC is Dearborn County. The community that overlaps the project area is called the affected community (AC). In these projects, the AC is Census Tract 802.04.

An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the American Community Survey five-year estimates data (2017-2021) was obtained from the U.S. Census Bureau website (<https://data.census.gov/>) on April 14, 2024. The data collected for minority and low-income populations within the AC are summarized in the table below.

| | COC – Dearborn County, Indiana | AC 1 – Census Tract 802.04, Dearborn County, Indiana |
|---|-----------------------------------|---|
| MINORITY POPULATION | | |
| Percent minority | 4.45% | 6.03% |
| 125 Percent of COC | 5.56% | |
| AC Percent Minority Greater Than 125 Percent of COC? | | Yes |
| AC Percent Minority Greater Than 50 Percent? | | No |
| Population of EJ Concern? | | Yes |
| LOW- INCOME POPULATION | | |
| Percent Low-Income | 8.46% | 4.68% |
| 125 Percent of COC | 10.58% | |
| AC Percent Low-Income Greater Than 125 Percent of COC? | | No |
| AC Percent Low-Income Greater Than 50 Percent? | | No |
| Population of EJ Concern? | | No |

The AC, Census Tract 802.04, has a percent minority population of 6.03%, which is below 50%; however, it is greater than the 125% COC threshold. Therefore, the AC Census Tract has a minority population of EJ concern.

The AC, Census Tract 802.04, has a percent low-income population of 4.68%, which is below 50% and below the 125% COC threshold. Therefore, the AC Census Tract does not have a low-income population of EJ concern.

The census data sheets, map, and calculations can be found in Appendix I, pages 14-16. All the aforementioned ROW is located

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within Census Tract 802.04, which has a minority population of EJ concern. It is not possible to completely avoid ROW acquisition and still address the needs of the projects, as the slide correction, roadway stabilization, and drainage work cannot be accomplished within existing INDOT ROW.

The maintenance of traffic for the projects will require a closure of this section of US 52 during construction. A detour will be provided during the closure. The detour route will use US 52, I-74, and SR 1, and will be approximately 20 miles long. The detour is expected to be in place for three months. Additionally, local roads can be utilized, specifically along St. Peters Road and Barber Road, as well as SR 46 to avoid the project area. This local route is approximately 7 miles long. Access to private properties will be maintained throughout construction to minimize impacts to the maximum extent feasible.

During construction, temporary travel inconveniences will similarly impact both populations with EJ concerns and populations without EJ concerns. These impacts will cease upon completion of the projects. The temporary impacts associated with construction activities will be minimized by following INDOT's Standard Specifications.

The projects will benefit all users of US 52, including populations with and without EJ concerns, by improving the failed slope, stabilizing the roadway embankment south of US 52, and restoring hydraulic adequacy in the area; thus, minimizing the potential for future slide activity and improving traffic mobility and safety for the traveling public. If no action is taken, the slope will continue to fail, and the roadway will continue to gradually lose stabilization.

The draft EJ analysis was submitted for review to INDOT ESD on April 25, 2024. INDOT ESD concurred with the findings of the EJ analysis on May 15, 2024, stating that the impacts associated with the projects would not cause a disproportionately high and adverse effect on minority and/or low-income populations of EJ concern relative to non-EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a and that no further EJ analysis is required (Appendix I, page 13).

Relocation of People, Businesses or Farms

Will the proposed action result in the relocation of people, businesses or farms?

Yes

No

Is a BIS or CSRS required?

| |
|--|
| |
| |

| |
|---|
| X |
| X |

Number of relocations: Residences: 0 Businesses: 0 Farms: 0 Other: 0

Discuss any relocations that will occur due to the project. If a BIS or CSRS is required, discuss the results in the discussion below.

No relocations of people, businesses, or farms will take place as a result of these projects.

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Hazardous Materials & Regulated Substances (Mark all that apply)

Red Flag Investigation (RFI)

Phase I Environmental Site Assessment (Phase I ESA)

Phase II Environmental Site Assessment (Phase II ESA)

Design/Specifications for Remediation required?

Documentation

| |
|---|
| X |
| |
| |
| |

Date RFI concurrence by INDOT SAM (if applicable): June 30, 2023

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Include a summary of the potential hazardous material concerns found during review. Discuss in depth sites found within, directly adjacent to, or ones that could impact the project area. Refer to current INDOT SAM guidance. If additional documentation (special provisions, pay quantities, etc.) will be needed, include in discussion. Include applicable commitments.

Based on a review of GIS and available public records, the RFI was completed on June 8, 2023, by HNTB and INDOT SAM provided their concurrence on June 30, 2023 (Appendix E, pages 1-11). One NPDES facility is located within 0.5 mile of the project area. The hazmat site identified will not impact the projects. Further investigation for hazardous material concerns is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required**Army Corps of Engineers (404/Section10 Permit)**

Nationwide Permit (NWP)

☒

Regional General Permit (RGP)

☐

Individual Permit (IP)

☐

Other

☐**IN Department of Environmental Management (401/Rule 5)**

Nationwide Permit (NWP)

☒

Regional General Permit (RGP)

☐

Individual Permit (IP)

☐

Isolated Wetlands

☐

Rule 5

☐

Other

☐**IN Department of Natural Resources**

Construction in a Floodway

☐

Navigable Waterway Permit

☐

Other

☐**Mitigation Required**☐**US Coast Guard Section 9 Bridge Permit**☐**Others (Please discuss in the discussion below)**☐

List the permits likely required for the project and summarize why the permits are needed, including permits designated as "Other."

A USACE Section 404 Nationwide Permit and IDEM Section 401 Nationwide Water Quality Certification Permit are anticipated to be required for the projects. An IDEM Construction Stormwater General Permit (CSGP) is not anticipated because ground disturbance will be less than one acre. An IDNR Construction in a Floodway (CIF) permit is not anticipated because fill will not be placed below the base flood elevation.

Applicable recommendations provided by resource agencies are included in the Environmental Commitments section of this document. If permits are found to be necessary, the conditions of the permit will be requirements of the projects and will supersede these recommendations.

It is the responsibility of the projects' sponsor to identify and obtain all required permits.

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ENVIRONMENTAL COMMITMENTS

List all commitments and include the name of agency/organization requesting/requiring the commitment(s). Listed commitments should be numbered.

Firm:

1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT District)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
3. The Whitewater River, UNT 1 to Whitewater River, UNT 2 to Whitewater River, UNT 3 to Whitewater River, and UNT 5 to Whitewater River will be marked as "Do Not Disturb" on the roadway plans. (INDOT ESD)
4. USFWS Culvert Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after August 18, 2024, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT)
5. One impaired stream (Whitewater River) is within the study area. Whitewater River is listed as impaired for Impaired Biotic Communities (IBCs) and Polychlorinated Biphenyls (PCBs). Concerning IBCs, Best Management Practices (BMPs) will be used to avoid further degradation to the stream. Concerning PCBs, exposure to PCBs in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. Workers will be informed. (INDOT ESD)
6. 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. (USFWS)
7. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season (April 1 to September 30). (USFWS)
8. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
9. 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. (USFWS & IDNR DFW)
10. 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). (USFWS)
11. 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. (USFWS)

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For Further Consideration:

1. Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Where riprap must be used, we recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank up to the ordinary high water mark (OHWM). The banks above the OHWM should be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to the area and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. (IDNR DFW)
2. Soft armoring and bioengineering techniques should be considered first, with hard armoring (e.g. riprap or glacial stone) used only where absolutely necessary. In many instances, one or more methods are necessary to increase the likelihood of vegetation establishment. Combining vegetation with most bank stabilization methods can provide additional bank protection and help reduce impacts upon fish and wildlife. If hard armoring is needed, wildlife passage can be facilitated by using a smooth-surfaced armoring material instead of riprap, such as articulated concrete block mats, fabric-formed concrete mats, or other similar smooth surfaced material. (IDNR DFW)
3. For crossing replacements, the new structure must include wildlife passage appropriate for the type of replacement structure being proposed. All wildlife passage designs must include a smooth level pathway a minimum of 1-2 feet in width composed of natural substrate (soil, sand, gravel, etc.) or compacted aggregate fill over riprap (#2, #53, #73, etc.) tied into existing elevations both upstream and downstream. The stream crossing repairs or modifications, and any bank stabilization under or around the structure, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. Upgrading wildlife passage for rehabilitated/modified structures is encouraged whenever possible to improve wildlife/vehicle safety. (IDNR DFW)
4. When designing a new or replacement structure, bridges are recommended over culverts, and three-sided culverts are recommended over box or pipe culverts. Multiple culverts or culverts with multiple openings are not recommended. These types of structures are often problematic for fish and wildlife passage as they tend to accumulate debris and become blocked. If box and pipe culverts must be used, the culvert bottoms should be sumped a minimum of 6" (or 20% of the culvert height or diameter, whichever is greater up to a maximum of 2') below the stream bed elevation. Sumping is not required for bridges or three-sided culverts. Crossings must span the entire channel width (a minimum of 1.2 times the ordinary high water mark width). Crossings must maintain the natural stream substrate within the structure (natural stream substrate must be replaced in sumped box and pipe culverts up to the existing flowline). Scour protection at the inlet and outlet must not extend above the existing flowline elevation to maintain aquatic organism passage. Stream depth, channel width and water velocities in the crossing structure during low-flow conditions must approximate those in the natural stream channel. (IDNR DFW)
5. Impacts to non-wetland forest of one acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to forested wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed. (IDNR DFW)
6. Do not excavate in the low flow area except for the placement of the shotcrete wall, new structure, or riprap and reshaping the bank or removal of the old structure. (IDNR DFW)
7. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR DFW)
8. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR DFW)
9. Erosion control blankets should be 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. (IDNR DFW)

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Appendix A: INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

| | PCE | Level 1 | Level 2 | Level 3 | Level 4 ¹ |
|--|--|---|-------------------------------------|------------------------------|--|
| Section 106 | Falls within guidelines of Minor Projects PA | "No Historic Properties Affected" | "No Adverse Effect" | - | "Adverse Effect" Or Historic Bridge involvement ² |
| Stream Impacts³ | No construction in waterways or water bodies | < 300 linear feet of stream impacts | ≥ 300 linear feet of stream impacts | - | USACE Individual 404 Permit ⁴ |
| Wetland Impacts³ | No adverse impacts to wetlands | < 0.1 acre | - | < 1.0 acre | ≥ 1.0 acre |
| Right-of-way⁵ | Property acquisition for preservation only or none | < 0.5 acre | ≥ 0.5 acre | - | - |
| Relocations⁶ | None | - | - | < 5 | ≥ 5 |
| Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)* | "No Effect", "Not likely to Adversely Affect" (With select AMMs ⁷) | "Not likely to Adversely Affect" (With any AMMs or commitments) | - | "Likely to Adversely Affect" | Project does not fall under Species Specific Programmatic ⁸ |
| Threatened/Endangered Species (Any other species)* | Falls within guidelines of USFWS 2013 Interim Policy or "No Effect" | "Not likely to Adversely Affect" | - | - | "Likely to Adversely Affect" |
| Environmental Justice | No disproportionately high and adverse impacts | - | - | - | Potential ⁹ |
| Sole Source Aquifer | No Detailed Groundwater Assessment | - | - | - | Detailed Groundwater Assessment |
| Floodplain | No Substantial Impacts | - | - | - | Substantial Impacts |
| Section 4(f) Impacts | None | - | - | - | Any ¹⁰ |
| Section 6(f) Impacts | None | - | - | - | Any |
| Permanent Traffic Alteration | None | - | - | - | Any |
| Noise Analysis Required | No | - | - | - | Yes |
| Air Quality Analysis Required | No | - | - | - | Yes ¹¹ |
| Approval Level <ul style="list-style-type: none"> District Env. (DE) Env. Serv. Div. (ESD) FHWA | Concurrence by DE or ESD | DE or ESD | DE or ESD | DE and/or ESD | DE and/or ESD; and FHWA |

¹ Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

² Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

³ Total permanent impacts to streams (linear feet) and wetlands (acres).

⁴ US Army Corps of Engineers Individual 404 Permit

⁵ Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.

⁶ If any relocations are within an area with a known or suspected Environmental Justice (EJ) or disadvantaged population, or has greater than 5 relocations, a conversation with FHWA, through INDOT ESD, is needed to confirm NEPA classification and outreach plan for the project.

⁷ Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

⁸ Projects that do not fall under a Species Specific Programmatic and results in a "Likely to Adversely Affect". Other findings can be processed as a lower-level CE.

⁹ Potential for causing a disproportionately high and adverse impact.

¹⁰ Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

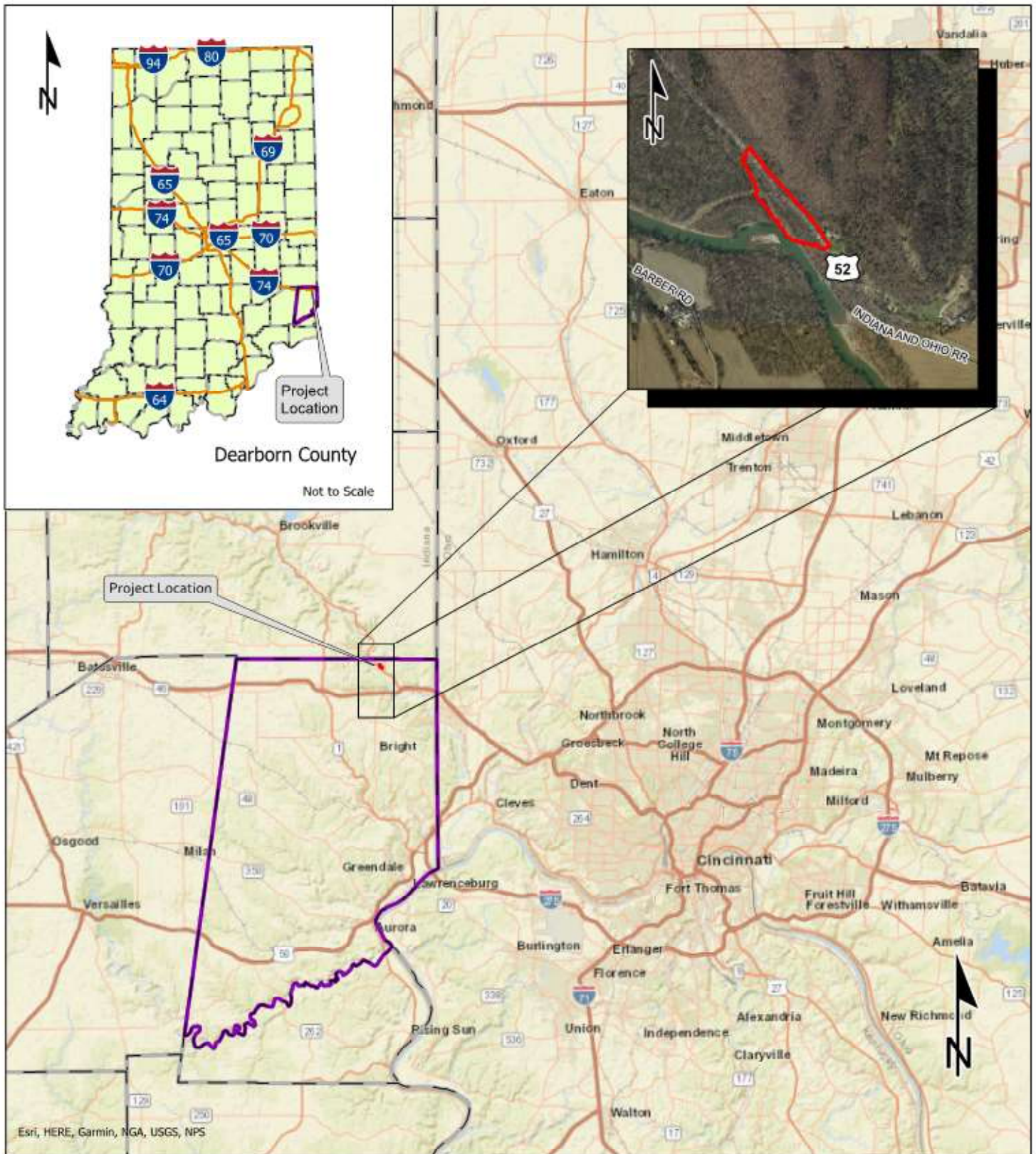
¹¹ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

Note: Substantial public or agency controversy may require a higher-level NEPA document.

US 52 Slide Correction and Small Structure Replacement
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Appendix B: Graphics



- Project Area
- Dearborn County
- County Boundary

0 4.5 9
Miles

Project Location Map

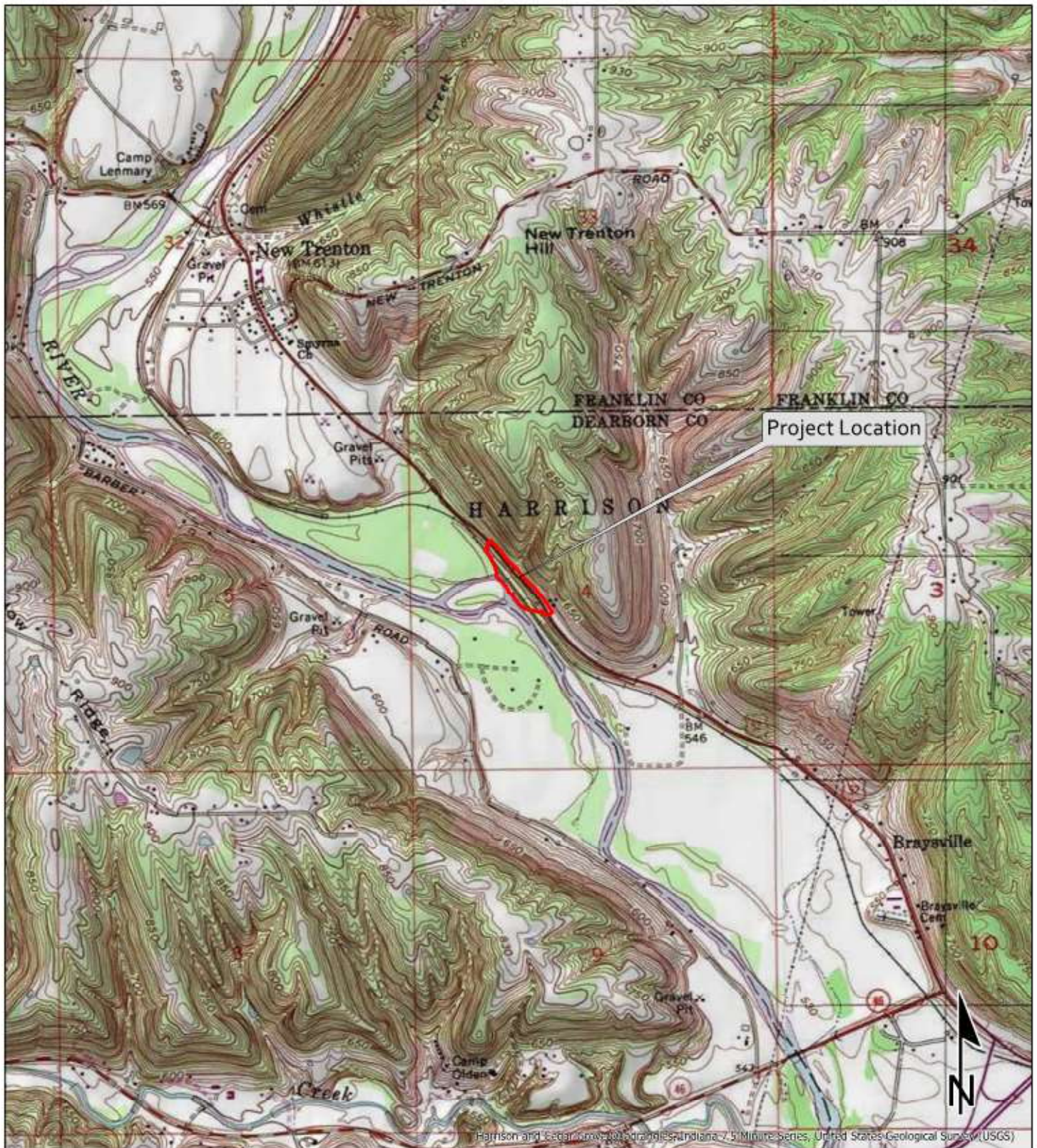
US 52, 1.4 Miles West of SR 46
Slide Correction and Small Structure Replacement
Dearborn County, Indiana

Des. No. 2000090 & 2001948

1 inch = 9 miles

HNTB

Graphics created by HNTB Corporation (2023)



 Project Area

0 1,000 2,000
Feet

USGS (1:24,000 scale) Topographic Map

US 52, 1.4 Miles West of SR 46

Slide Correction and Small Structure Replacement
Dearborn County, Indiana

Des. No. 2000090 & 2001948

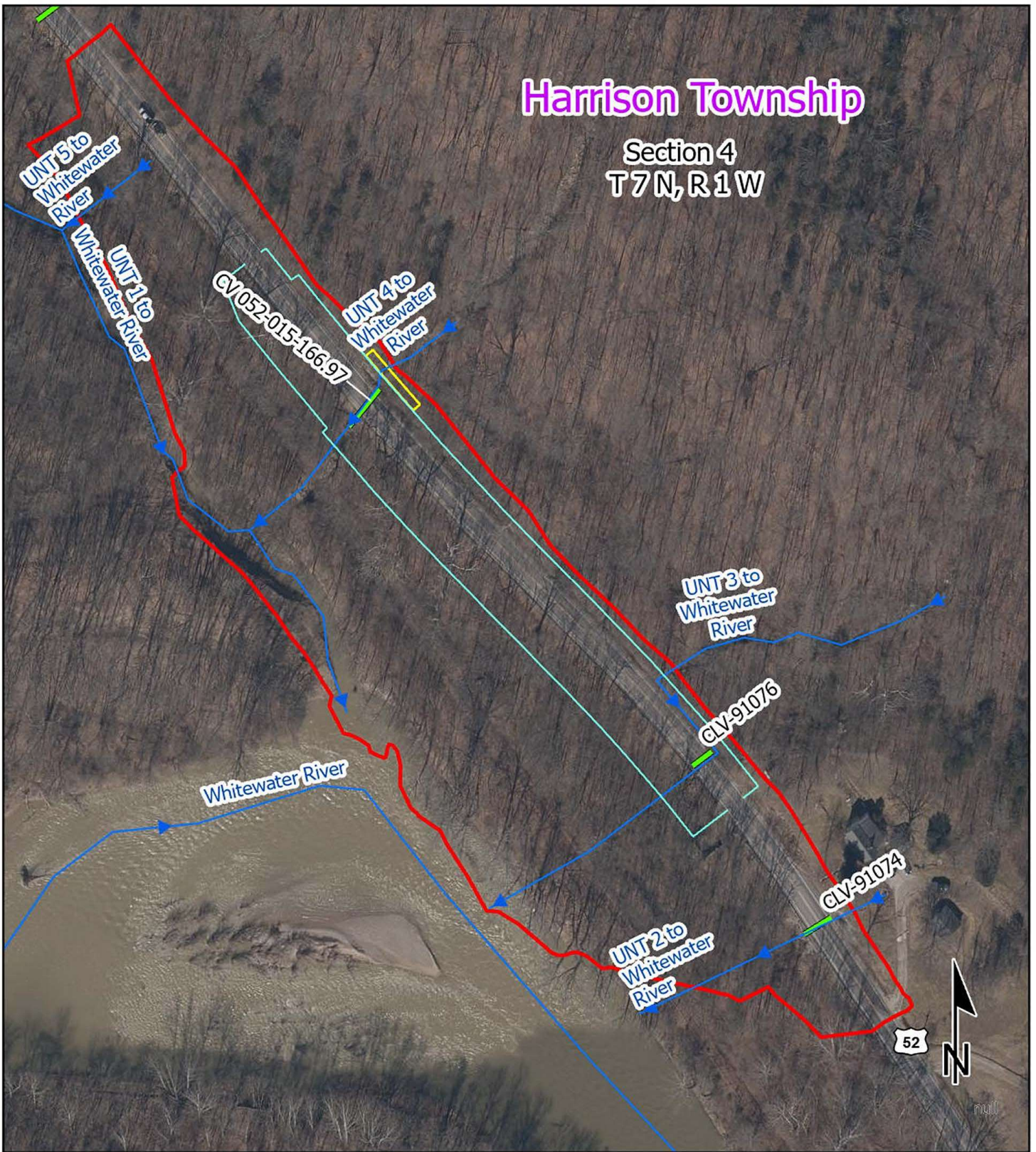
1 inch = 2,000 ft

HNTB

Graphics created by HNTB Corporation (2024)

Harrison Township

Section 4
T7N, R1W



- Project Area
- Permanent ROW
- Temporary ROW
- Construction Limits
- Streams
- Culvert

0 75 150
Feet

Project Aerial Map

US 52, 1.4 Miles West of SR 46
Slide Correction and Small Structure Replacement
Dearborn County, Indiana

Des. No. 2000090 & 2001948

1 inch = 150 ft

HNTB

Graphics created by HNTB Corporation (2024)



- Project Area
- Photo Location

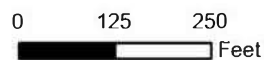


Photo Location Map

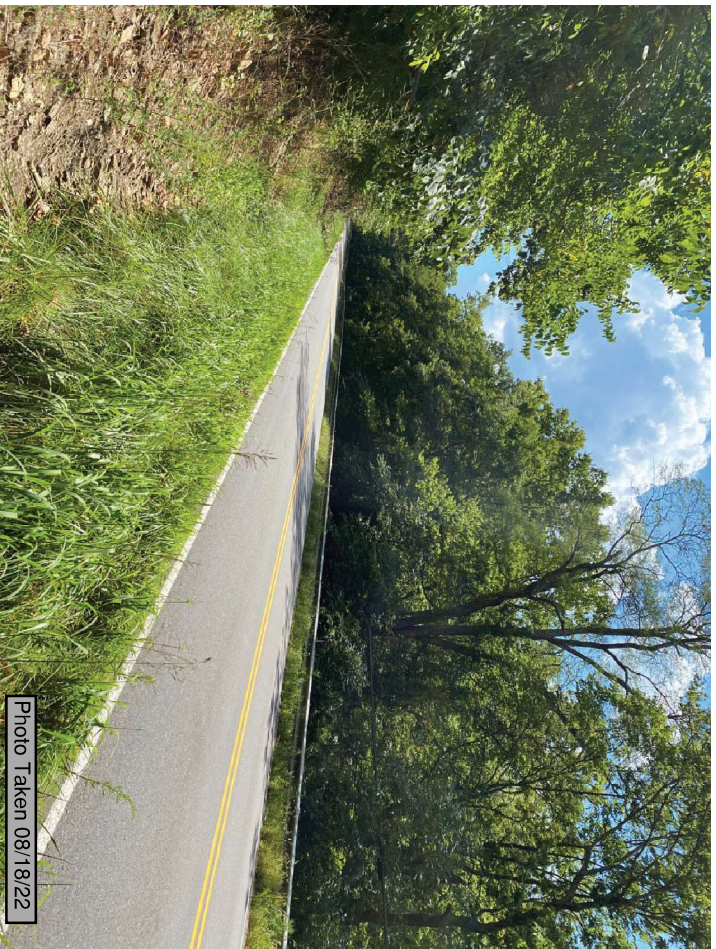
US 52, 1.4 Miles West of SR 46
 Slide Correction and Small Structure Replacement
 Dearborn County, Indiana

Des. No. 2000090 & 2001948

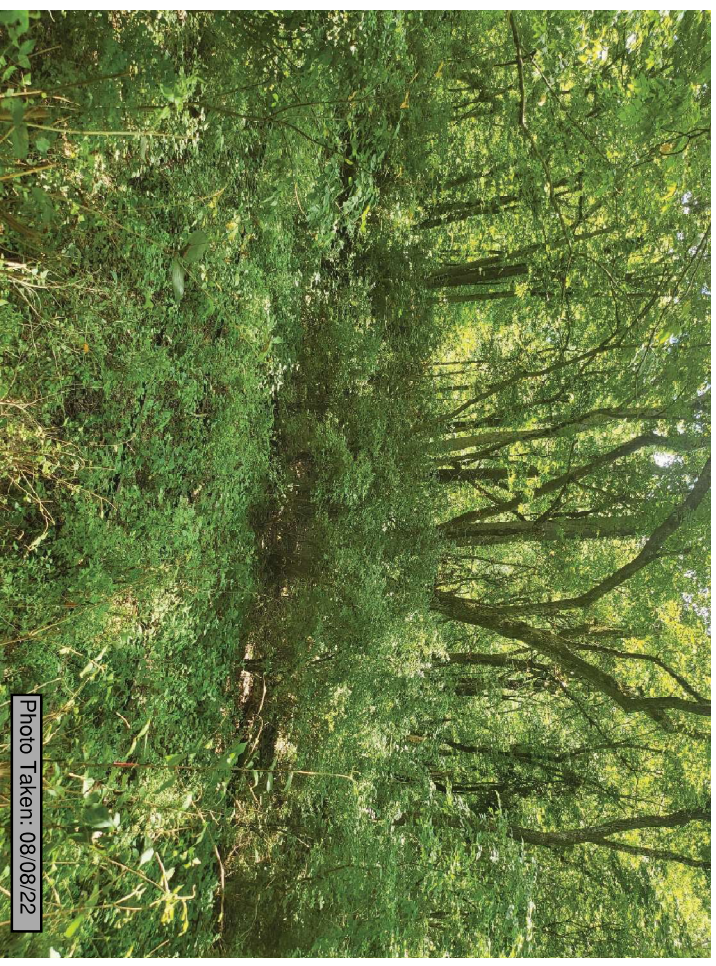
1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



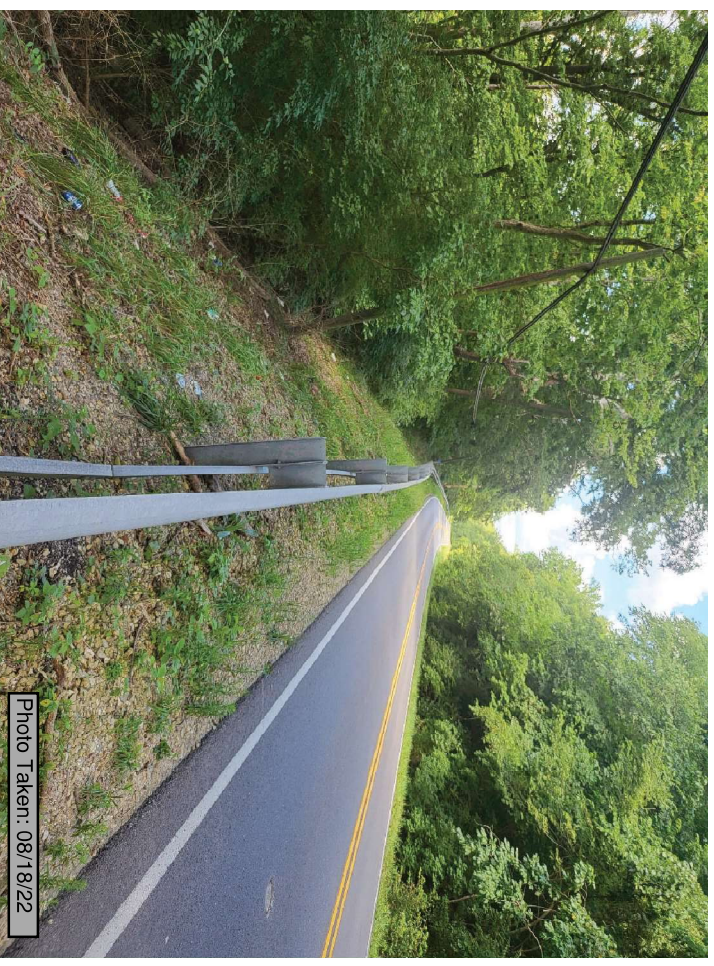
1. Looking southeast along north side of US 52



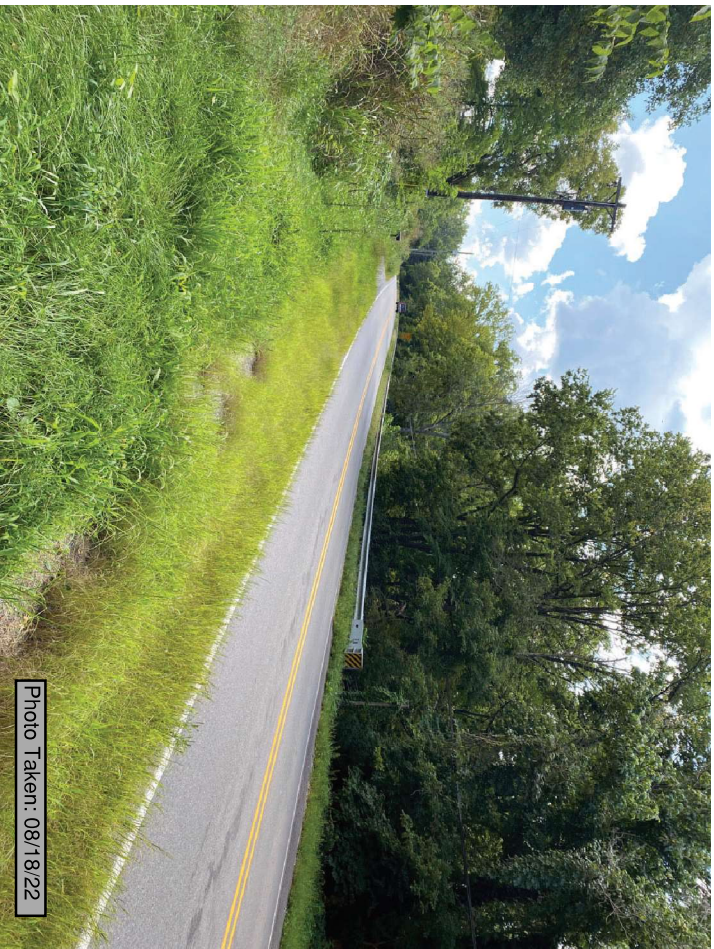
2. Looking south to wooded area south of US 52



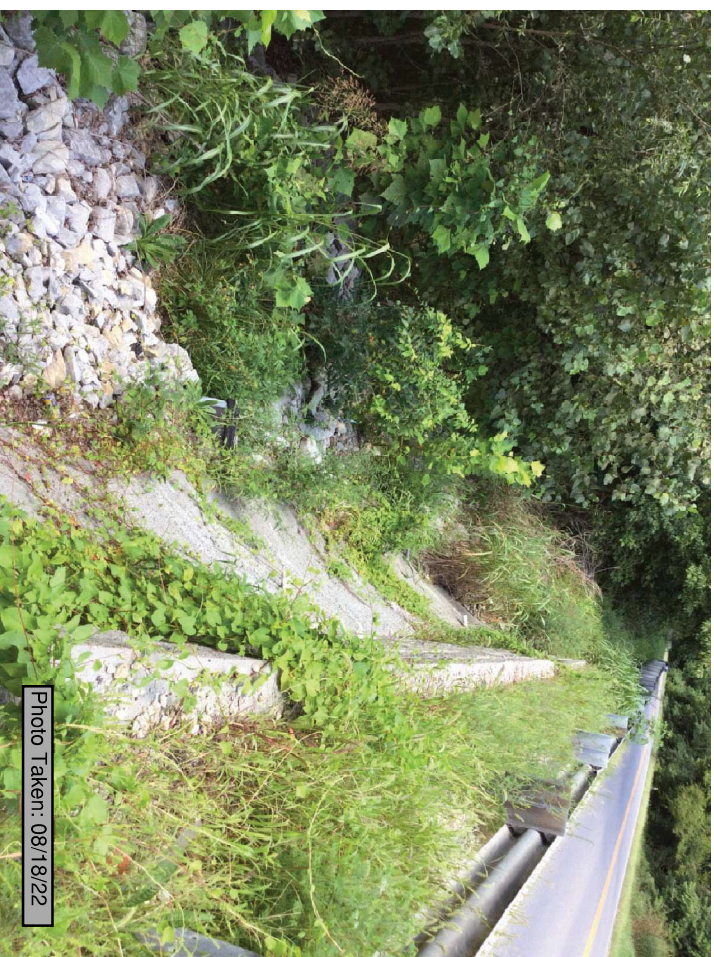
3. Looking southeast along south side of US 52



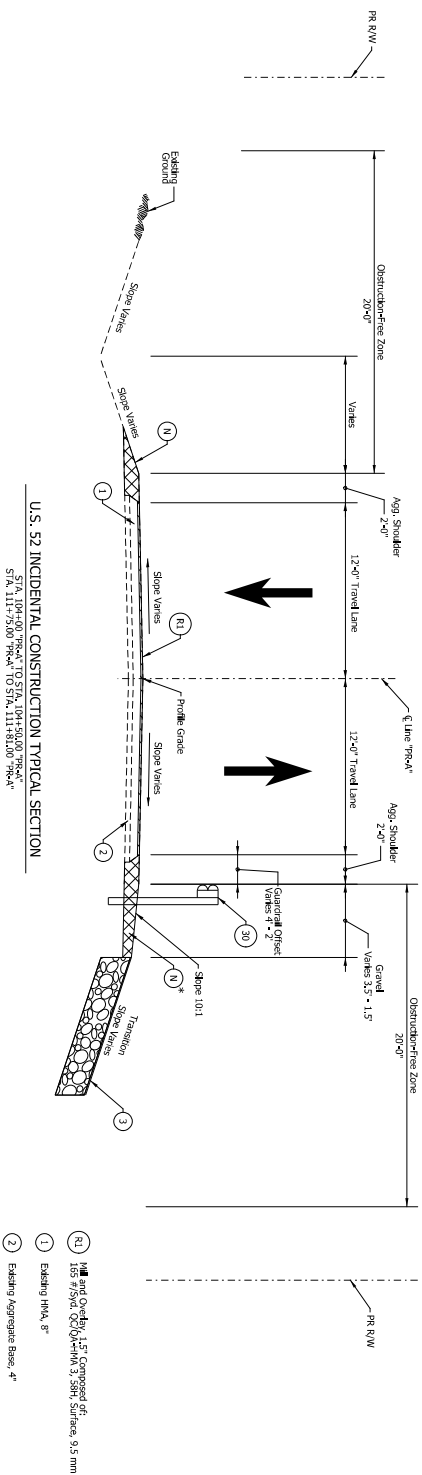
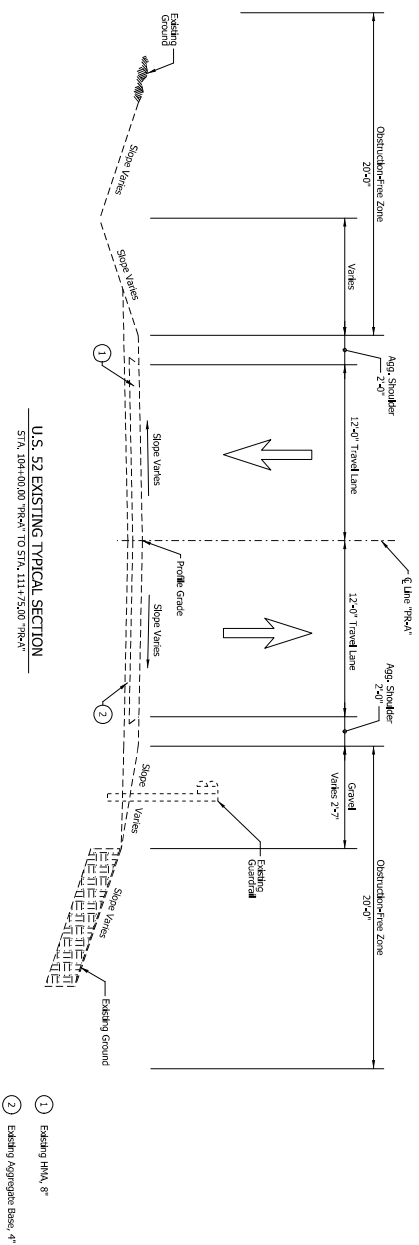
4. Looking northwest along south side of US 52, note the steep slope adjacent to the road



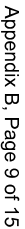
5. Looking southeast along north side of US 52

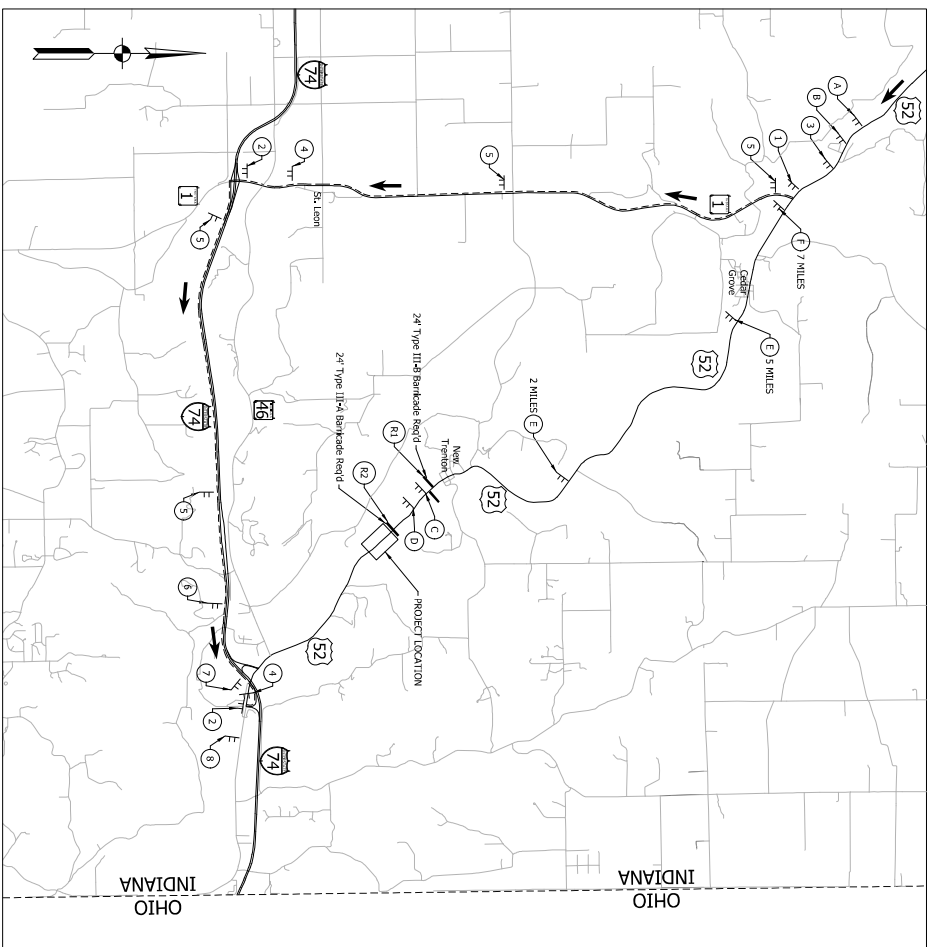


6. Looking northwest at the retaining wall on south side of US 52



| | | | | | | | |
|---|--|---------------------------------------|--|------------------------------|--|-------------------------------|--|
| <p>DRAFT NOT FOR CONSTRUCTION</p> | | <p>RECOMMENDED FOR APPROVAL _____</p> | | <p>DESIGN ENGINEER _____</p> | | <p>DATE _____</p> | |
| <p>DESIGNED BY JCH _____</p> | | <p>DRAWN BY AM _____</p> | | <p>CHECKED BY BGS _____</p> | | <p>CHECKED BY BGS _____</p> | |
| <p>INDIAN DEPARTMENT OF TRANSPORTATION</p> | | | | <p>TYPICAL SECTIONS</p> | | | |
| <p>HORIZONTAL SCALE 1" = 100'</p> | | <p>BRIDGE FILE NA</p> | | <p>VERTICAL SCALE NA</p> | | <p>DISCUSSION 2000/09</p> | |
| <p>SHEET BOOK ELECTRONIC CONTRACT 14-3371</p> | | <p>SHEETS TYPICAL 6 of 35</p> | | <p>2000/09</p> | | <p>2000/09</p> | |



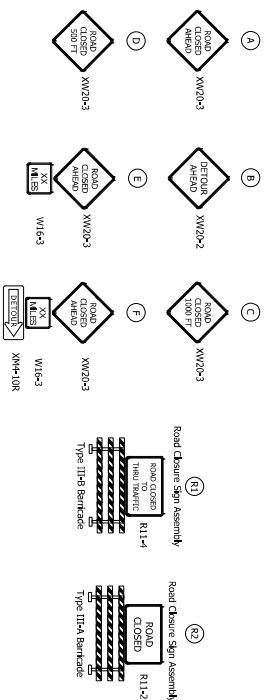
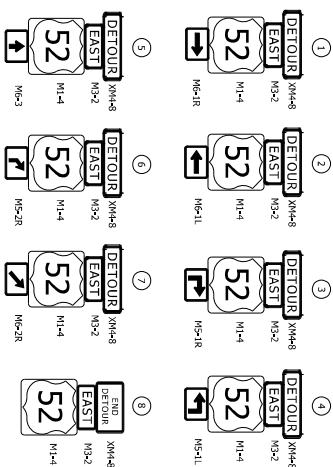


NOTE TO REVIEWER

DETAILS OF A LOCAL DETOUR WILL BE DISCUSSED AT A LATER SUBMITTAL

Detour

1. Project area along US-52 shall be closed to thru traffic. Detour eastbound thru traffic south on SR-1 to I-74 Exit. Detour westbound thru traffic to I-74 West to SR-1 North.
2. Detour shall remain in place throughout construction.
3. Contractor shall maintain temporary access to all properties during construction.
4. For detour sign spacing see Standard Detail E-501-TCDD-004.



| Summary of Detour Quantities | | |
|------------------------------|------|----------------|
| Item | Unit | Total Quantity |
| Detour Route Marker Assembly | EACH | 13 |
| Detour Closure Sign Assembly | EACH | 2 |
| Construction Sign A | EACH | 7 |
| Construction Sign B | EACH | 4 |
| Barrelade, IIIA | LFT | 24 |
| Barrelade, IIIB | LFT | 24 |

LEGEND

-- Detour Route
 F Detour Route Sign Assembly
 — Type II-A or Type III-B Barricade

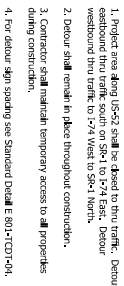
| | | | | | |
|---|--|---|--|--|--|
| DRAFT NOT FOR CONSTRUCTION | | | | | |
| RECOMMENDED FOR APPROVAL _____ | | DESIGN ENGINEER _____ DATE _____ | | | |
| DESIGNED BY JCH _____ | | DRAWN BY AM _____ | | | |
| CHECKED BY BGS _____ | | CHECKED BY BGS _____ | | | |
| INDIANA DEPARTMENT OF TRANSPORTATION | | | | | |
| DETROUR U.S. 52 - EASTBOUND | | | | | |
| HORIZONTAL SCALE VIA _____ | | BRIDGE FILE VIA _____ | | | |
| VERTICAL SCALE VIA _____ | | DISPOSITION 200909 | | | |
| SHEET BOOK ELECTRONIC CONTRACT In-3371 | | SHEETS NOT ALL 10 OF 35 PROJECT 200909 | | | |



| | |
|---|-------------------------------|
| INDIANA DEPARTMENT OF TRANSPORTATION | DETOUR U.S. 52 - WESTBOUND |
|---|-------------------------------|

| | |
|------------------|-------------|
| HORIZONTAL SCALE | BRIDGE FILE |
| N/A | N/A |
| VERTICAL SCALE | DESIGNATION |
| N/A | 2000090 |
| SURVEY BOOK | SHEETS |
| ELECTRONIC | NOT-02 |
| CONTRACT | of 35 |
| Rc-43371 | PROJECT |
| | 2000090 |

Appendix B, Page 11 of 15



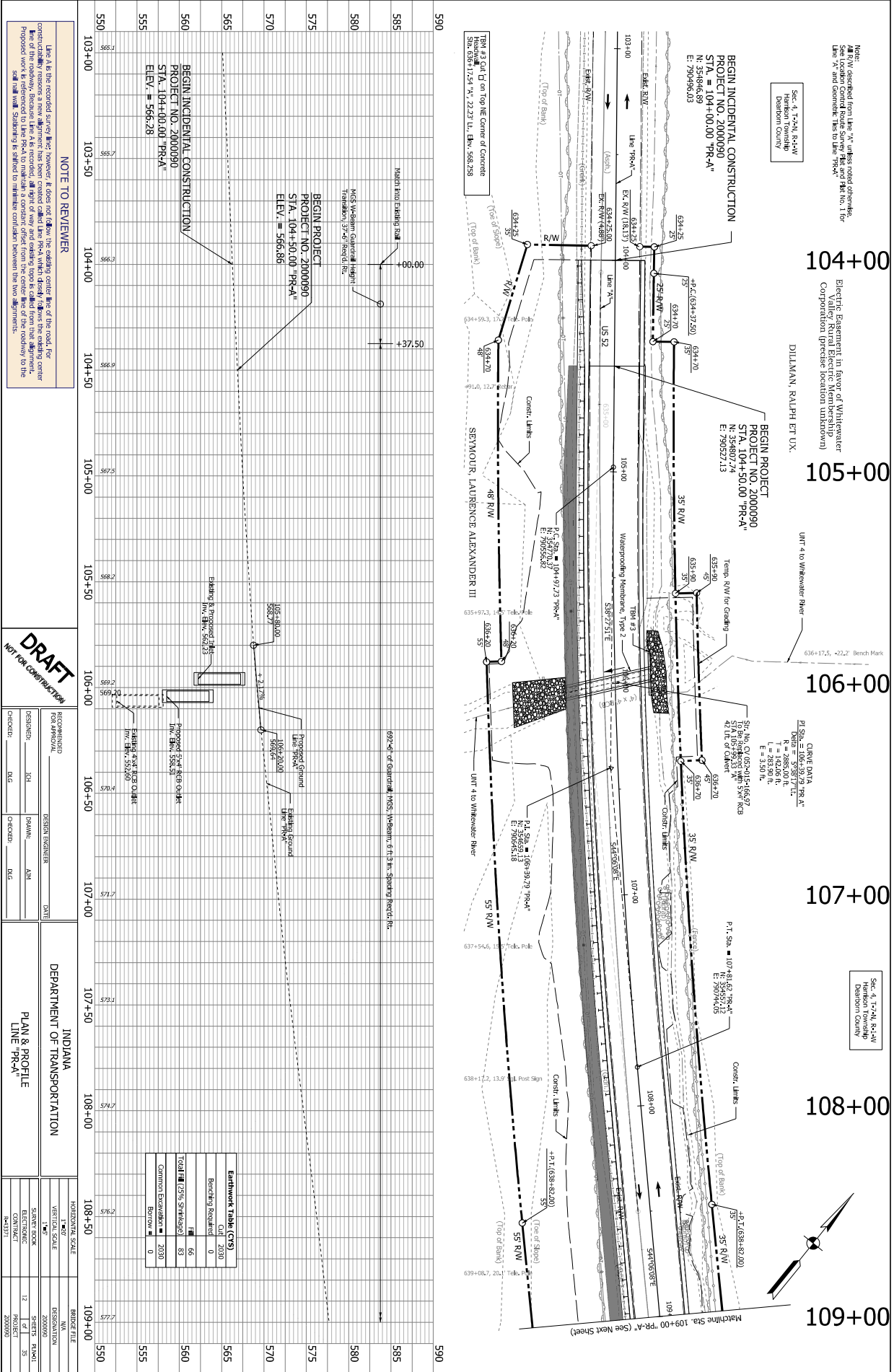
Detour

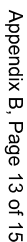
1. Project area along US-52 shall be closed to thru traffic. Detour westbound thru traffic south on SR-1 to I-74 East. Detour westbound thru traffic to I-74 West to SR-1 North.
2. Detour shall remain in place throughout construction.
3. Contractor shall maintain temporary access to all properties during construction.
4. For detour sign spacing see Standard Detail E-501-1-CD-I-04.

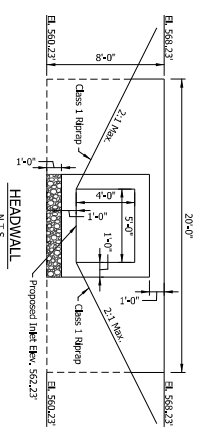
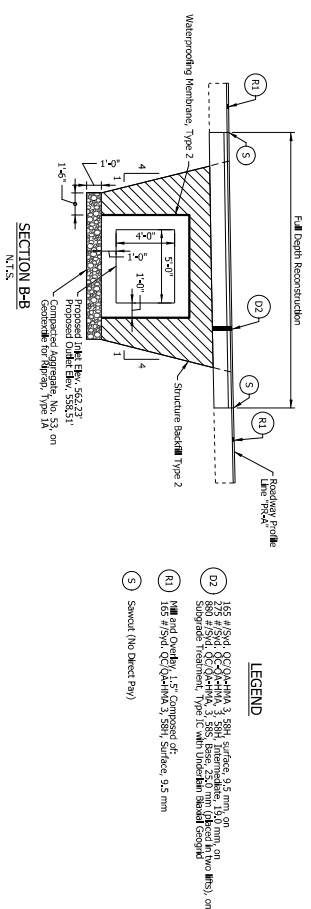
| Summary of Detour Quantities | | |
|------------------------------|------|----------------|
| Item | Unit | Total Quantity |
| Detour Route Marker Assembly | EACH | 12 |
| Road Closure Sign Assembly | EACH | 2 |
| Construction Sign, A | EACH | 6 |
| Barrrcade, IIIx8 | LF | 24 |
| Barrrcade, IIIx6 | LF | 24 |

LEGEND

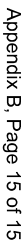
- Detour Route
 F Detour Route Sign Assembly
 — Type III-A or Type III-B Barricade







| | | | |
|---|-----------------|--------------|------|
| RECOMMENDED FOR APPROVAL | DESIGN ENGINEER | | DATE |
| | | | |
| DESIGNED BY | JOH | DRAWN BY | AM |
| CHECKED BY | DAG | CHECKED BY | DAG |
| INDIANA DEPARTMENT OF TRANSPORTATION STRUCTURE DETAIL | | | |
| HORIZONTAL SCALE | | BRIDGE FILE | |
| 1"=60' | | NA | |
| VERTICAL SCALE | | DESIGNATION | |
| 1"=10' | | 200095 | |
| SUPER STRUCT | | SHEETS OF 64 | |
| ELECTRONIC CONTRACT | | PROJECT 35 | |
| 200095 | | 200095 | |



US 52 Slide Correction and Small Structure Replacement
Dearborn County, Indiana
Des. Nos. 2000090 & 2001948

Appendix C: Early Coordination



INDIANA DEPARTMENT OF TRANSPORTATION

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

PHONE: (855) 463-6848
(855) INDOT-4U

Eric J. Holcomb, Governor
Michael Smith, Commissioner

Example Early Coordination Letter

March 9, 2023

Via Email to Early Coordination List

Re: Early Coordination Letter
Des. Nos. 2000090 and 2001948, State Project
US 52, 1.4 Miles West of State Road (SR) 46
Slide Correction
Dearborn County, Indiana

To Whom it May Concern:

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a Slide Correction project on US 52 in Dearborn County, Indiana. This letter is part of the early coordination phase of the environmental review process. We request comments from you regarding any potential environmental or community effects associated with this proposed project of which you are aware. **Please use the above designation numbers and description in your reply.** We will incorporate your comments into a study of the project's environmental effects.

Project Location: This project is located on US 52, approximately 1.4 miles west of SR 46. More specifically, the project is located in Section 4, Township 7 North, Range 1 West, in Harrison Township, Indiana.

Existing Conditions: This section of US 52 is a two-lane Principal Arterial with a speed limit of 45 miles per hour (mph). The existing roadway has 12-foot lanes with 2-foot usable shoulders and guardrail along the south roadway edge. The guardrail is in poor condition and does not appear to meet height requirements. In addition, the existing horizontal alignment does not meet minimum INDOT Design Manual horizontal alignment design criteria as the existing horizontal curves have inconsistent super-elevations.

There is an existing 4-foot by 4-foot reinforced concrete box (RCB) culvert (CV 052-015-166.97) within the project area, located approximately 0.09 mile southeast of the northern project area terminus. The culvert is in poor condition, with significant spalling and cracking on the interior and exposed rebar. The channel on the inlet side (north side of US 52) is not in line with the structure, causing moderate erosion. There is also heavy debris and evidence of overtopping. There is a 3-foot by 3-foot concrete culvert (CV 52-015-166.70) within the project area, located approximately 0.06 mile northwest of the southern project area terminus. There is spalling and cracking at the culvert inlet and outlet.

Purpose and Need: The purpose of the project is to mitigate soil erosion on the south side of the US 52 roadway. The need for this project is due to continued bank erosion along the south side of US 52.

Proposed Project: The proposed project includes the excavation of the slope south of US 52 and the installation of a soil nail wall to stabilize the land slide. Steel wire mesh encased in shotcrete will be placed against the excavated slope. The heads of the soil nail anchors will be encased in shotcrete. The roadway within the project area will be milled and overlaid. Guardrail will be replaced along the eastbound lane. The aggregate shoulder along the south edge of the roadway will be replaced with hot mix asphalt (HMA). Culvert CV 052-015-166.97 will be replaced with a 5-foot by 5-foot RCB under Des. No. 2001948. Riprap will be placed at the inlet and outlet. The inlet and outlet location for Culvert CV 52-015-166.70 will be regraded, and riprap will be placed at the inlet and outlet. Existing overhead electric poles along the south edge of the roadway will be reset or relocated.

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