

CATEGORICAL EXCLUSION LEVEL 1 FORM

GENERAL PROJECT INFORMATION

Road No./County:

State Road (S.R.) 49 / Porter County

Designation Number(s):

2301097

Project**Description/Termini:**

Intersection Improvement Project on S.R. 49 at County Road (C.R.) 950 North (N)/Calumet Avenue, 1.5 miles north of United States (U.S.) 6

☒CE Level 1 documentation for
exempted projectsAdditional Information
to CE Level 1**Approval:**_____
INDOT DE/ESD Signature and Date**Release for Public Involvement:**SFM 06/30/2026

INDOT DE/ESD Initials and Date**Certification of Public involvement:**_____
INDOT Consultant Services Signature and Date**INDOT DE/ESD Reviewer:**_____
Signature and Date**CE Preparer:**Lisa Harris, MSES/MPA - Lawson-Fisher Associates P.C.

Name and Organization

Indiana Department of Transportation

County Porter Route S.R. 49 Des. No. 2301097

GENERAL PROJECT INFORMATION, DESCRIPTION, AND DESIGN INFORMATION

Purpose and Need:

Need

The need for this project is based upon a worse-than-expected crash frequency and crash severity at the intersection of S.R. 49 and C.R. 950 N, according to the Abbreviated Engineer's Report prepared by the Indiana Department of Transportation (INDOT) (Appendix I-24, Tables 8a and 8b). Another need for this project is due to a poor operational Level of Service (LOS) of the existing intersection (Appendix I-21; Table 5c).

Crash data for the S.R. 39 and C.R. 950 N intersection was analyzed with the Road Hazard Analysis Tool (RoadHAT) to evaluate crash hazards for road sections and intersections for the three-year period from 2019 to 2021. RoadHAT considers the Index of Crash Frequency (ICF) and the Index of Crash Cost (ICC) to evaluate deviation from what is typical of similar intersections in the state. ICF and ICC values near zero indicate that an intersection is performing as expected. The ICF at this intersection is 1.51 and the ICC is 1.45, indicating the intersection is performing considerably worse than expected regarding crash frequency and crash severity (Appendix I-45). Of the 48 crashes in the project limits, the most predominant crash type (60%) was rear end collisions, followed by left-turn, right-turn, and right-angle collisions (22%). Results of the data are further summarized in Table 8a (Appendix I-23) and Table 8b (Appendix I-24).

According to the 2013 Indiana Design Manual there are six measures describing traffic flow conditions ranging from free-flowing traffic to disrupted and unstable traffic which are used to analyze highway capacity. LOS "A" represents free flow, "C" represents stable flow where the intersection or roadway is acting as expected, and "F" represents forced or breakdown flow. The current design guidelines for LOS recommend that all legs of an intersection should operate at a LOS "D" or better. The traffic data analyzed for this project demonstrates that the existing two-way stop-controlled intersection at S.R. 49 and C.R. 950 N has movements that operate at a LOS "F" and thus, the intersection currently fails to operate effectively under its current capacity (Appendix I-20 and 21; Table 5c).

Purpose

The purpose of this project is to improve the operational safety of the intersection of S.R. 49 and C.R. 950 N, thereby improving the intersection's LOS to a "D" or better for all movements.

**Project Description
(Preferred Alternative):**

INDOT and the Federal Highway Administration (FHWA) intend to proceed with a proposed Modified Intersection Improvement Project/Median U-Turn (MUT) project on S.R. 49 at C.R. 950 N/Calumet Avenue in Porter County, Indiana.

Location

Specifically, the proposed project is located approximately 1.5 miles north of U.S. 6 in Section 18, Township 36 North, Range 5 West, Liberty Township, as illustrated on the Chesterton, Indiana 7.5-minute United States Geological Survey (USGS) topographic quadrangle (Appendix B-2).

Existing Conditions

According to the July 15, 2025, Abbreviated Engineering Assessment Report (Appendix I-2 to I-45), this section of S.R. 49 is a multi-lane divided highway classified as a Rural Principal Arterial-Other with a posted speed limit of 55 miles per hour (mph) through the project area. The typical cross-section of S.R. 49 consists of two 12-ft. travel lanes going in each direction, a 4-ft. paved inside shoulder, a 10-ft. paved outside shoulder, and a variable width center grass median. Auxiliary lanes ranging from 10-ft. to 12-ft. provide

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	<p>right-hand and left-hand turn lanes for access to intersecting roadways. Traffic is currently allowed to cross S.R. 49 from the west via C.R. 950 N and from the east via Calumet Avenue and make right and left turns from all roadways in the intersection.</p> <p>Land use surrounding the project area primarily consists of residential, commercial and agricultural parcels. There is one existing guardrail in the project area on the east side of S.R. 49 approximately 100-ft. north of Calumet Avenue that extends beyond the Interstate (I) 80/90 overpass. There is also a guardrail on the west side of northbound S.R. 49 that extends beyond the I-80/90 overpass, but it is not in the project area. S.R. 49 is a limited access corridor with access points only at major intersections and no mid-block connections. There are three wetlands located within and adjacent to the project limits.</p> <p>C.R. 950 N meets S.R. 49 from the west and is primarily a two-lane roadway classified as a Local roadway with a posted speed limit of 40 mph. The typical cross-section appears to consist of 12-ft. travel lanes with no apparent paved shoulder, with approximately 7-ft. to 10-ft. shoulders within the project area at the intersection with S.R. 49. C.R. 950 N currently intersects S.R. 49 at a skewed two-way stop-controlled intersection, with stop conditions on C.R. 950 N and Calumet Avenue. Land use along C.R. 950 N is primarily residential on the north side of the roadway, and agricultural on the south side. No access control is present along this roadway. Calumet Avenue intersects S.R. 49 from the east at the intersection and is classified as a Minor Arterial roadway with no posted speed limit.</p> <p>Two small existing drainage structures are present in the S.R. 49 median. Structure No. 11 (CLV-110970) is an 18-inch diameter by 18-Lft. smooth concrete circular storm pipe (Type N-12 Mod) with a downstream safety metal end section that carries storm water east to west from the middle of the median and is located approximately 650-ft. south of the intersection. The upstream barrel and end section are rated 7-good condition and the downstream barrel and end section are rated 5-fair condition. The pipe is rusted inside the flow line and phragmites are present. Structures 11a and 11b are both 15-in. diameter, 48-Lft. (Mod Inlet Type P-12) stormwater pipes. Structure No. 10 is a 12-in. of 15-in. diameter smooth concrete pipe running east to west from the median, approximately 100 ft. north of the center of the S.R. 49 and C.R. 950 N intersection. The upstream barrel and end section are rated 7-good condition and the downstream barrel and end section are rated and the downstream barrel and end section are rated 6-satisfactory condition. There is phragmites in the flow line pipe separation.</p> <p>Structure No. 12 (CLV-110974) is a 12-in. diameter by 14-Lft. diameter smooth concrete circular storm pipe (Mod Inlet Type N-12) with a downstream safety metal end section that carries storm water east to west from the middle of the median and is located approximately 150-ft. north of the intersection.</p> <p>Crash data for the S.R. 39 and C.R. 950 N intersection was obtained by INDOT in 2022 and revealed forty-eight crashes within the intersection. The most predominant crash type at this intersection was rear end collisions (60%) and the second most predominant type was turning collisions (22%) including left turn, right turn, and right angle. (Table 8b, Appendix I-24) These crashes tend to occur on divided highways where left turns are made from a major roadway or onto the major roadway at an intersection (Appendix I-30).</p> <p>The intersection has a LOS of "F" for some movements and it is failing to operate effectively (Appendix I-21; Table 1).</p>
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Preferred Alternative

The preferred alternative will construct a Modified Reduced Conflict Intersection (RCI) with a MUT as stated in Addendum No. 1 to the Abbreviated Engineer's Report dated July 21, 2025 (Appendix I-2). RCIs are known to significantly reduce right-angle crashes and the severity of crashes that occur at intersections with unbalanced traffic volumes between major and minor roadways. The reconfiguration will eliminate direct traffic movements across S.R. 49 from C.R. 950 N and Calumet Avenue, prevent left turns from northbound S.R. 49, and prevent left turns from C.R. 950 N and Calumet Avenue onto S.R. 49. Traffic will be redirected to new left-turn movements from a right turn from C.R. 950 N onto southbound S.R. 49 to a new MUT directing traffic north, and a right turn from Calumet Avenue onto northbound S.R. 49 will direct traffic to the signalized intersection of S.R. 49 and I-80/90 to make a U-Turn back onto southbound S.R. 49. The detailed plans for the preferred alternative are attached in Appendix B-15 to B-50.

An acceleration lane for traffic turning right from Calumet Avenue northbound onto northbound S.R. 49 will be constructed. Approximately 354-ft. of guardrail will be removed and 115.6-ft. of new guardrail will be replaced and reconnected to the I-80/90 overpass bridge curb. Approximately 390-ft. of the S.R. 49 roadway will be converted into a 400-ft. acceleration lane on the northbound side of S.R. 49 for traffic turning right from Calumet Avenue. This lane will provide more room for vehicles to merge into traffic and utilize the U-turn at the intersection of S.R. 49 and Gateway Boulevard. A delineator curb and lane separator will be installed along the left side of the expanded acceleration lane to distinguish the merging traffic lane from the through lane. Approximately 0.0195 acre of Wetland 4 is anticipated to be permanently impacted due to excavation, side ditch relocation and re-grading at the acceleration lane site.

Two Type B concrete center curbs will be installed in the C.R. 950 N and Calumet Avenue intersections to prevent traffic from making left turns onto S.R. 49. Two Type B concrete center curbs will be installed in the S.R. 49 median to prevent traffic from directly crossing S.R. 49 from C.R. 950 N or Calumet Avenue, or from making a left turn from northbound S.R. 49 onto C.R. 950 N. The median curbs will also direct S.R. 49 southbound traffic making a left turn onto Calumet Avenue.

A median cut for a MUT will be constructed approximately 950-ft. south of the intersection in order to direct eastbound traffic from C.R. 950 N to Calumet Avenue and to northbound S.R. 49. A concrete curb and gutter will be constructed at the MUT that will guide traffic from southbound S.R. 49 onto northbound S.R. 49. The S.R. 49 southbound left lane located south of the intersection will be reconfigured into a left-turn lane to access the MUT for transitioning into northbound S.R. 49 traffic. Seven drainage structures will be installed to convey stormwater runoff in the median. See *Small Structure Drainage Structures Table 1* in the *Bridge(s) and/or Small Structures* section of this CE document.

Structure No. 10 will be a new 15-in. diameter by 79-Linear feet (Lft.) crossing culvert with two end sections that will be installed in the median approximately 950-feet south of the intersection and located under the new MUT location for drainage. No wetlands will be impacted at this site.

The project will remove 7-Lft. of Structure No. 11 (CLV-110970) from the east end in the median and install 18-Lft. of an 18-in. diameter modern inlet pipe (Type N-12) extension. Structures 11a and 11b will be attached to Structure 11 on the east end to carry flow from the north and south along the median ditch. Riprap will be applied at the outlet on the west side of S.R. 49. Approximately 0.027 acre of Wetland 1, located at the outlet of Structure No. 11, is anticipated to be permanently impacted by excavation, side ditch

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	<p>relocation, re-grading and possible riprap replacement. Approximately 0.024 acre of Wetland 2, located in the median where the existing structure No. 11 and new structure No. 11B will be attached, is anticipated to be permanently impacted from excavation, side ditch relocation and re-grading at Structure 11B. Approximately 0.027 acre of soil will be graded at the west outlet of the structure.</p> <p>The project will remove 14-Lft. from the east end of Structure No. 12 (CLV-110974) in the median and install 114-Lft. of a 12-in. diameter (Mod Inlet type N-12) extension. Structures 12a and 12b will be attached to Structure 12 on the east end to carry flow from the north and south along the median ditch. Riprap may be applied at the outlet on the west side of S.R. 49. No wetlands will be impacted at this site.</p> <p>No right-of-way (ROW) is required for this project.</p> <p>The forecasted LOS for the intersection is a "D" or better for all movements (Appendix I-2; Table 15A).</p> <p>New signage will be installed at the following locations to direct traffic through the modified intersection and roadway configuration: the new MUT location; southbound S.R. 49 between the intersection and MUT; the newly modified intersection; and the I-80/90 Indiana Toll Road entrance turnaround location at the intersection of S.R. 49 and Gateway Boulevard.</p> <p>New permanent LED lighting will be installed at the intersection of S.R. 49 at C.R. 950 N/ Calumet Avenue and at the new MUT crossover. Snowplowable raised pavement markers will be maintained. Milled corrugations outside the edgeline will be maintained.</p> <p>The maintenance of traffic (MOT) plan will utilize phased construction. Traffic on S.R. 49 will be maintained by keeping a minimum of one northbound and one southbound lane open at all times. The approaches of C.R. 950 N and Calumet Avenue will be closed for construction, requiring a local detour. See the <i>Maintenance of Traffic</i> section of this CE document for details.</p> <p>The preferred alternative meets the purpose and need by addressing the significant crash history present at the intersection of S.R. 49 and C.R. 950 N/Calumet Avenue, addressing the poor operational LOS currently present, and improving the operational safety of the intersection of S.R. 49, C.R. 950 N, and Calumet Avenue while improving the LOS to a "D" or better for all movements (Appendix I-2; Table 15).</p> <p>This project has independent utility since it meets the purpose and need of the project without being connected to any other actions in the area and has logical termini because the limits are confined to those required to meet the requirements for the proposed roadway reconfiguration.</p>
<p>Other Alternatives Considered:</p>	<p>Alternative 1 – Do Nothing</p> <p>The No Build alternative allows the existing intersection to remain in place with no improvements. This alternative will not cause environmental impacts or costs associated with this alternative; however, it will not address poor operational LOS or the safety concerns present and therefore does not meet the need nor achieve the purpose of the project. This alternative was dismissed and will not be considered.</p>

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Alternative 2 – Signalized Intersection Improvement

This alternative would introduce a new signalized stop condition at this intersection. This alternative may be feasible as the nature of the S.R. 49 corridor begins to change near the interchange of I-80/ 90 and the Town of Chesterton. Further analysis of LOS with this alternative showed that while a signalized intersection provides some improvement in LOS for a number of movements, southbound left turn movements still experience a LOS “F” under forecasted (2028 and 2048) traffic volumes due to the moderate amount of turn volumes trying to cross heavy northbound through movements. For the 2048 design year, this starts to also impact the southbound through movements as queueing from the left-turn movements at the intersection begins to spill into the left-most through lane. Due to these results, Alternative 2 was dismissed as it does not meet the purpose and need of this project.

Alternative 3 – Roundabout Intersection Improvement

Roundabout intersection configurations eliminate many conflict points typically associated with right-angle and left-turn collisions, as well as serve as a tool to implement speed control to a corridor. While S.R. 49 is considered a high-speed facility, the nature of the corridor begins to change near the intersection of I-80/90 and the Town of Chesterton. A roundabout improvement would help eliminate conflict points of the intersection, and help minimize left, right, and angle crashes. However, after review it was determined that there was a lack of available ROW due to the adjacent homes and the close proximity of the overpass over I-80/90. Therefore, due to the complexity of necessary ROW and the overpass proximity, this alternative will not address the need to reduce the crash frequency and improve the LOS rating and was dismissed and will not be considered further.

Alternative 4 – Displaced Left Turn Intersection Improvement

Displaced left-turn intersection configurations are typically used in situations where high left-turn volumes conflict with heavy through volumes on the major roadway for the majority of the day, rather than only at peak hours. The current intersection of S.R. 49 and C.R. 950 N has relatively minor left-turn volumes from the major roadway. The incompatibility of the design with the traffic volumes will not apply, therefore, the purpose and need regarding LOS and crash frequency will not be addressed. This alternative was dismissed and will not be considered further.

Alternative 5 – Jughandle Intersection Improvement

Jughandle intersections operate by removing the left-turn movements from the major roadway at congested signalized intersections in order to reduce the number of signal phases. These movements are then made at stop-controlled intersections along the minor roadway, while cross-street left turns are still made at the signalized intersection. As the current intersection of S.R. 49 and C.R. 950 N has relatively minor left-turn volumes from the major roadway, this alternative was dismissed and will not be considered further. Therefore, the purpose and need will not be addressed to improve the LOS or reduce the crash frequency.

Alternative 6 – Offset “T” Intersection Improvement

Offset “T” intersections convert a conventional intersection into two “T” intersections offset by some distance along the major roadway. Alternative 6 would consist of the realignment of N. Calumet Avenue to improve separation between C.R. 950 N and N. Calumet Avenue, forming an offset “T” intersection. To further evaluate Alternative 6, a level of service analysis using forecasted traffic volumes was performed. This intersection improvement begins to fail under 2028 forecasted traffic volumes, largely due to the delays caused by left-turn volumes attempting to cross or merge with heavy through

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	<p>volumes. Due to the forecasted failure after improvement, the purpose and need will not be addressed by LOS or crash frequency improvement. Therefore, this project alternative was dismissed and was not considered further.</p> <p>Alternative 7 – Continuous Green “T” Intersection Improvement A continuous green “T” intersection is only applicable to existing “T” intersections and therefore is not a viable alternative for this location. Therefore, the purpose and need will not be addressed. This alternative was not considered further.</p> <p>Alternative 8 – Quadrant Roadway Intersection Improvement A quadrant roadway intersection removes all left-turn movements from the main intersection via a connecting roadway in one quadrant of the intersection. This type of intersection improvement requires a considerable amount of ROW to construct, and as well as the installation of at least two additional signalized intersections. Due to the minimal left turn volume at the current intersection, as well as the anticipated ROW impacts, this alternative will not address the purpose and need and was not considered further.</p> <p>Alternative 9 – Grade Separation Improvement A grade separation eliminates the at-grade intersection of two roadways, allowing for the through traffic on both roadways to continue under free flow conditions and relocating any turning movements to the adjacent roadway network. Due to the minimal amount of through movements between C.R. 950 N and N. Calumet Avenue, as well as the larger amounts of turn movements from the minor roadways, a grade separation improvement was dismissed, the purpose and need will not be addressed, and this alternative was not considered further.</p> <p>See the Abbreviated Engineer’s Report in Appendix I-2 to I-45.</p>		
Funding Source(s):	☒ Federal	☒ State	☐ Local ☐ Other
Project Sponsor:	Indiana Department of Transportation (INDOT)		
Estimated Cost:	\$2,364,465.00	Project Length:	0.27 mile
Public Involvement:			No: Yes: X
<p>Notice of Entry letters were mailed to potentially affected property owners near the project area on December 31, 2024, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in Appendix G-1.</p> <p>The project will meet the minimum requirements described in the current <i>Indiana Department of Transportation (INDOT) Project Development Public Involvement Procedures Manual</i> which requires the project sponsor to offer the public an opportunity to request a public hearing. INDOT determined that it is in the public’s interest to hold a public hearing for this project. Therefore, a Notice of Public Hearing 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.</p>			
Right-of-Way:			No: X Yes:
<p>The apparent existing ROW varies along S.R. 49 and extends approximately 145-ft. west from the centerline of southbound S.R. 49 and 145-ft. to 161-ft. 11-in. east from the centerline of northbound S.R. 49. Current land use varies along the project area but primarily consists of residential, commercial, or agricultural parcels. The land in and adjacent to the project area consists of mowed ROW, shrubs, and overgrowth.</p>			

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This project will occur within existing ROW. No permanent or temporary ROW will be required for this project. If the scope of work or permanent or temporary ROW amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.

Maintenance of Traffic (MOT) During Construction:	No:	Yes: X
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The MOT plan for S.R. 49 traffic will utilize phased construction, with at least one lane of traffic always being maintained on S.R. 49 in each direction.

Traffic will be maintained on S.R. 49 through phased construction. Phase 1 will include constructing the outside acceleration lane with shoulder on S.R. 49, installing the C.R. 950 N/Calumet Avenue intersection raised islands, installing lighting fixtures, and replacing roadside ditch/storm structures. One lane for northbound movement and two lanes for southbound movement of S.R. 49 will be maintained. There will be a temporary closure of C.R. 950 N and Calumet Avenue during Phase I that will be coordinated between INDOT and the Town of Chesterton. LFA will also communicate with Porter County regarding the detour route.

Phase 2 will include the construction of the median U-turn, median left turn lane, the C.R. 950 N/Calumet Avenue intersection raised island installations continue, and median ditches/storm structures. C.R. 950 N and Calumet Avenue will reopen to S.R. 49 with right turn movements only. One lane of traffic on S.R. 49 shall be maintained in each direction at all times.

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.

Bridge (s) and/or Small Structure(s) (include structure number(s)):	No:	Yes: X
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There are no bridges located within the project construction limits; however, a I-80/90 overpass bridge is north of the construction limits. Two existing drainage structures conveying stormwater runoff from the median to the side ditches along the outside shoulder of southbound S.R. 49 will be modified. One new culvert will be constructed in the median at the new MUT. See *Table 1 Small Drainage Structures* below for locations, specifications, and proposed modifications.

Table 1 Small Drainage Structures			
Structure No.	Plan Set Station No.	Existing Small Drainage Structure and Proposed Modifications	Proposed Small Drainage Structure Type
10	961+99.5	N/A	New Crossing Culvert 15-inch diameter, 79-Lft. circular concrete pipe
11A	964+50		Mod Inlet Type P-12 15-inch diameter, 48-Lft. concrete pipe
11	965+00	Existing 18-inch Storm (CLV-110970) Removing 7-Lft to add extension	Extension - Mod. Inlet Type N-12 18-inch diameter, 18-Lft. concrete pipe
11B	965+50		Mod Inlet Type P-12 15-inch diameter, 48-Lft. concrete pipe
12A	972+50		Inlet Type P-12 12-inch diameter, 48-Lft. concrete pipe
12	973+00	Existing 12-inch Storm (CLV-110974) Removing 14-Lft to add extension	Extension - Mod. Inlet Type N-12 12-inch diameter, 14-Lft. concrete pipe
12B	973+50		Inlet Type P-12 12-inch diameter, 48-Lft. concrete pipe

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IDENTIFICATION AND EVALUATION OF IMPACTS

Early Coordination:

Early coordination letters were sent on November 26, 2025 and February 2, 2026. A sample early coordination letter is included in Appendix C-1 to C-18.

Agency	Date Sent	Response Received	Appendix C Page(s)
Federal Highway Administration (FHWA)	11/26/25	N/A	N/A
US Department of Housing and Urban Development (HUD)	11/26/25	N/A	N/A
Indiana Department of Environmental Management – Groundwater Section (IDEM)	11/26/25	N/A	N/A
Indiana Department of Natural Resources – Division of Fish & Wildlife (IDNR DFW)	11/26/25	12/22/25	C-22 to C-23
INDOT Aviation	11/26/25	11/26/25	C-25 to C-26
INDOT LaPorte District Environmental Manager	11/26/25	12/1/25	C-27 to C-28
INDOT LaPorte District Project Manager	11/26/25	N/A	N/A
United States Department of Agriculture-Natural Resources Conservation Service (USDA NRCS)	11/26/25	12/1/25	C-24
United States Army Corps of Engineers – Chicago District (USACE)	11/26/25	N/A	N/A
United States Fish and Wildlife Service (USFWS)	11/26/25	N/A	N/A
Indiana Geological and Water Survey (IGWS)	2/2/26	2/2/26	C-19 to C-21
Northwest Indiana Regional Planning Commission (NIRPC)	11/26/25	N/A	N/A
Porter County Commissioners	11/26/25	N/A	N/A
Porter County Board of Commissioners – District 3	11/26/25	N/A	N/A
Porter County Council	11/26/25	N/A	N/A
Porter County Highway Department	11/26/25	N/A	N/A
Porter County Surveyor	11/26/25	N/A	N/A
Chesterton Fire Department	11/26/25	N/A	N/A
Chesterton Floodplain Administrator	11/26/25	N/A	N/A
Chesterton Police Department	11/26/25	N/A	N/A
Chesterton Town Council	11/26/25	N/A	N/A
Chesterton Town Engineer	11/26/25	N/A	N/A

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

Streams, Rivers, and Other Jurisdictional Features Impacted:	No: X	Yes:
Based on the desktop review, the aerial map of the project area, and the Red Flag Investigation (RFI) report (Appendix E-1 to E-10) there are 24 streams, rivers, watercourses, or other jurisdictional features within the 0.5-mile search radius. There are no streams, rivers, watercourses, or other jurisdictional features within or adjacent to the project area, which was confirmed by the site visit on October 1, 2025, conducted by SJCA Inc. Therefore, no impacts are expected.		
A <i>Waters of the U.S. Determination Report</i> was completed for the project on January 2, 2026, to investigate the proposed small drainage structure replacement areas, median and roadway and was approved by INDOT Ecology and Waterway Permitting Office on January 21, 2026. Please refer to Appendix F-1 to F-67 for the <i>Waters of the U.S. Determination Report</i> . It was determined that no streams or other jurisdictional features were identified within the project area. The U.S. Army Corps of Engineers (USACE) makes all final determinations regarding jurisdiction.		

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There are no Federal, Wild and Scenic Rivers in the area. There are no State Natural, Scenic, and Recreational Rivers, Outstanding Rivers, or National Rivers Inventory present in the area. Therefore, no impact is expected.

Open Water Feature(s):

No: X

Yes:

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E-1 to E-10) there are six open water features within the 0.5-mile search radius. There are no open water features within or adjacent to the project area, which was confirmed by the site visit on October 1, 2025, conducted by SJCA Inc. Therefore, no impacts are expected.

A *Waters of the U.S. Determination Report* was completed for the project on January 2, 2026, to investigate the proposed small drainage structure replacement areas, median and roadway and was approved by INDOT Ecology and Waterway Permitting Office on January 21, 2026. Please refer to Appendix F-1 to F-67 for the *Waters of the U.S. Determination Report*. It was determined that no open water features were identified within the project area.

Wetlands:

No:

Yes: X

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E-1 to E-10) there are 45 NWI wetlands within the 0.5-mile search radius. There are five wetlands within or adjacent to the project area. That number confirmed by the site visit on October 1, 2025, conducted by SJCA Inc.

A *Waters of the U.S. Determination Report* was completed for the project on January 2, 2026, to investigate the proposed small drainage structure replacement areas, median and roadway and was approved by INDOT Ecology and Waterway Permitting Office on January 21, 2026. Please refer to Appendix F-1 to F-67 for the *Waters of the U.S. Determination Report*. During the site investigation, it was determined that five wetland features were identified within the project limits. The project limits have since been refined leaving only three wetlands, 1, 2, and 4, within or adjacent to the project area. All three wetlands were classified as PEM5A (palustrine, emergent, *Phragmites australis*, temporarily flooded) and considered of poor quality. The USACE makes all final determinations regarding jurisdiction.

Approximately 0.027 acre of Wetland 1 is anticipated to be permanently impacted from this project due to excavation, side ditch relocation, re-grading and possible riprap re-placement at the outlet of Structure No. 11. Wetland 1 is an emergent wetland located south of C.R. 950 N/Calumet Ave and west of S.R. 49 within the roadside ditch. Approximately 0.362 acre of Wetland 1 is within the investigated area. The boundaries of the wetland were determined by the slopes of the ditch and subsequent shift in vegetative communities and soil conditions; however, Wetland 1 continues south beyond the investigated area limits within the slopes of the ditch. Wetland 1 is a poor-quality wetland due to its lack of habitat for aquatic flora and fauna, its low species diversity, and presence of invasive species communities. The vegetative community within Wetland 1 is largely dominated by narrow leaf cattail (*Typha angustifolia*, OBL) and black willow (*Salix nigra*, OBL) near the southern end of the investigated area, but the community shifts to a disturbed community on the northern portion of the wetland and is dominated by the invasive reed phragmites (*Phragmites australis*, FACW). Wetland 1 provides moderate hydrological function due to its connectivity via drainage culverts to Wetlands 2-5. There was no direct surface connection observed between Wetland 1 and a jurisdictional water resource, and it does not appear to have a direct surface connection to any jurisdictional resources beyond the investigated area limits. Therefore, Wetland 1 is likely an isolated wetland under the jurisdiction of IDEM.

Approximately 0.024 acre of Wetland 2 is anticipated to be permanently impacted from this project due to excavation, side ditch relocation and re-grading at Structure No. 11B. Wetland 2 is an emergent wetland located in the median of S.R. 49 and south of C.R. 950 N/Calumet Avenue within the median. Approximately 0.024 acre of Wetland 2 is within the investigated area. The boundaries of the wetland were determined by the slopes of the ditch and subsequent shift in vegetative communities and soil conditions. The presence or absence of hydric soils along the wetland boundaries were determined with the use of a soil probe. Wetland 2 is contained entirely within the investigated area. The vegetative community within Wetland 2 is dominated by narrow leaf cattail and the invasive reed canary grass (*Phalaris arundinacea*, FACW). Wetland 2 is a poor-quality wetland due to its lack of habitat for

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aquatic flora and fauna, its low species diversity, and presence of invasive species communities. Wetland 2 provides poor hydrological function but helps convey drainage via culverts to Wetlands 1 and 3-5. There was no direct surface connection observed between Wetland 2 and a jurisdictional water resource. Therefore, Wetland 2 is likely an isolated wetland under the jurisdiction of IDEM.

Approximately 0.0195 acres of Wetland 4 is anticipated to be permanently impacted from this project due to excavation, side ditch relocation, and re-grading at the site of a new acceleration lane for traffic turning right from Calumet Avenue onto S.R. 49 northbound. Wetland 4 is an emergent wetland located north of C.R. 950 N/Calumet Avenue and east of S.R. 49 within the roadside ditch. Approximately 0.052 acre of Wetland 4 is contained entirely within the investigated area. The boundaries of the wetland were determined by the slopes of the ditch and subsequent shift in vegetative communities and soil conditions. The presence or absence of hydric soils along the wetland boundaries were determined with the use of a soil probe. Wetland 4 is contained entirely within the investigated area. The vegetative community within Wetland 4 is dominated by the invasive reed phragmites and non-native foxtail barley (*Hordeum jubatum*, FAC). Wetland 4 is a poor-quality wetland due to its lack of habitat for aquatic flora and fauna, its low species diversity, and presence of invasive species communities. Wetland 4 provides poor hydrological function due to its connectivity via drainage culverts to Wetlands 1-3 and 5. There was no direct surface connection observed between Wetland 4 and any jurisdictional water resource, and it does not appear to have a direct surface connection to any jurisdictional resources. Therefore, Wetland 4 is likely an isolated wetland under the jurisdiction of IDEM.

None of the wetlands to be impacted exhibit a continuous surface connection to other likely jurisdictional water features, and it did not appear that wetlands that extend beyond the investigated area limits connect to any likely jurisdictional features. Therefore, these features are likely isolated water features under the jurisdiction of IDEM. No open water features, streams, or other jurisdictional features were identified within the investigated area. There are no water resources under USACE jurisdiction per Section 10 of the Rivers and Harbors Act within the investigated area. A total of approximately 0.08 acres of permanent impacts to Wetlands 1, 2 and 4 are anticipated to require 401/404 Nationwide Permits (NWP). The final determination of jurisdictional waters is ultimately made by the appropriate regulatory staff of the USACE.

Avoidance of the three wetlands is not feasible; however, proposed permanent and temporary impacts to these wetlands will be minimized. Specialized fencing will be installed along the construction limits to prohibit encroachment upon Wetland 1 and Wetland 4 beyond the construction limits. Areas of 1 and Wetland 4 outside the construction limits will be labeled "Do Not Disturb" on the project plans. This is included as a firm commitment in the *Environmental Commitments* section of this CE document.

A firm commitment has been included in the *Environmental Commitments* section of this CE document stating that non-impacted wetlands and the portions of impacted wetlands that will not be impacted shall be marked "Do Not Disturb" on the final project plans. Section 401 and 404 NWPs will be required. Mitigation will likely not be required.

IDNR-DFW responded on December 22, 2025, with recommendations to avoid and minimize impacts to fish and wildlife and botanical resources to the greatest extent possible, and to compensate for impacts.

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

Terrestrial Habitat:	No:	Yes: X
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Based on a desktop review, the aerial map of the project area (Appendix B-1), and a site visit on October 1, 2025, conducted by SJCA Inc., there are terrestrial habitats present within and adjacent to the project area. The S.R. 49 roadway is bordered primarily by mowed grasses, forbs, and shrubs scattered along the route and mowed grasses within the median, all within the existing ROW.

Documented upland species are listed in *Table 2 Terrestrial Species* below.

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Table 2 Terrestrial Species	
	Upland Species
Trees	Black willow (<i>Salix nigra</i>)
Saplings/Shrubs	Eastern red cedar (<i>Juniperus virginiana</i>) Callery pear (<i>Pyrus calleryana</i>) Autumn olive (<i>Elaeagnus umbellata</i>)
Herbaceous	Common milkweed (<i>Asclepias syriaca</i>) Late goldenrod (<i>Solidago altissima</i>) Indian grass (<i>Sorghastrum nutans</i>) Tall fescue (<i>Schedonorus arundinaceus</i>) New England Aster (<i>Symphyotrichum novae-angliae</i>) Red Fescue (<i>Festuca rubra</i>) Wild carrot (<i>Daucus carota</i>) Wild onion (<i>Allium canadense</i>) Foxtail barley (<i>Hordeum jubatum</i>) prairie dropseed (<i>Sporobolus heterolepis</i>)

Approximately 2.36 acres of terrestrial habitat will be impacted by: construction of an acceleration lane; a median cut for a MUT; a concrete curb and gutter at the MUT location; expansion of the southbound S.R. 49 left turn lane; installation of seven drainage structures in the median; new signage installations; and new permanent LED lighting. All efforts to minimize terrestrial impacts were considered during the design phase of the project. Construction limits have been reduced to the extent that is practical to complete the project. All disturbed areas will be stabilized, graded and re-seeded per INDOT standard specifications. No trees are anticipated to be removed. No terrestrial habitat restoration or mitigation will be necessary.

IDNR-DFW responded to early coordination on December 22, 2025, with recommendations to avoid and minimize impacts to botanical resources to the greatest extent possible, and to compensate for impacts. All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

Protected Species:	No:	Yes: X
Based on a desktop review and the RFI report (Appendix E-1 to E-10), completed by LFA on December 29, 2025, the IDNR Porter County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated December 22, 2025, (Appendix C-22 to C-23), the Natural Heritage Program's Database has been checked. There are no plant or animal species listed as state or federally threatened, endangered, or rare reported to occur in the project vicinity. An INDOT 0.5-mile bat review of the USFWS database occurred on November 20, 2025, and did not indicate the presence of endangered bat species within 0.5 mile of the project area.		
The project qualifies for Range-wide Programmatic Informal Consultation under the December 13, 2024, FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA) Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat, Northern Long-eared Bat (NLEB), and Tricolored Bat. Bridge/Structure inspections were not performed due to existing structures being less than 36-inches in diameter which is considered unsuitable habitat. An effect determination key was completed on March 23, 2026, and based on the responses provided, the project was found to "may affect, not likely to adversely affect" the Indiana bat, the NLEB, or the Tricolored bat (Appendix C-44 to C-54). INDOT reviewed and verified the effect finding on March 23, 2026, 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. An Avoidance and Minimization Measure (AMM) pertaining to worker awareness of bat habitat is included as a firm commitment in the <i>Environmental Commitments</i> section of this CE document.		

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Other Federally Listed Species

The official USFWS species list generated from IPaC on March 27, 2026, indicated two species not currently listed that may be present within the project area (Appendix C-29 to C-43): the Proposed Federally Threatened Monarch butterfly (*Danaus Plexippus*) and Western Regal Fritillary butterfly (*Argynnis idalia occidentalis*). The IPaC stated that the location does not overlap the Monarch critical habitat. No critical habitat has been designated for the Western Fritillary. Due to the project scope, this project does not jeopardize the continued existence of either species.

This precludes the need for further consultation on this project 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:

No: X

Yes:

Based on a desktop review and the Indiana Karst Region map, the project is located outside 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-2), there are no karst features identified within or adjacent to the project area. In the early coordination response February 2, 2026, the IGWS did not indicate that karst features exist in the project area (Appendix C-19 to C-21). The IGWS did indicate a moderate liquefaction potential and a low potential for sand and gravel. The response from IGWS was communicated to the designer on February 2, 2026. No impacts are expected.

Drinking Water Resources:

No:

Yes: X

The project is located in Porter County, which is not located 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/U.S. Environmental Protection Agency (EPA)/INDOT Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project. A detailed groundwater assessment is not needed, and no impacts are expected.

The IDEM Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on February 2, 2026, by LFA. This project is not located within a Wellhead Protection Area. The project is located within a Source Water Protection Area. IDEM Groundwater Section did not respond to the early coordination letter sent on November 26, 2025. The maximum excavation depth over a water line is 3-ft. and a casing pipe has been installed for more protection during construction activities. Coordination with the Town of Chesterton and IN American Water is ongoing. Therefore, the Source Water Protection Area features are not anticipated to be affected. Avoidance would be impractical due to the need for improvements to the existing intersection.

The IDNR Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on November 11, 2025, by LFA. The nearest well was a field located unconsolidated well located 0.19 miles west of the project limits. There were no wells located adjacent to or within the project limits. The wells will not be affected because of their distance from the project site and there being no excavation deeper than approximately 10-ft. Therefore, no impacts are expected. Should it be determined during the ROW phase that these wells will be affected, a cost to cure will likely be included in the appraisal to restore the wells.

Indiana-American Water has a 16-in. water main and appurtenances throughout the project limits and sent an Initial Notice on May 29, 2025. Coordination will continue with Indiana-American Water.

Floodplains:

No: X

Yes:

The Indiana Department of Natural Resources Indiana Floodway Information Portal website (<https://www.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/>) was accessed on November 11, 2025, by LFA and the *Waters of the U.S. Determination Report* approved January 21, 2026. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps

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(Appendix F-15). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

Farmland:	No: X	Yes:
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Based on a desktop review, a site visit on October 1, 2025, conducted by SJCA Inc., and the aerial map of the project area (Appendix B-1), there is farmland as defined by the Farmland Protection Policy Act adjacent to the project ROW. An ECL was sent on November 26, 2025, to Natural Resources Conservation Service (NRCS). The response dated December 1, 2025, from NRCS stated that the project will not cause a conversion of prime farmland (Appendix C-24).

Cultural Resources:	No: X	Yes:
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On December 16, 2025, the INDOT Cultural Resources Office (CRO) determined that this project falls within the guidelines of Category B-1, B-2, B-3, B-4, and B-9 of the Minor Projects PA (Appendix D-1 to D-11).

MPPA Category B-1 projects include the replacement, repair, or installation of curbs associated with roadway work including shoulder treatments. Category B-2 projects include the installation of new lighting and signage. Category B-3 projects include the construction of added turning or auxiliary lanes (e.g. acceleration lanes) and shoulder widening. Category B-4 projects include installation of new safety appurtenances, including guardrails, barriers and crash attenuators. Category B-9 projects include the installation, replacement, repair or extension of culverts and other drainage structures when the structures exhibit no unusual features such as wood, stone, or brick. These MPPA categories apply when such projects take place in previously disturbed soils and when work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

Section 4(f) and Section 6(f) Resources:	No: X	Yes:
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Section 4(f)

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 National Register of Historic Places (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 and the aerial map of the project area (Appendix B-1), there is one potential 4(f) resource located within the 0.5-mile search radius. According to additional research, there are no 4(f) resources located within or adjacent to the project area.

Coffee Creek Watershed Preserve is located 0.36-mile northeast of the project area. The Preserve is open to the public; therefore, it is eligible for protection under Section 4(f). Because the Preserve is not adjacent to or within the project limits, and the traffic along S.R. 49 will not be subject to a detour, there will be no direct or indirect impacts to the Preserve. The project will not use this resource by taking permanent ROW and will not indirectly use the resource in such a way that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Therefore, no 4(f) use is expected.

Section 6(f) LWCF

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 revealed a total of 31 properties in Porter County (Appendix I-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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Air Quality:	No: X	Yes:
<p>This project is included in the FY 2024-2028 Northwest Indiana Regional Planning commission (NIRPC TIP) Statewide Transportation Improvement Program (STIP) which was incorporated by reference into the FY 2026-2030 STIP (Appendix H-1 to H-5).</p>		
<p>Attainment Status This project is located in Liberty Township, Porter County, which is currently a maintenance area for 8-hour Ozone, under the 1997 standard, which was revoked in 2015 but is being evaluated for conformity due to the February 16, 2018, South Coast Air Quality Management District V. Environmental Protection Agency, Et. Al. Decision. This is according to the U.S. EPA Nonattainment Areas for Criteria Pollutants Green Book (https://www.epa.gov/green-book). The project's design concept and scope are accurately reflected in both the NIRPC Transportation Plan (TP) and the TIP and both conform to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.</p>		
<p>MSAT Level 1a Analysis This project is 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.</p>		
Community Impacts:	No: X	Yes:
<p><i>Due to the issuance of recent federal Executive Orders (EO) from January 2025, including EO 14154, EO 14148, and EO 14173, EO 12898 has been rescinded and this section is no longer applicable.</i></p>		
Public Facilities and Services (e.g. schools, emergency services):	No:	Yes: X
<p>Based on a desktop review by LFA, the aerial map of the project area (Appendix B-1), and the RFI report (Appendix E-1 to E-10) there are two recreational facilities, three pipelines, two railroads, five trails, and one managed land located within 0.5 mile of the project area. One planned trail, Dunes Kankakee Trail, runs adjacent to the project area. Coordination with NIRPC will occur One pipeline segment is located within the project area. Coordination with INDOT Utilities and Railroads will occur. Access to all properties will be maintained during construction.</p> <p>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.</p>		
Hazardous Materials and Regulated Substances:	No:	Yes: X
<p>Based on a review of Geographic Information System (GIS) data and available public records, the RFI was concurred by INDOT SAM on June 11, 2026, 2026 (Appendix E1 to E-10). One Underground Storage Tank site (UST), two Leaking Underground Storage Sites (LUST), and twelve National Pollutant Discharge Elimination System (NPDES) facilities are located within 0.5 miles of the project area. One NPDES is located adjacent to the project area where no excavation will take place. The permit was terminated on May 6, 2024. No impact is expected. Further investigation for hazardous material concerns or regulated substances is not required at this time.</p>		
Permits:	No:	Yes: X
<p>The project will require an IDEM Construction Stormwater General Permit (CSGP) due to the disturbance of more than 1.0 acre of land (2.36 acres). Due to a total of 0.0712 acres of wetland impacts an IDEM Isolated Wetland Individual Permit will likely be required.</p> <p>Applicable recommendations provided by resource agencies are included in the <i>Environmental Commitments</i> section of this CE document. If permits are found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.</p> <p>It is the responsibility of the project sponsor to identify and obtain all required permits.</p>		

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ENVIRONMENTAL COMMITMENTS:

Firm:

1. If the scope of work or permanent or temporary ROW amounts change, the INDOT ESD and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT LaPorte District Office)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction activity that would block or limit access. (INDOT ESD)
3. Any work in a wetland area within right-of-way or in borrow/waste areas is prohibited unless specifically allowed in the U.S. Army Corps of Engineers permit. (INDOT EWPSO)
4. Specialized fencing will be installed along the construction limits to prohibit encroachment upon Wetland 1, Wetland 2, Wetland 3 and Wetland 4 beyond the construction limits. All wetlands and portions of wetlands outside the construction limits will be labeled "Do Not Disturb" on the project plans. This is included as a firm commitment in the *Environmental Commitments* section of this CE document. (INDOT ESD and INDOT LaPorte District Office)
5. The non-impacted wetlands shall be marked "Do Not Disturb" on the project plan set. (INDOT EWPSO)
6. GAMM1: Ensure all operators, employees, and contractors working in areas of Indiana bat, NLEB, or TCB habitat are aware of all Transportation Agency environmental commitments, including all applicable AMMs. (USFWS)
7. LAMM1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
8. LAMM2: When installing new/additional permanent lighting or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those Transportation Agencies using the Backlight Uplight and Glare (BUG) system developed by the Illuminating Engineering Society, the project should be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. http://www.escolighting.com/PDFfiles/BUG_rating.pdf (USFWS)

For Consideration:

9. Any new/replacement/rehabilitated crossing structures, and any bank stabilization under or around the structures, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. Upgrading wildlife passage for replacement/rehabilitated structures is recommended whenever possible to improve wildlife/vehicle safety. (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.

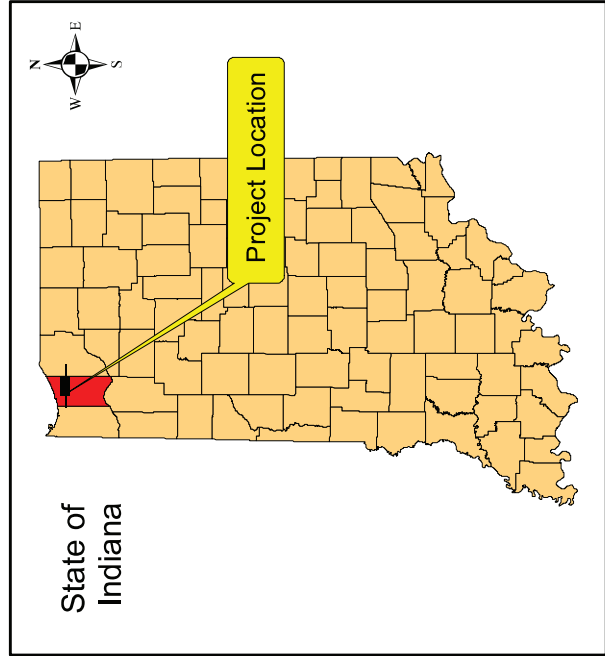
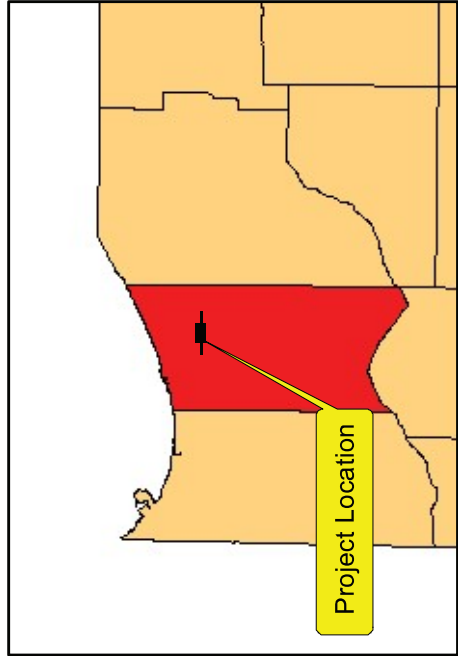
¹¹ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

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



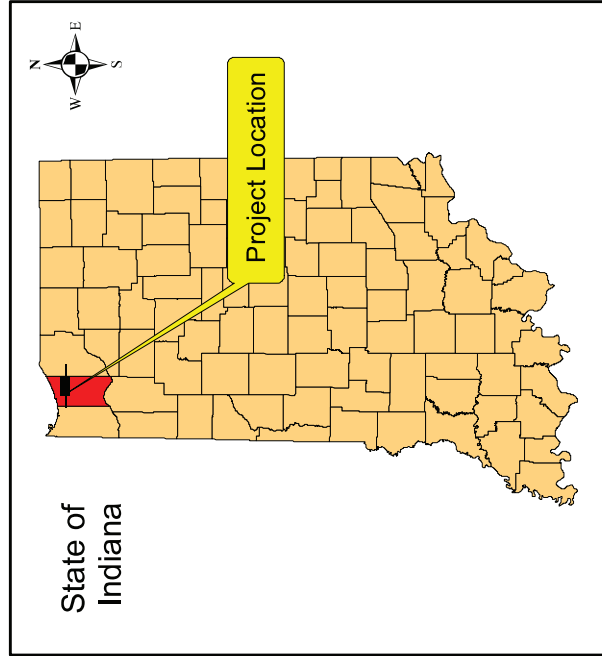
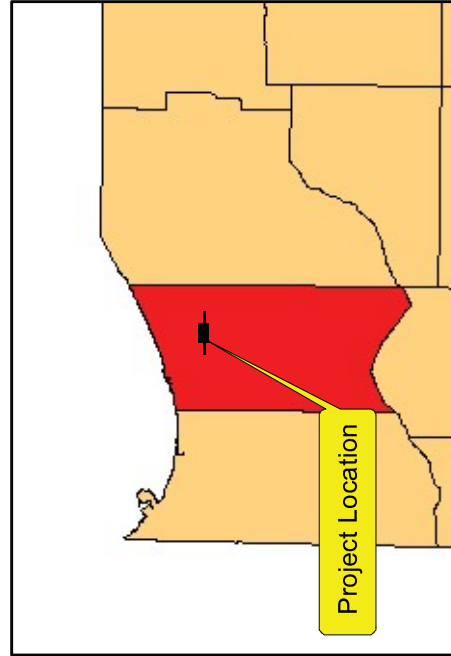
APPENDIX B GRAPHICS



SR 49 Intersection Improvement w/
Added Turn Lanes,
1.5 miles North of US 6 at
CR 950N/Calumet Ave
Des. No. 2301097
Porter County, Indiana

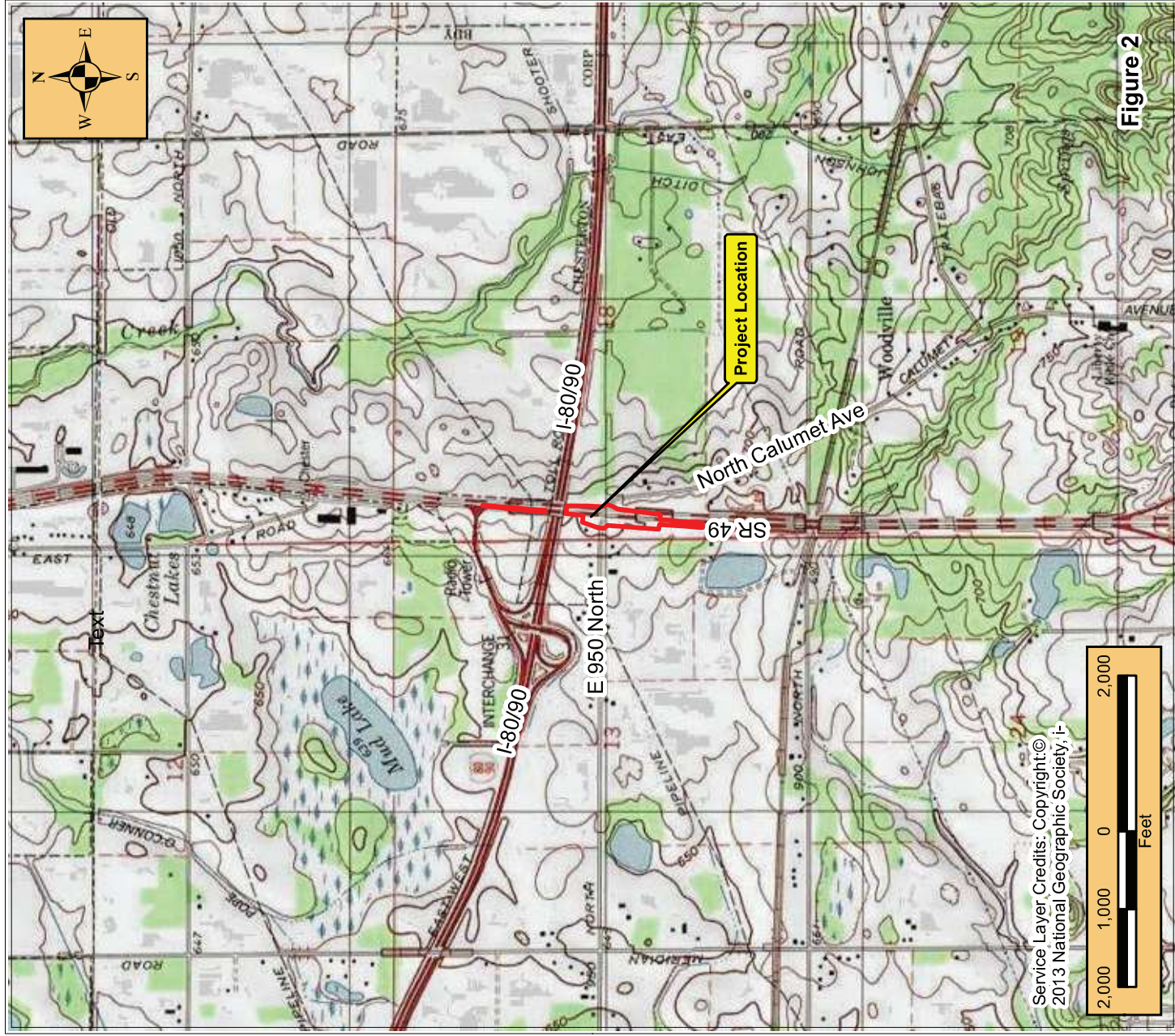
LFA
LAWSON FISHER ASSOCIATES P.C.
525 W WASHINGTON AVENUE
SOUTH BEND, INDIANA 46601
PH. (574) 234-3167





SR 49 Intersection Improvement w/
Added Turn Lanes,
1.5 miles North of US 6 at
CR 950N/Calumet Ave
Des. No. 2301097
Porter County, Indiana

LFA
LAWSON FISHER ASSOCIATES P.C.
525 W WASHINGTON AVENUE
SOUTH BEND, INDIANA 46601
PH. (574) 234-3167



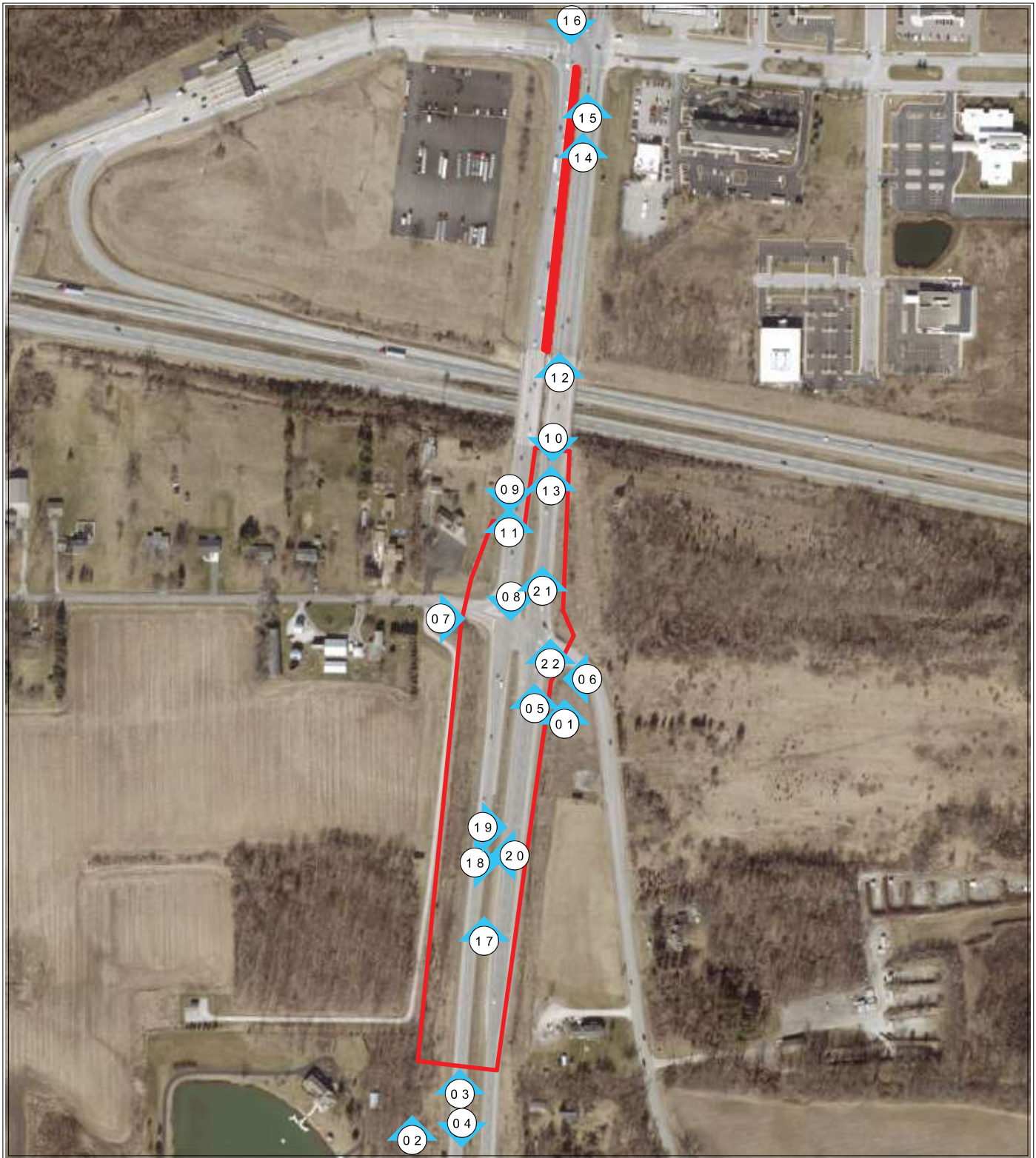


 Photo Designation

Figure 1

LFA
LAWSON-FISHER ASSOCIATES P.C.
525 W WASHINGTON AVENUE
SOUTH BEND, INDIANA 46601
PH. (574) 234-3167

*SR 49 Intersection Improvement w/
Added Turn Lanes, Des. No. 2301097
1.5 miles North of US 6 at
CR 950N/Calumet Ave
Porter County, Indiana*



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 1: Aerial view of S.R.49 C.R. 950 N/Calumet Avenue Intersection Looking North



Photograph 2: Aerial View of S.R.49 Looking North from South End of Project Area



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 3: Looking North from South End of Project Area



Photograph 4: Looking South from South End of Project Area



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 5: Looking North at S.R.49 C.R.950 N/Calumet Avenue Intersection



Photograph 6: Looking West Across S.R. 49 C.R. 950 N/Calumet Avenue Intersection



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 7: Looking East Across S.R. 49 C.R. 950 N/Calumet Avenue Intersection



Photograph 8: Looking South at S.R.49 C.R. 950 N/Calumet Avenue Intersection



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 9: Looking South Along Southbound Lane at North End of Project Area



Photograph 10: Looking South from Northbound Lane at North End of Project Area



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 11: Looking North at North End of Project Area



Photograph 12: Looking North from South End of Northern Project Area

**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 13: Looking North Over 80-90 Overpass at North End of Project Area



Photograph 14: Looking North at Gateway Boulevard Proposed U-turn

**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 15: Looking North at Gateway Boulevard Intersection Proposed U-turn



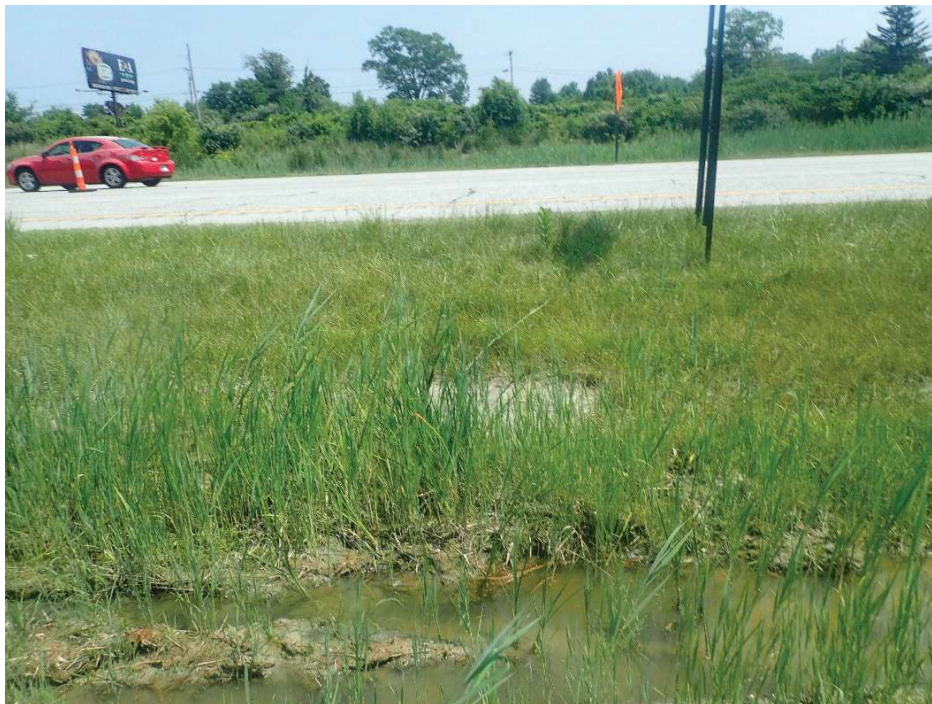
Photograph 16: Looking South at Gateway Boulevard Intersection Proposed U-turn



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 17: Looking North Along East Side of Road at Site of Proposed Structure No. 10



Photograph 18: Looking East From Median Site of Proposed Structure Nos. 11, 11a, and 11b



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 19: Looking East From Median Site of Proposed Structure Nos. 11, 11a, and 11b



Photograph 20: Looking West Across Median at Site of Proposed Structure Nos. 11a and 11b



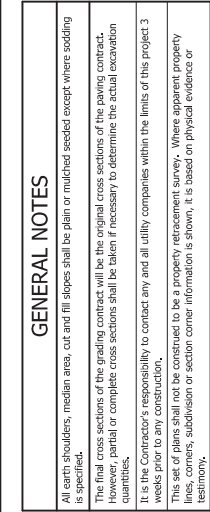
**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 21: Looking North at Proposed Structure Nos. 12, 12a, and 12b Site in Median



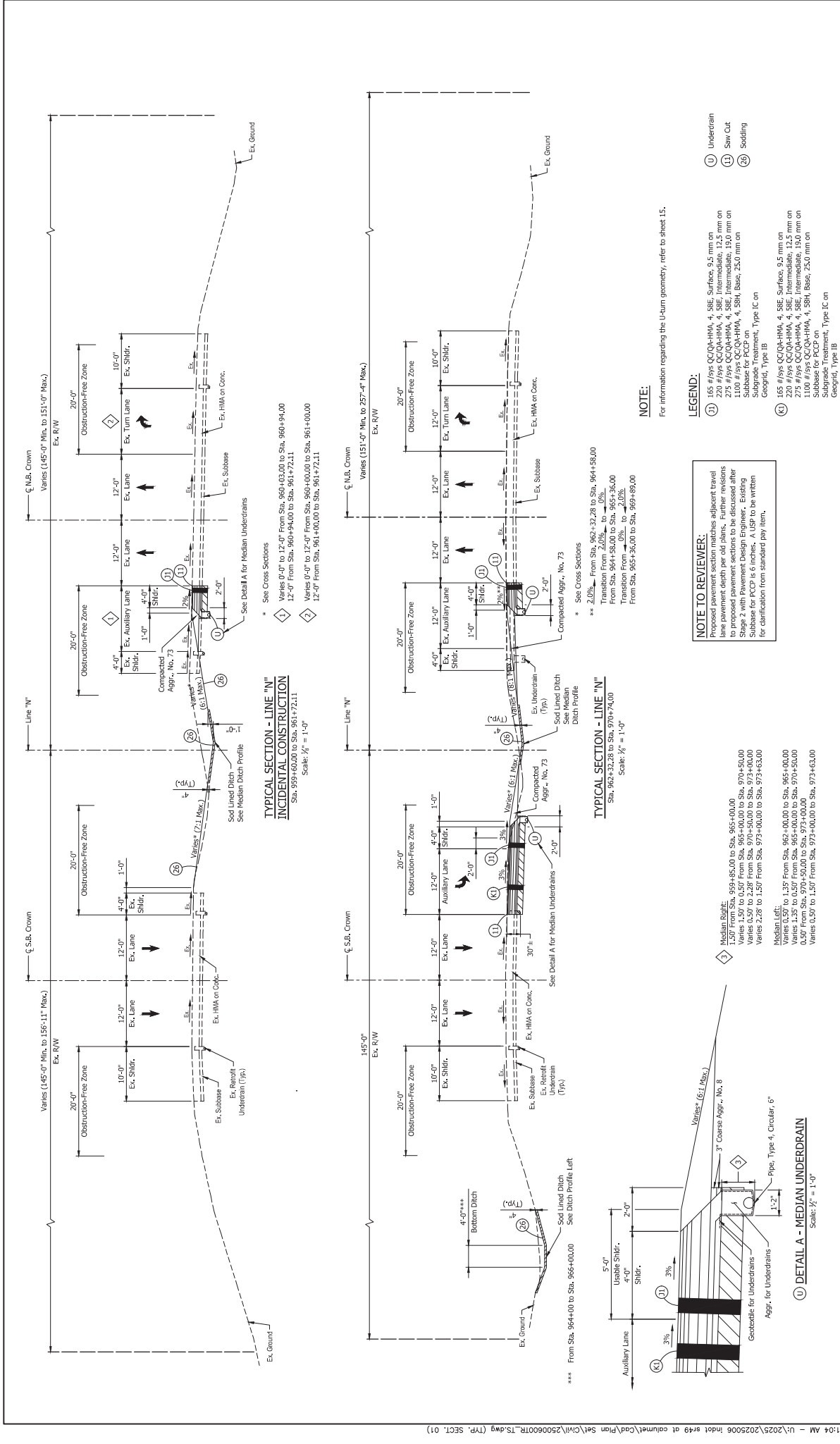
Photograph 22: Looking North Along East Side of S.R. 49 at Proposed Right Turn Acceleration Lane



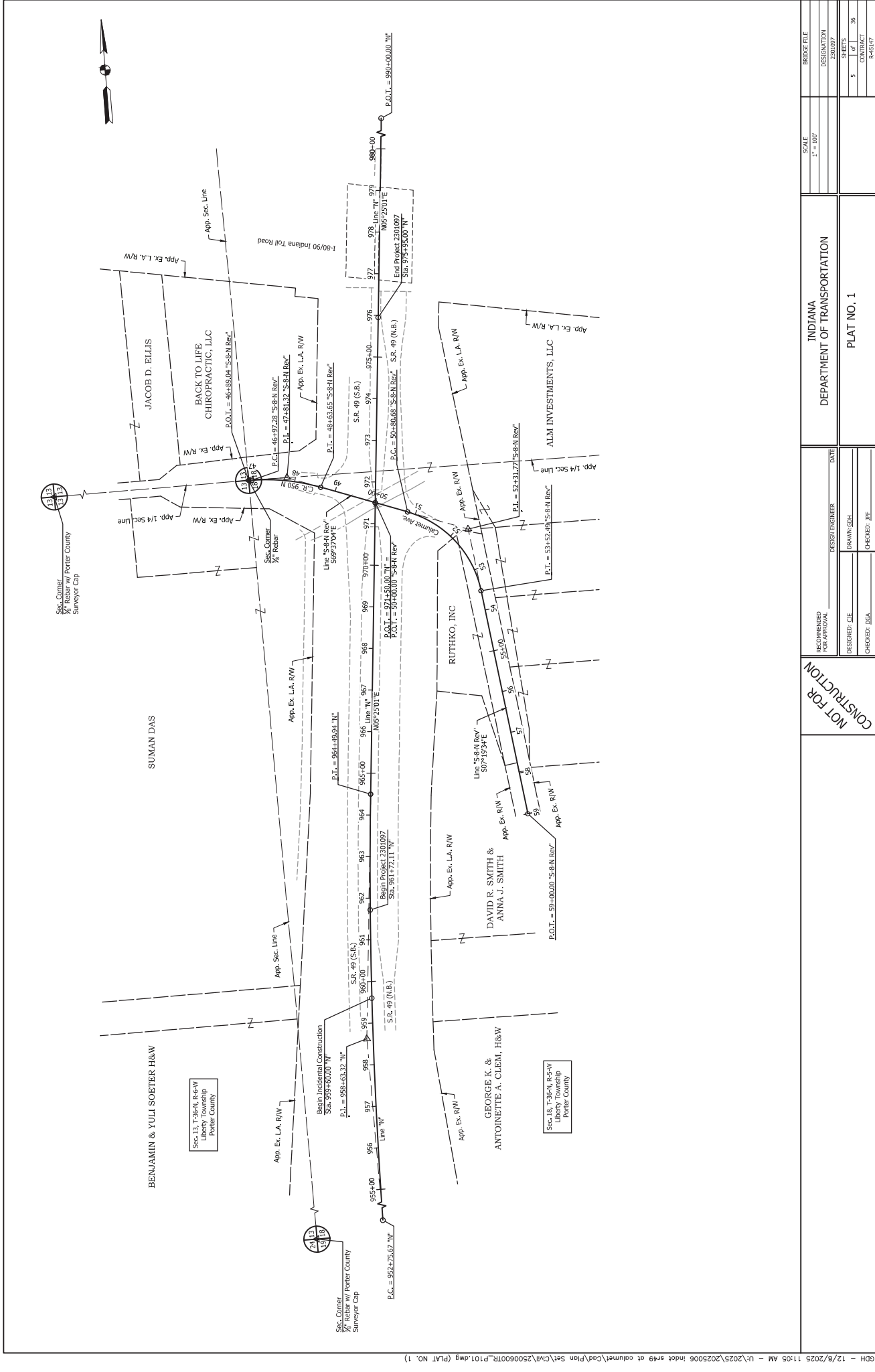
INDEX	
DRAWINGS INDEX	
SHEET NO.	
1	Title Sheet
2	Index and General Notes
3 - 4	Typical Sections
5	Plot No. 1
6 - 11	Maintenance of Traffic
12 - 14	Plan and Profiles
15 - 17	Intersection Details
18	Structure Details
19	Lighting Plan
20	Pavement Marking Plan
21	Storage Plan
22	Sign Layout Details
23	Approach Table
24	Structure Data and Pipe Material Tables
25	Underdrain Table
26	Sheet Sign & Post Summary Tables
27 - 36	Cross Sections

[illegible]

NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE _____	BRIDGE FILE _____
	DESIGNED: PSE _____	DRAWN: PIV _____	CHECKED: PSE _____			
				INDEX AND GENERAL NOTES	SHEETS 2 of 36	CONTRACT R-45147



NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE AS NOTED	BRIDGE FILE
NOT FOR CONSTRUCTION	DESIGNED: JPF	DRAWN: JY	CHECKED: JPF	TYPICAL SECTIONS LINE "N"	3 of 36	CONTRACT R-45147



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA	
			DEPARTMENT OF TRANSPORTATION	
			PLAT NO. 1	
DESIGNED: CJE	DRAWN: ECH	CHECKED: JRF	SHEETS	
CHECKED: EGA			5 of 36	
			CONTRACT	
			R-45147	

NOT FOR CONSTRUCTION		BRIDGE FILE	
		SCALE	
		1" = 100'	
		DESIGNATION	
		2301097	

GENERAL NOTES:

1. Install construction signs as shown on plans and as directed.
2. S.R. 49 shall remain open at all times and maintain at least one lane in each direction.
3. All type 'A' construction signs to have low intensity flashing yellow light, type 'A'.
4. All materials, procedures, signs, markings, and miscellaneous items shall conform to the requirements of the INDOT standard specifications and the Indiana Manual on Uniform Traffic Control Devices, and revisions there to.
5. Contractor shall coordinate with INDOT #2/PS to notify local fire department, police, ambulance and schools at least two weeks prior to any construction that would block or limit access.
6. The construction zone speed limit for S.R. 49: Northbound 45 mph (Design Speed = 55 mph), Southbound 45 mph (Design Speed = 45 mph)
7. S.R. 49 traffic barrel spacing on tangent: 50 ft
S.R. 49 traffic barrel spacing on taper: 25 ft
8. S.R. 49 construction clear zone requirements: 55 mph - 23 ft for 4:1
45 mph - 16 ft for 4:1
9. Temporary Traffic Barrier Taper Rates: 45 mph - 12:1
55 mph - 16:1
10. Cover any existing speed limit signs that conflict with construction speed reduction.

PHASE I:

1. Construction activities shall include construction of outside shoulders, turn lanes, lighting fixtures and roadside ditches/storm structures. Public road approaches shall be constructed in this phase.

PHASE II:

1. Construction activities shall include construction of median shoulders, turn lanes, raised median island, and median ditches/storm structures.

ESTIMATE OF QUANTITIES - CONTROLLING		
ITEM	QUANTITY	UNIT
Maintaining Traffic	1	Lump Sum
Construction Sign Type A	18	Each
Construction Sign Type B	22	Each
Temporary Pavement Marking, Removable, Solid, White, 6"	4625	ft
Temporary Pavement Marking, Removable, Solid, Yellow, 6"	8090	ft
Temporary Traffic Barrier, Type 2	3410	ft
Energy Absorbing Terminal, CZ, TL-2	2	Each
Temporary Pavement Marking, Removable, Black, 5"	2931	ft
Barricade, Type III-B	156	ft
Flashing Arrow Board	120	Days

ESTIMATE OF QUANTITIES - PHASE I		
ITEM	QUANTITY	UNIT
Maintaining Traffic	1	Lump Sum
Construction Sign Type A	18	Each
Construction Sign Type B	21	Each
Temporary Pavement Marking, Removable, Solid, White, 6"	4625	ft
Temporary Pavement Marking, Removable, Solid, Yellow, 6"	2745	ft
Temporary Traffic Barrier, Type 2	1030	ft
Energy Absorbing Terminal, CZ, TL-2	2	Each
Temporary Pavement Marking, Removable, Black, 5"	164	ft
Barricade, Type III-B	156	ft
Flashing Arrow Board	120	Days

ESTIMATE OF QUANTITIES - PHASE II		
ITEM	QUANTITY	UNIT
Maintaining Traffic	1	Lump Sum
Construction Sign Type A	16	Each
Construction Sign Type B	17	Each
Temporary Pavement Marking, Removable, Solid, Yellow, 6"	5345	ft
Temporary Traffic Barrier, Type 2	3410	ft
Energy Absorbing Terminal, CZ, TL-2	2	Each
Temporary Pavement Marking, Removable, Black, 5"	127	ft
Flashing Arrow Board	120	Days

NOT FOR CONSTRUCTION

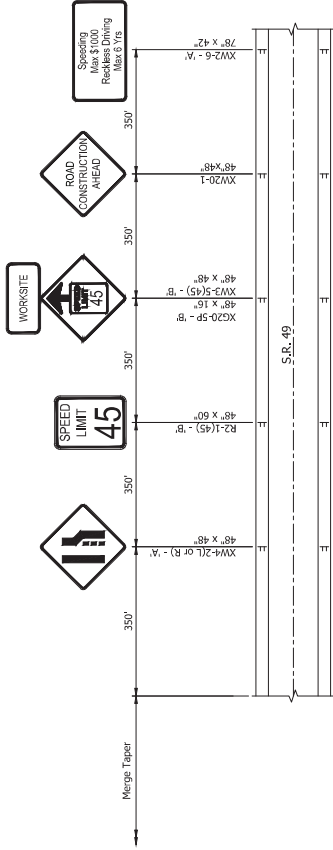
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: JPF	DRAWN: ZY	
CHECKED: BGA	CHECKED: JPF	

INDIANA	BRIDGE FILE
DEPARTMENT OF TRANSPORTATION	SCALE
MAINTENANCE OF TRAFFIC	AS SHOWN
GENERAL NOTES	DESIGNATION
	2301097
	SHEETS
	6 of 36
	CONTRACT
	R-45147



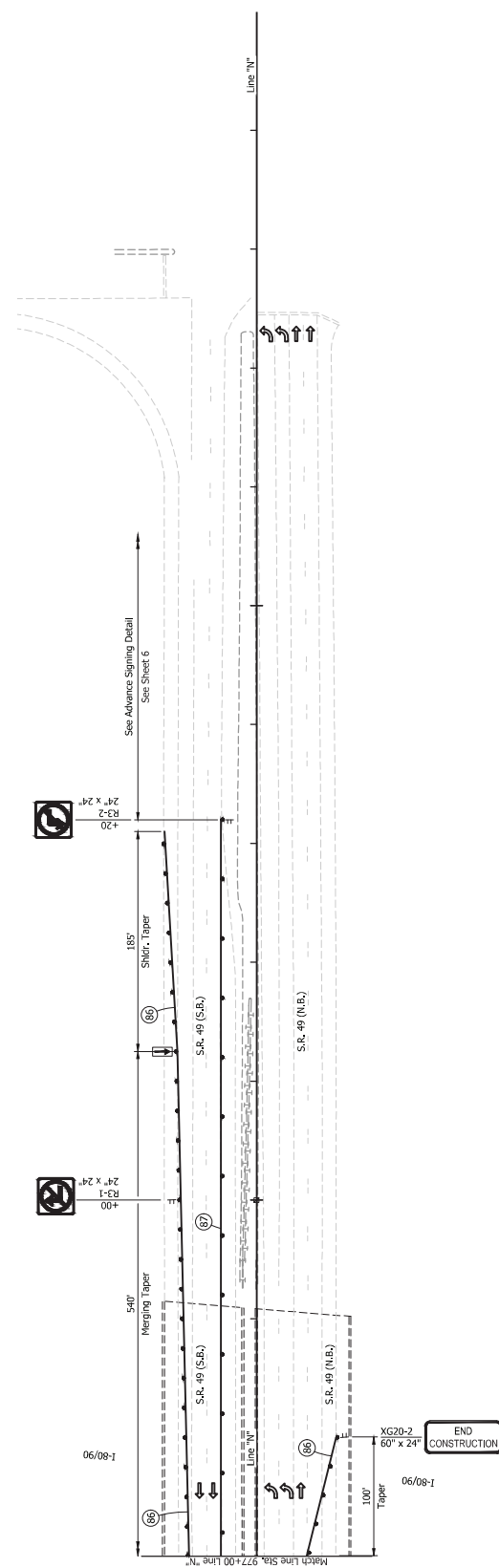
PROJECT LOCATION

Scale: 1" = 500'



ADVANCED SIGNING DETAIL

Not to Scale

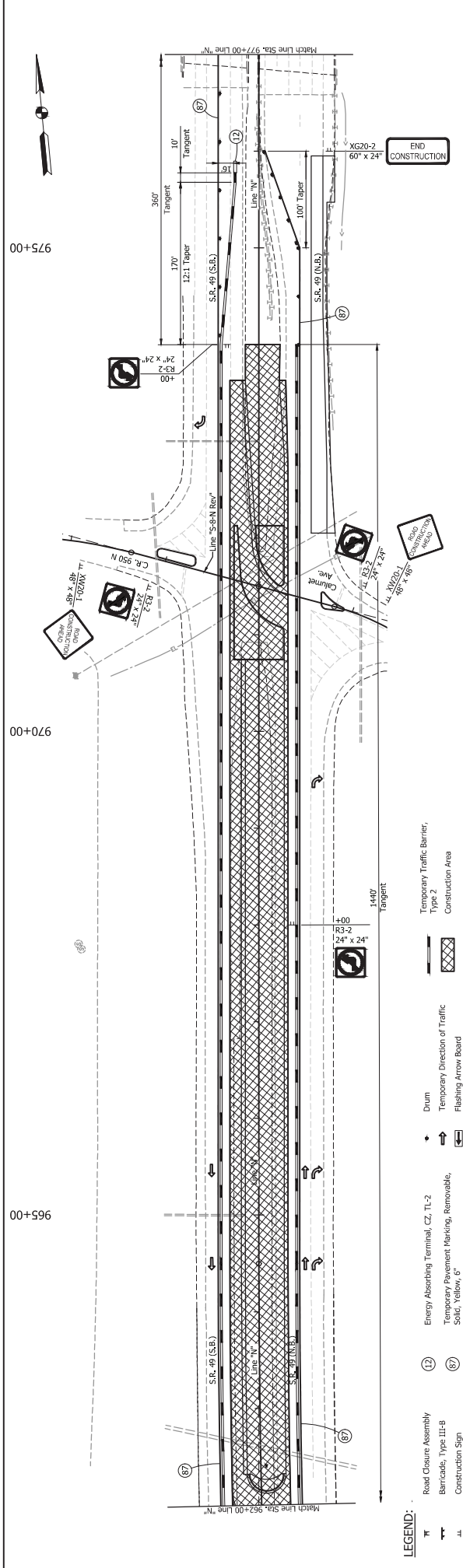


Temporary Pavement Marking, Removable, Solid, White, 6"
Temporary Pavement Marking, Removable, Solid, Yellow, 6"
Construction Sign
Drum
Temporary Direction of Traffic
Fishing Arrow Board

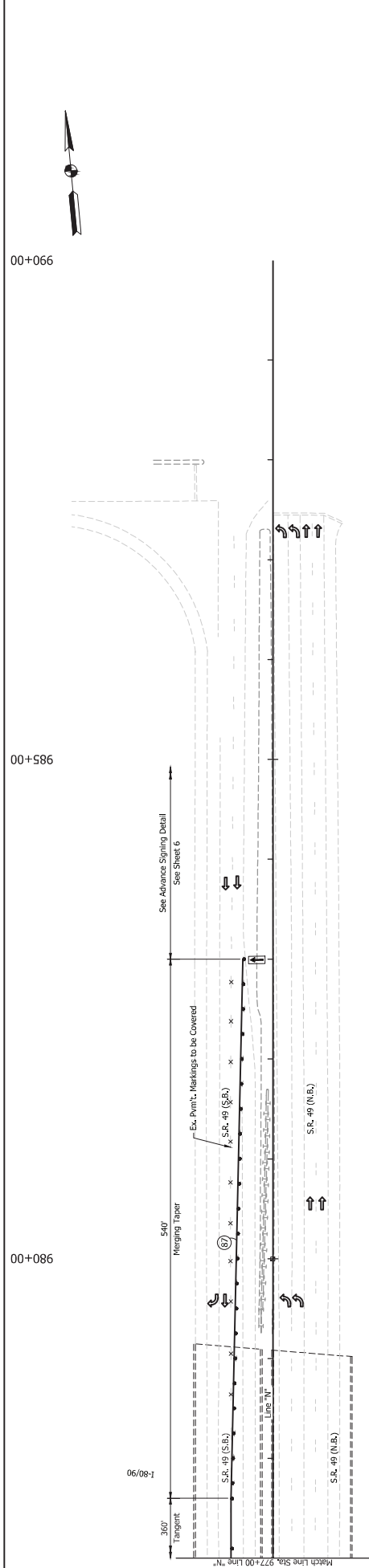
SCALE	BRIDGE FILE
1" = 50'	
	DESIGNATION
	Z301097
	SHEETS
	9 of 36
	CONTRACT
	R-45147

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEERS _____ DATE _____	
	DESIGNED: JPF	DRAWN: BSH
	CHECKED: BSA	CHECKED: JPF
	INDIANA DEPARTMENT OF TRANSPORTATION MAINTENANCE OF TRAFFIC PHASE I	

NOT FOR
CONSTRUCTION



NOT FOR CONSTRUCTION		RECOMMENDED FOR APPROVAL		INDIANA DEPARTMENT OF TRANSPORTATION		SCALE 1" = 50'		BRIDGE FILE	
		DESIGNED: JBE		DESIGNER ENGINEER		DESIGNATION		DESIGNATION	
		CHECKED: JBE		DATE		2301097		2301097	
		CHECKED: DGA		09/04/2024		10		1 of 36	
		CHECKED: JBE				SHEETS		CONTRACT R-53167	
				MAINTENANCE OF TRAFFIC PHASE II					



LEGEND:

Temporary Pavement Marking, Removable, Solid, Yellow, 6"

Construction Sign

Drum

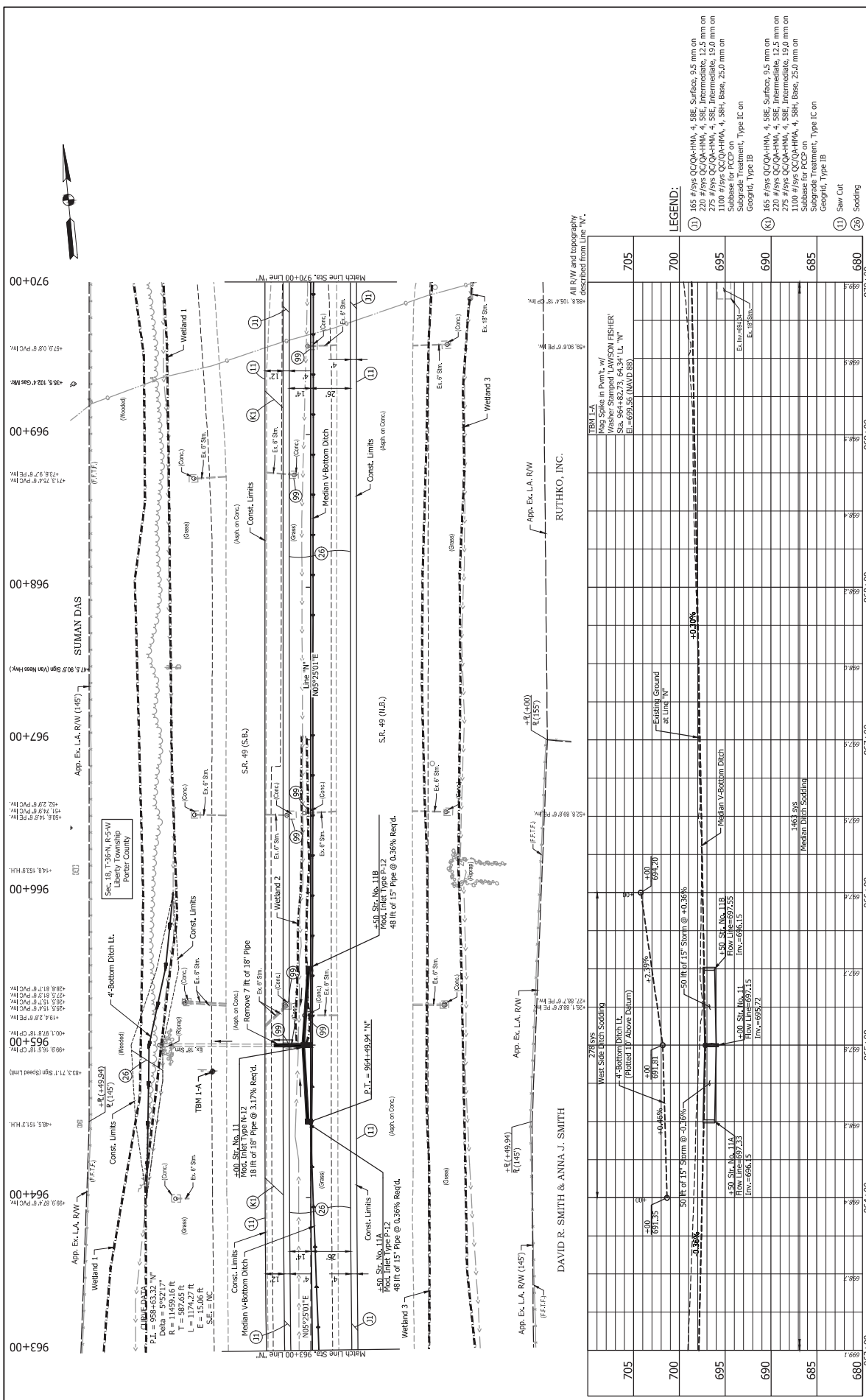
Temporary Direction of Traffic

Flashing Arrow Board

SCALE	1" = 50'
BRIDGE FILE	
DISSEMINATION	2301027
SHEETS	11 of 36
CONTRACT	R-45147

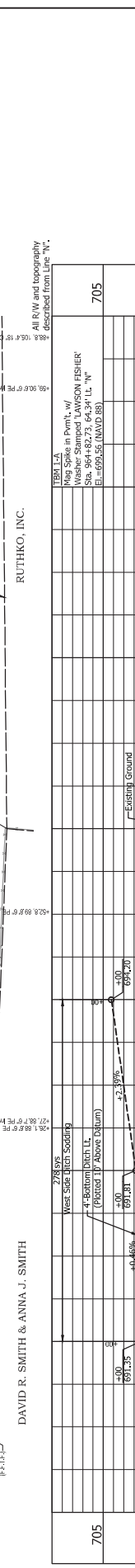
INDIANA DEPARTMENT OF TRANSPORTATION	
MAINTENANCE OF TRAFFIC PHASE II	
RECOMMENDED FOR APPROVAL	DATE
DESIGNED: JPF	DRAWN: ECH
CHECKED: ECH	CHECKED: JPF

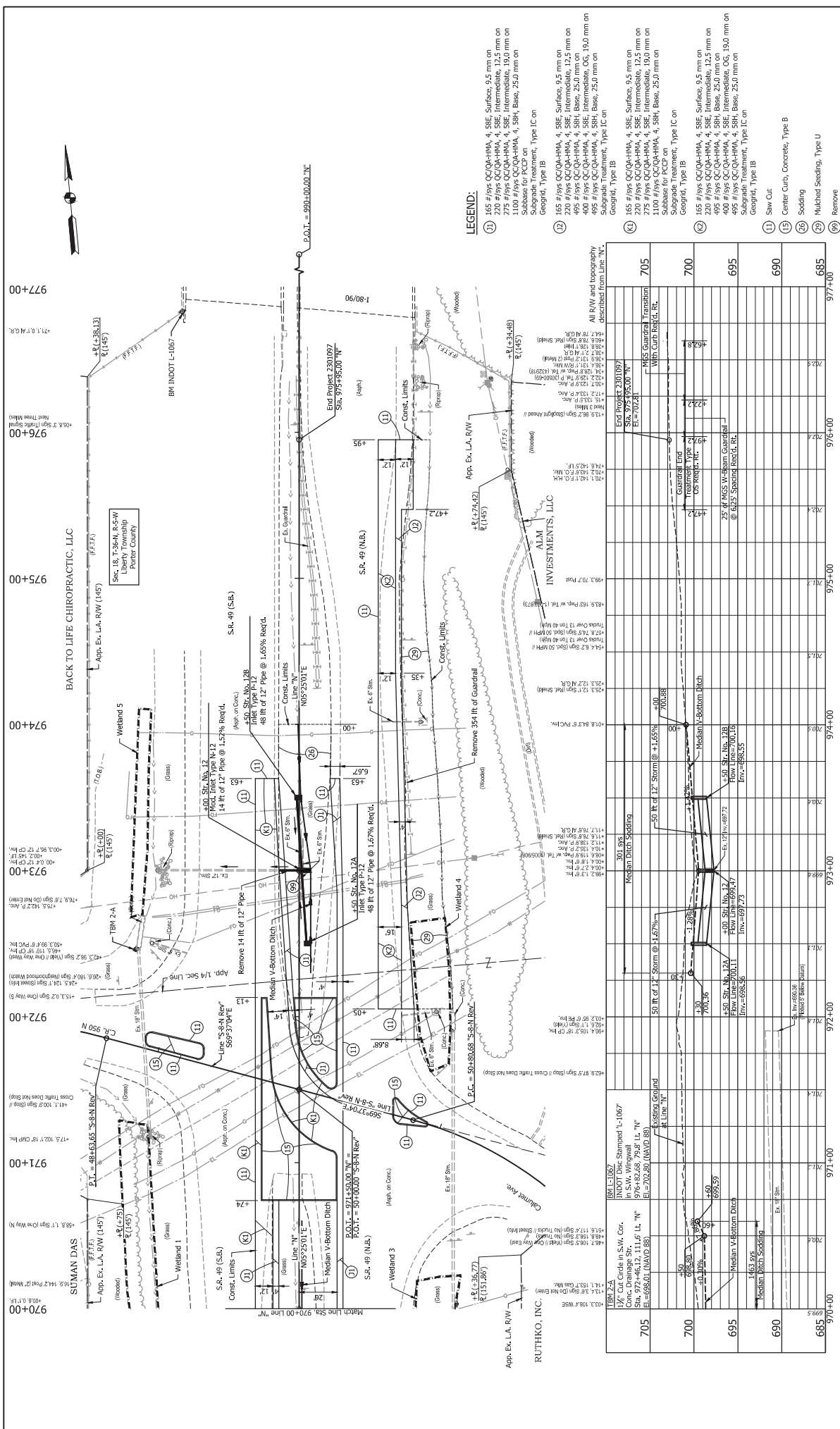
NOT FOR CONSTRUCTION



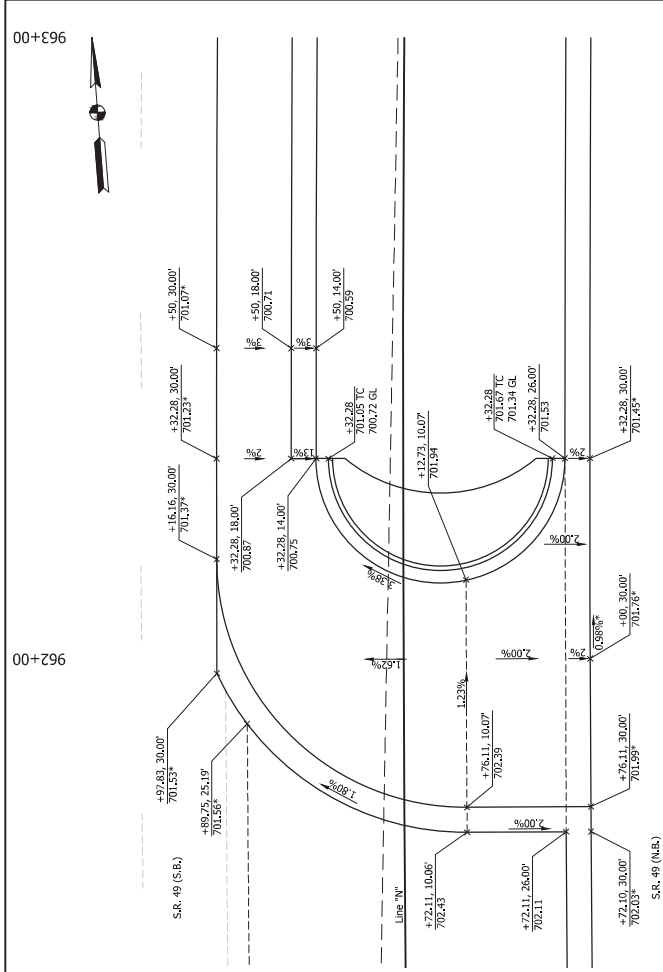
INDIANA DEPARTMENT OF TRANSPORTATION			PLAN AND PROFILE - LINE "N" STA. 963+00 TO STA. 970+00		
RECOMMENDED FOR APPROVAL			NOT FOR CONSTRUCTION		
DESIGN ENGINEER			DATE		
DESIGNED: JPF			DRAWN: GSH		
CHECKED: BGA			CHECKED: JPF		
HORIZONTAL SCALE 1" = 30'			VERTICAL SCALE 1" = 5'		
BRIDGE FILE			SHEETS		
DESIGNATION 231027			13 of 36		
			CONTRACT		
			R-45147		

- LEGEND:**
- 165 #/ys OC/QA-HMA, 4.5SE, Surface, 9.5 mm on
 - 220 #/ys OC/QA-HMA, 4.5SE, Intermediate, 12.5 mm on
 - 275 #/ys OC/QA-HMA, 4.5SE, Intermediate, 19.0 mm on
 - 1100 #/ys OC/QA-HMA, 4.58H, Base, 25.0 mm on
 - Subbase for PCP on
 - Subgrade treatment, Type IC on
 - Geogrid, Type IB
 - 165 #/ys OC/QA-HMA, 4.5SE, Surface, 9.5 mm on
 - 220 #/ys OC/QA-HMA, 4.5SE, Intermediate, 12.5 mm on
 - 275 #/ys OC/QA-HMA, 4.5SE, Intermediate, 19.0 mm on
 - 1100 #/ys OC/QA-HMA, 4.58H, Base, 25.0 mm on
 - Subbase for PCP on
 - Subgrade treatment, Type IC on
 - Geogrid, Type IB
 - 11 Saw Cut
 - 26 Sodding
 - 99 Remove





NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL		INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE	
	DESIGN ENGINEER		DATE		HORIZONTAL SCALE	
					1" = 30'	
					VERTICAL SCALE	
					1" = 5'	
					DESIGNATION	
					230.097	
					SHEETS	
					14 of 35	
					CONTRACT	
				R-4347		
				PLAN AND PROFILE - LINE "N" STA. 970+00 TO STA. 977+00		



MEDIAN U-TURN DETAIL
Scale: 1" = 10'

Scale: 1" = 10'

INTERSECTION DETAIL
SPOT ELEVATIONS

Scale: 1" = 10'

LEGEND:

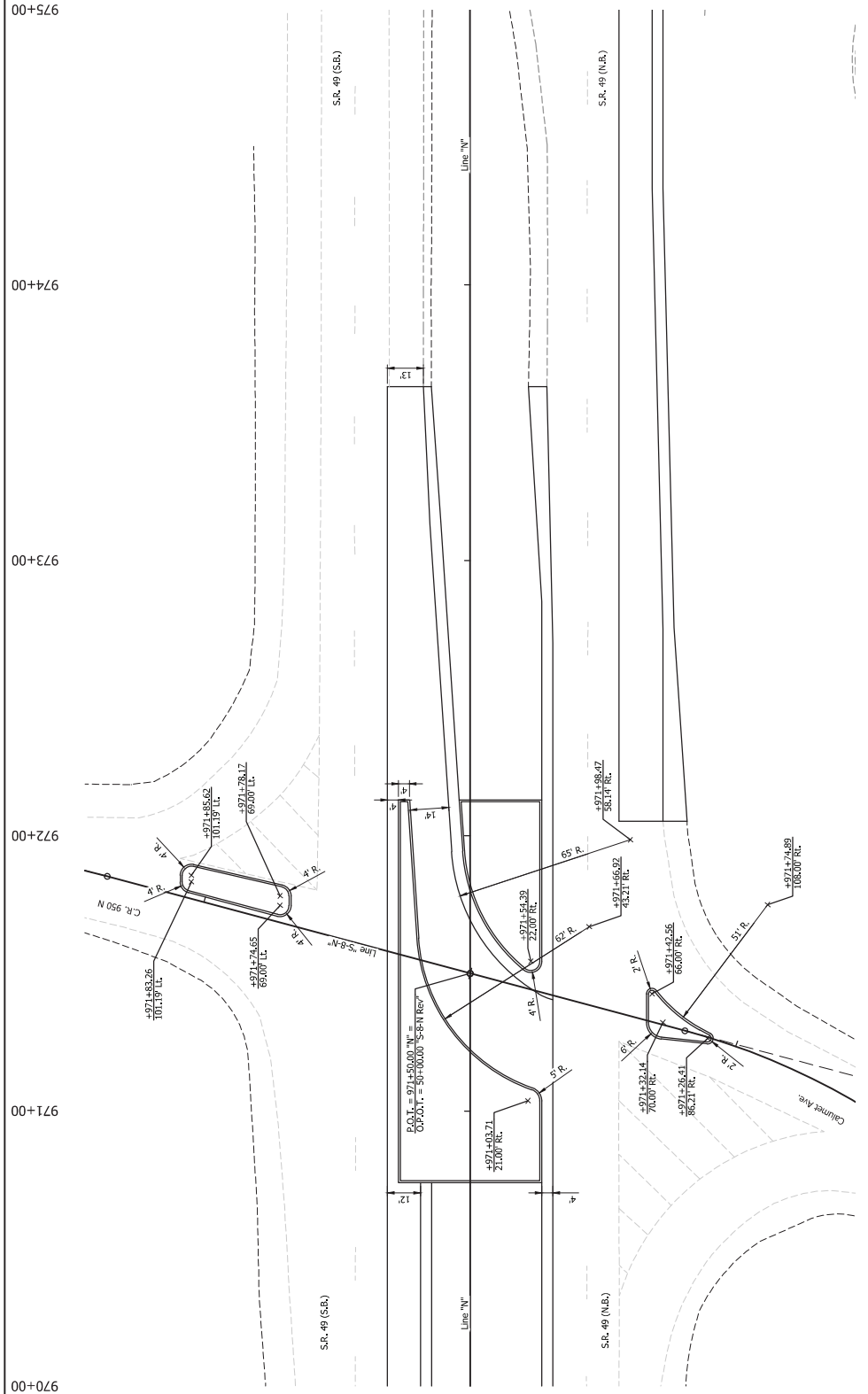
- * Existing Elevation
GL Gutter Line Elevation

TC Top of Curb Elevation

RECOMMENDED FOR APPROVAL _____		INDIANA DEPARTMENT OF TRANSPORTATION		SCALE 1" = 10'		BRIDGE FILE	
DESIGNED: JF		DESIGN ENGINEER _____ DATE _____		25101927		DESCRIPTION	
CHECKED: DGA		DRAWN: SDH		25101927		CONTRACT	
						R-45147	
						15' of 36'	
						SHEET 5	

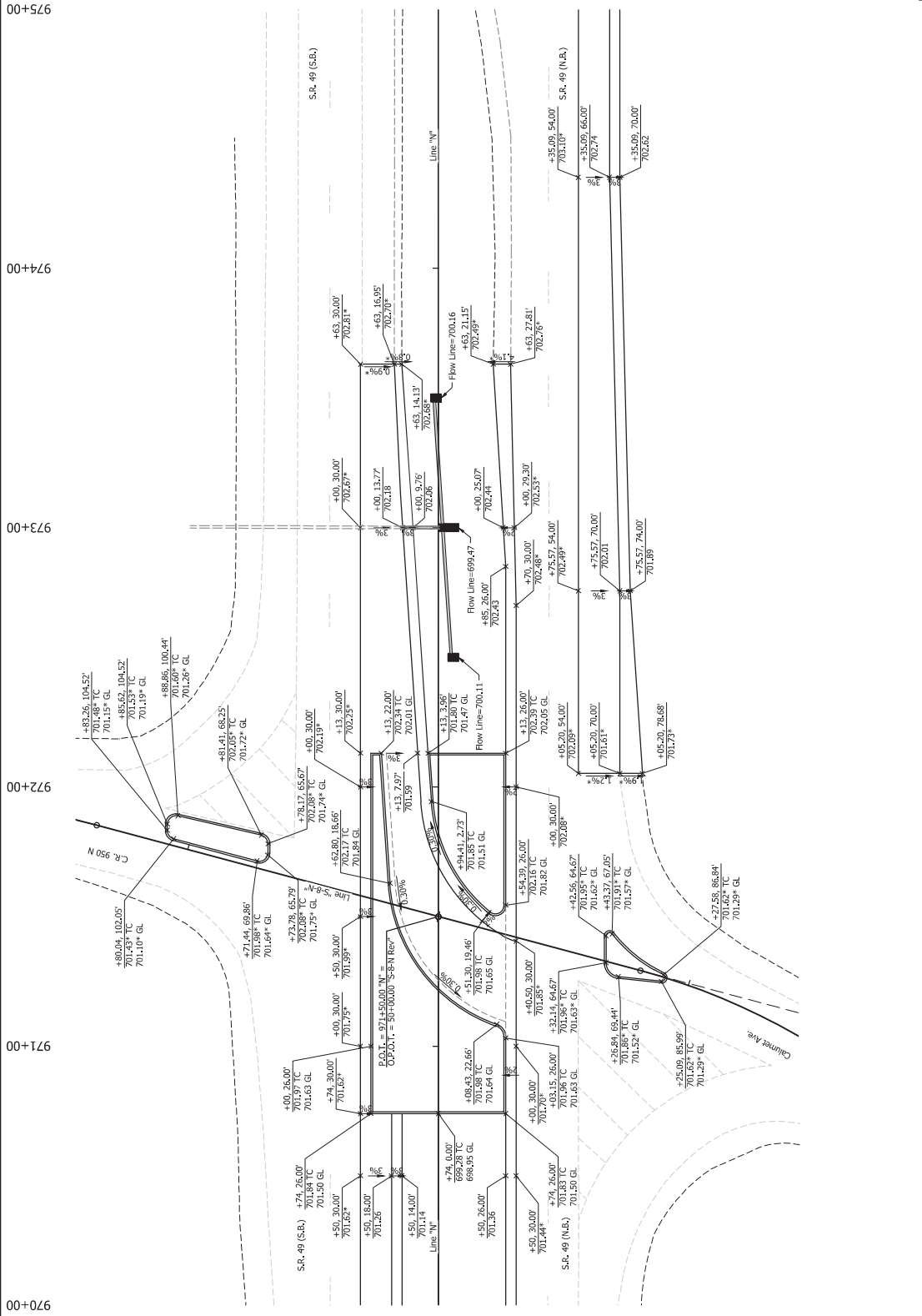
NOT FOR CONSTRUCTION

0-20



RECOMMENDED FOR APPROVAL _____		INDIANA DEPARTMENT OF TRANSPORTATION		SCALE 1" = 20'		BRIDGE FILE	
DESIGN ENGINEER _____		DATE _____		DESIGNATION		2301097	
DESIGNED: PFS		DRAWN: GDM		SHEETS		16 of 36	
CHECKED: DGA		CHECKED: PFS		CONTRACT		R-45147	
				INTERSECTION DETAIL			

NOT FOR
CONSTRUCTION



* Existing Elevation	GL Gutter Line Elevation	TC Top of Curb Elevation
----------------------	--------------------------	--------------------------

	SCALE 1" = 50'	BRIDGE FILE
		DESIGNATION
		2301097
SHEETS	17 OF 36	CONTRACT
		R-45147

INDIANA
 DEPARTMENT OF TRANSPORTATION
 INTERSECTION DETAIL
 SPOT ELEVATIONS

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE
	DESIGNED: JPF	DRAWN: PIV	
	CHECKED: DGA	CHECKED: JPF	

NOT FOR
CONSTRUCTION



Scale: 1" = 1'-0"



INLET TYPE P-12 DIMENSIONS			
STR. NO.	PIPE SIZE (d)	GRADE	C
11A	15"	6:1	22 1/2"
11B	15"	6:1	22 1/8"
12A	12"	8:1	---
12B	12"	6:1	---

"---" Denotes the Inlet Follows the Standard Dimension

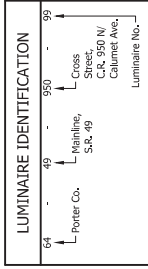


Refer to standard drawings E 720-INST for additional details and standard dimensions.

NOT FOR CONSTRUCTION



975+00



TOTAL
Type II Luminaire Shall Provide a Light Distribution Equivalent to RFM-160W48LED4K-G2-R2M.ies. Type III Luminaire Shall Provide a Light Distribution Equivalent to RFM-160W48LED4K-G2-R3M.ies

Lighting Circuit Designation

Service Point, Type II

Service Point, Type II

4-1/C No. 4 AWG in Plastic Conduit

4-1/C No. 4 AWG In 2" Sch. 80 HDPE Conduit

SERVICE POINT AMP TABLE				
SERVICE POINT	MAIN BREAKER	BRANCH CIRCUIT	COMPUTED AMPS	BRANCH CIRCUIT BREAKER
A	200 Amps	Red	2.8	15 Amps
		Black	2.8	
B	200 Amps	Red	2.8	15 Amps
		Black	1.4	

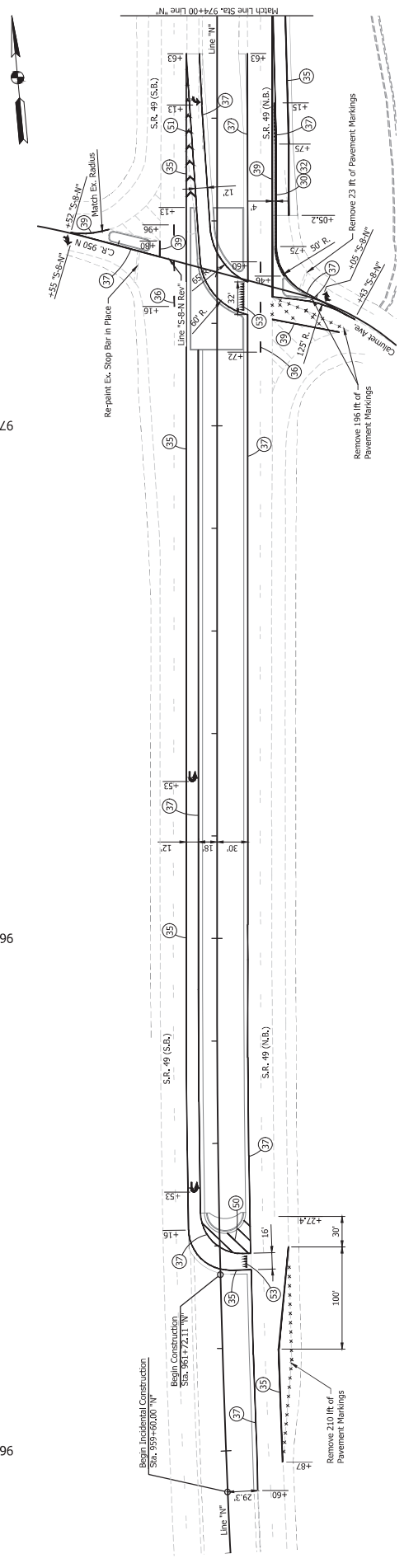
DESIGN DATA	
Initial Lamp Lumens (LL) T61W LED	18,300 lm
Average Maintained Illumination (Roadway)	0.9 fc
Light Loss Factor	0.87
Uniformity Ratio (Roadway)	4.5:1
Roadway Luminaire Classification (Conventional)	As Noted
Effective Mounting Height	44 ft
Color Temperature	4000 k

	<div style="writing-mode: vertical-rl; transform: rotate(180deg);">NOT FOR CONSTRUCTION</div>	RECOMMENDED FOR APPROVAL _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		SCALE 1" = 50'	BRIDGE FILE
		DESIGN ENGINEER _____					
		DRAWN: GSA					DESCRIPTION 2301097
		CHECKED: JFE					
		CHECKED: DGA				SHEETS 14	19
		CHECKED: JFE				CONTRACT S-41617	36
				LIGHTING PLAN AND TABLES			

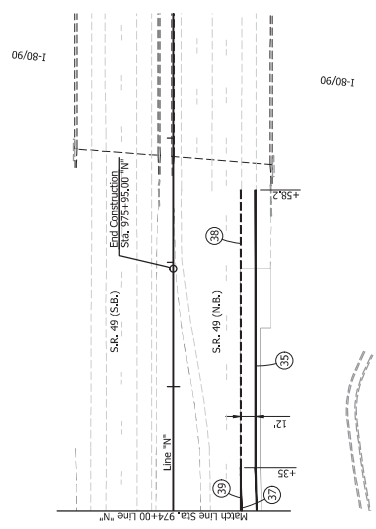
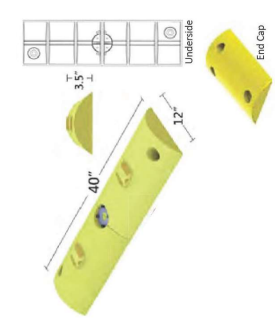
00+096

965+00

970+00



975+00



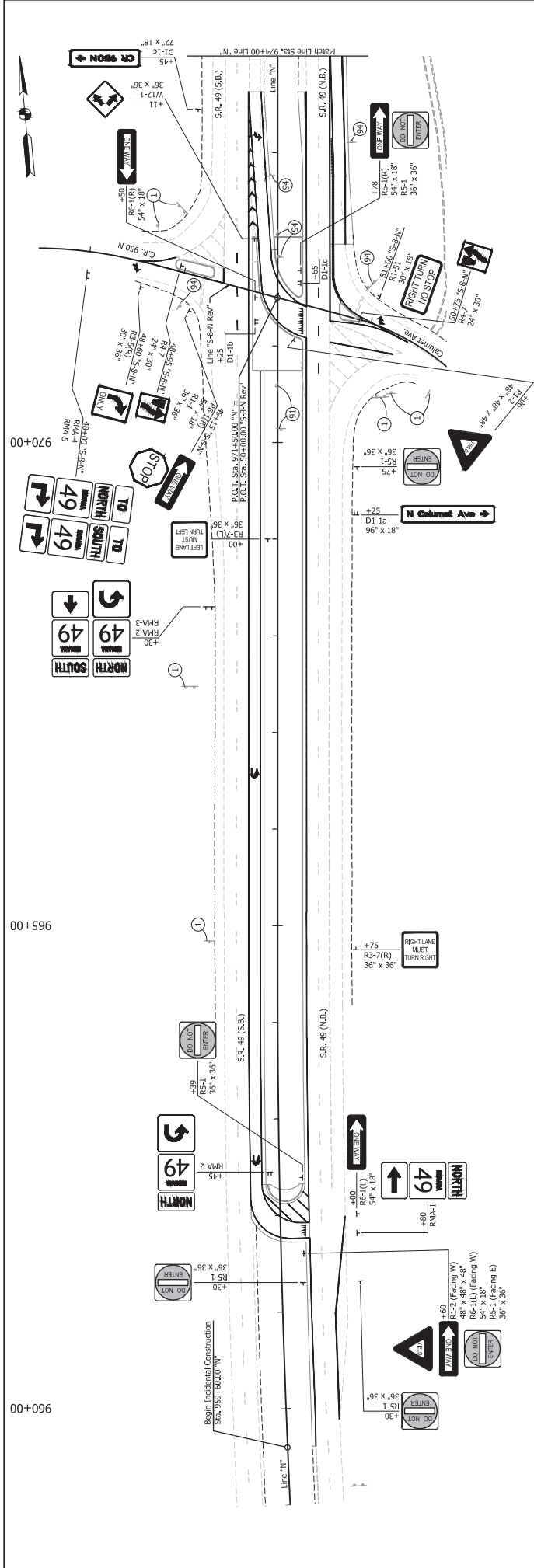
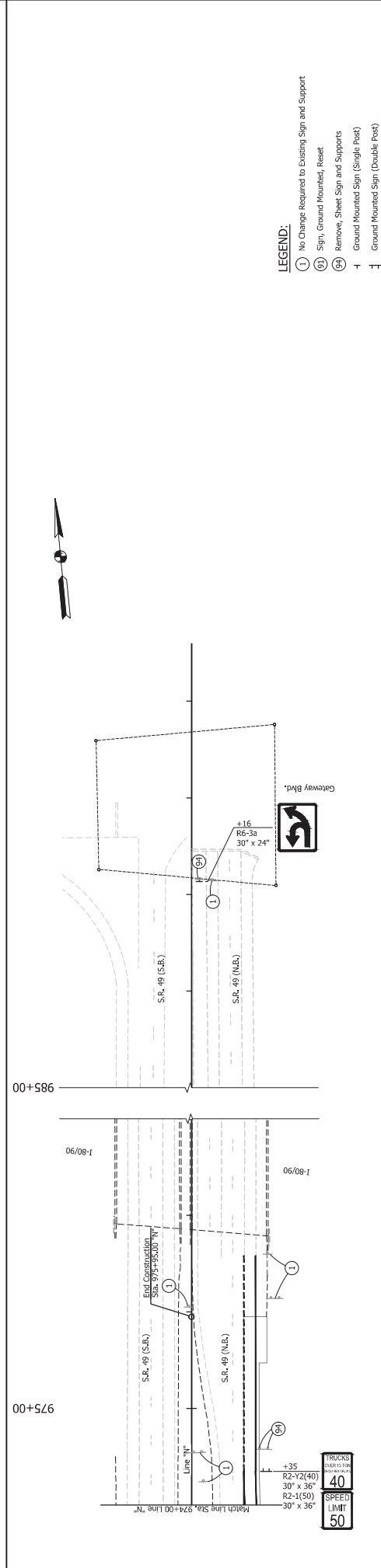
LANE SEPARATOR, TUFF CURB DETAIL
Shown for reference used in design.
Not to Scale

LEGEND:

- 30 Lane Separator, Tuff Curb
- 32 Delineator Post, Flexible, Type II
- 33 Line, Multi-Component, Solid, White, 6"
- 34 Line, Multi-Component, Broken, White, 6"
- 37 Line, Multi-Component, Solid, Yellow, 6"
- 38 Line, Multi-Component, Dotted, White, 10"
- 39 Line, Multi-Component, Solid, White, 10"
- 50 Transverse Marking, Multi-Component, Solid, Yellow, Cross Hatch, 12"
- 51 Transverse Marking, Multi-Component, Solid, White, Cross Hatch, 12"
- 53 Transverse Marking, Multi-Component, Yield Line, White, 18"
- 54 Pavement Message Marking, Multi-Component, Turn Arrow

INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE	
PAVEMENT MARKING PLAN		SCALE 1" = 50'	
RECOMMENDED FOR APPROVAL		DESIGNATION 2301027	
DESIGNED: JPF		SHEETS 20 of 36	
DRAWN: ECH		CONTRACT R-45147	
CHECKED: ECH		Pavement Message Marking, Multi-Component, Turn Arrow	

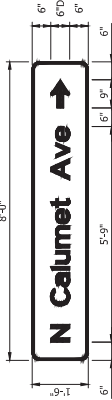
NOT FOR CONSTRUCTION



- LEGEND:
- 1 No Change Required to Existing Sign and Support
 - 91 Sign, Ground Mounted, Reset
 - 92 Remove, Sheet Sign and Supports
 - 94 Ground Mounted Sign (Single Post)
 - 1 Ground Mounted Sign (Double Post)

INDIANA DEPARTMENT OF TRANSPORTATION		SIGNING PLAN	
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: JPF	DRAWN: ECH	CHECKED: JPF	
CHECKED: ECH			
BRIDGE FILE		SCALE	
DESIGNATION		1" = 50'	
SHEETS		21 of 36	
CONTRACT		R-45147	

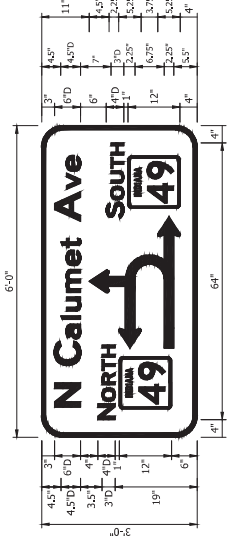
SIGN NUMBER	D1-1a
WIDTH x HGT.	8'-0" x 1'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	2.25"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White



BORDER
R=2.25"
TH=0.75"

Sta. 969+25.00 "N" R/L

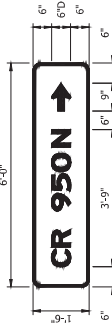
SIGN NUMBER	D1-1b
WIDTH x HGT.	6'-0" x 3'-0"
BORDER WIDTH	1"
CORNER RADIUS	5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White



BORDER
R=5"
TH=1"

Sta. 971+25.00 "N" L/L

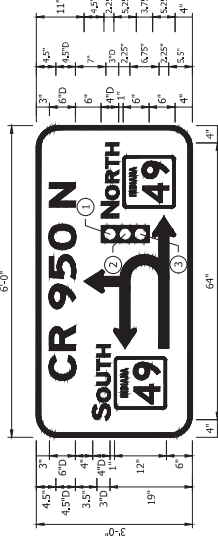
SIGN NUMBER	D1-1d
WIDTH x HGT.	6'-0" x 1'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	2.25"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White



BORDER
R=2.25"
TH=0.75"

Sta. 972+65.00 "N" L/L

SIGN NUMBER	D1-1c
WIDTH x HGT.	6'-0" x 3'-0"
BORDER WIDTH	1"
CORNER RADIUS	5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White



BORDER
R=5"
TH=1"

Sta. 971+65.00 "N" R/L

- ① Color: Red, Reflective
- ② Color: Yellow, Reflective
- ③ Color: Green, Reflective

NOT FOR
CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: JPF	DRAWN: ZY	
CHECKED: EGA	CHECKED: JPF	
SCALE	INDIANA DEPARTMENT OF TRANSPORTATION	SIGN DETAILS AND LAYOUT
NOT TO SCALE		
BRIDGE FILE		
DESIGNATION		
23101097		
SHEETS		
22 of 36		
CONTRACT		
R-45147		

PAVEMENT QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADIUS	DISTANCE BEYOND R/W LINE		SURFACE BEYOND R/W LINE				GRADE				EXCAVATION				GEOTEKILE FOR PAVEMENT, TYPE 28		D-1-COMPACTION JOINT		CLEAR ZONE AT DRIVE			HMA FOR APPROACHES TYPE B			WIDENING WITH HMA, TYPE D			HMA FOR STRUCTURE INSTALLATION, TYPE C			SUBBASE FOR PCP		SUBGRADE TREATMENT		PRIME COAT		HMA MATERIAL FOR		COMPACTED AGGREGATE, NO. 53		COMPACTED AGGREGATE, NO. 73		PCCP				DENSE GRADED SUBBASE		LIQUID ASPHALT SEALANT		JOINT ADHESIVE,		GEOGRID, TYPE 18	REMARKS																																																																																																																																																																																																																																																																																																																							
					RADII		LENGTH		WIDTH		DISTANCE BEYOND R/W LINE		SURFACE BEYOND R/W LINE		GRADE		EXCAVATION		GEOTEKILE FOR PAVEMENT, TYPE 28		D-1-COMPACTION JOINT		CLEAR ZONE AT DRIVE			HMA FOR APPROACHES TYPE B			WIDENING WITH HMA, TYPE D			HMA FOR STRUCTURE INSTALLATION, TYPE C			SUBBASE FOR PCP		SUBGRADE TREATMENT		PRIME COAT		HMA MATERIAL FOR		COMPACTED AGGREGATE, NO. 53		COMPACTED AGGREGATE, NO. 73		PCCP				DENSE GRADED SUBBASE		LIQUID ASPHALT SEALANT		JOINT ADHESIVE,																																																																																																																																																																																																																																																																																																																										
					DEPTH	6 IN.	9 IN.	12 IN.	15 IN.	18 IN.	21 IN.	24 IN.	27 IN.	30 IN.	33 IN.	36 IN.	39 IN.	42 IN.	45 IN.	48 IN.	51 IN.	54 IN.	57 IN.	60 IN.	63 IN.	66 IN.	69 IN.	72 IN.	75 IN.	78 IN.	81 IN.	84 IN.	87 IN.	90 IN.	93 IN.	96 IN.	99 IN.	102 IN.	105 IN.	108 IN.	111 IN.	114 IN.	117 IN.	120 IN.	123 IN.	126 IN.	129 IN.	132 IN.	135 IN.	138 IN.	141 IN.	144 IN.	147 IN.	150 IN.	153 IN.	156 IN.			159 IN.	162 IN.	165 IN.	168 IN.	171 IN.	174 IN.	177 IN.	180 IN.	183 IN.	186 IN.	189 IN.	192 IN.	195 IN.	198 IN.	201 IN.	204 IN.	207 IN.	210 IN.	213 IN.	216 IN.	219 IN.	222 IN.	225 IN.	228 IN.	231 IN.	234 IN.	237 IN.	240 IN.	243 IN.	246 IN.	249 IN.	252 IN.	255 IN.	258 IN.	261 IN.	264 IN.	267 IN.	270 IN.	273 IN.	276 IN.	279 IN.	282 IN.	285 IN.	288 IN.	291 IN.	294 IN.	297 IN.	300 IN.	303 IN.	306 IN.	309 IN.	312 IN.	315 IN.	318 IN.	321 IN.	324 IN.	327 IN.	330 IN.	333 IN.	336 IN.	339 IN.	342 IN.	345 IN.	348 IN.	351 IN.	354 IN.	357 IN.	360 IN.	363 IN.	366 IN.	369 IN.	372 IN.	375 IN.	378 IN.	381 IN.	384 IN.	387 IN.	390 IN.	393 IN.	396 IN.	399 IN.	402 IN.	405 IN.	408 IN.	411 IN.	414 IN.	417 IN.	420 IN.	423 IN.	426 IN.	429 IN.	432 IN.	435 IN.	438 IN.	441 IN.	444 IN.	447 IN.	450 IN.	453 IN.	456 IN.	459 IN.	462 IN.	465 IN.	468 IN.	471 IN.	474 IN.	477 IN.	480 IN.	483 IN.	486 IN.	489 IN.	492 IN.	495 IN.	498 IN.	501 IN.	504 IN.	507 IN.	510 IN.	513 IN.	516 IN.	519 IN.	522 IN.	525 IN.	528 IN.	531 IN.	534 IN.	537 IN.	540 IN.	543 IN.	546 IN.	549 IN.	552 IN.	555 IN.	558 IN.	561 IN.	564 IN.	567 IN.	570 IN.	573 IN.	576 IN.	579 IN.	582 IN.	585 IN.	588 IN.	591 IN.	594 IN.	597 IN.	600 IN.	603 IN.	606 IN.	609 IN.	612 IN.	615 IN.	618 IN.	621 IN.	624 IN.	627 IN.	630 IN.	633 IN.	636 IN.	639 IN.	642 IN.	645 IN.	648 IN.	651 IN.	654 IN.	657 IN.	660 IN.	663 IN.	666 IN.	669 IN.	672 IN.	675 IN.	678 IN.	681 IN.	684 IN.	687 IN.	690 IN.	693 IN.	696 IN.	699 IN.	702 IN.	705 IN.	708 IN.	711 IN.	714 IN.	717 IN.	720 IN.	723 IN.	726 IN.	729 IN.	732 IN.	735 IN.	738 IN.	741 IN.	744 IN.	747 IN.	750 IN.	753 IN.	756 IN.	759 IN.	762 IN.	765 IN.	768 IN.	771 IN.	774 IN.	777 IN.	780 IN.	783 IN.	786 IN.	789 IN.	792 IN.	795 IN.	798 IN.	801 IN.	804 IN.	807 IN.	810 IN.	813 IN.	816 IN.	819 IN.	822 IN.	825 IN.	828 IN.	831 IN.	834 IN.	837 IN.	840 IN.	843 IN.	846 IN.	849 IN.	852 IN.	855 IN.	858 IN.	861 IN.	864 IN.	867 IN.	870 IN.	873 IN.	876 IN.	879 IN.	882 IN.	885 IN.	888 IN.	891 IN.	894 IN.	897 IN.	900 IN.	903 IN.	906 IN.	909 IN.	912 IN.	915 IN.	918 IN.	921 IN.	924 IN.	927 IN.	930 IN.	933 IN.	936 IN.	939 IN.	942 IN.	945 IN.	948 IN.	951 IN.	954 IN.	957 IN.	960 IN.	963 IN.	966 IN.	969 IN.	972 IN.	975 IN.	978 IN.	981 IN.	984 IN.	987 IN.	990 IN.	993 IN.	996 IN.	999 IN.	1002 IN.	1005 IN.	1008 IN.	1011 IN.	1014 IN.	1017 IN.	1020 IN.	1023 IN.	1026 IN.	1029 IN.	1032 IN.	1035 IN.	1038 IN.	1041 IN.	1044 IN.	1047 IN.	1050 IN.	1053 IN.	1056 IN.	1059 IN.	1062 IN.	1065 IN.	1068 IN.	1071 IN.	1074 IN.	1077 IN.	1080 IN.	1083 IN.	1086 IN.	1089 IN.

NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA		SCALE	BRIDGE FILE
				DEPARTMENT OF TRANSPORTATION			
				DESIGNATION			
				23B1097			
	DESIGNED: CJE	DRAWN: PIV	CHECKED: JPF	APPROACH TABLE		SHEETS	
				23		of 36	
				CONTRACT		R-45147	

STRUCTURE NUMBER	LOCATION				DESCRIPTION PIPE TYPE	LENGTH	VIDEO INSPECTION LENGTH	SKEW	FLOW LINE			SERVICE LIFE		SITE DESIGNATION	BACKFILL METHOD	STRUCTURE BACKFILL	TYPE	FLOWABLE BACKFILL	GEOTEXTILES	SCOUR PROTECTION							PIPE END SECTION	SAFETY METAL END SECTION			CONNECT TO STR.	REMARKS									
	STATION	RIGHT CROSS	LEFT CROSS	OFFSET					UP STREAM	DOWN STREAM	COVER	LIFT	ELEV.							ELEV.	YRS	CY/S	TONS	R/RAP	SLUMP DEPTH			GEOTEXTILE, TYPE 1A					CONCRETE CLASS A FOR STR.	VIDEO INSPECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION			
																									IN.	SYS.		TYPE	TONS	CY/S					EA.	TYPE	EA.	TYPE	EA.	TYPE	EA.

[illegible]

ALUM	Aluminum
CORR	Corrosion
DR	Dimensional Ratio
PE	Polyethylene
PP	Polypropylene
PVC	Polyvinyl Chloride
RCHEP	Reinforced Concrete Horizontal Elliptical Pipe
RCP	Reinforced Concrete Pipe
STR	Structural
(S)	Lock Seam Pipe Required

(C)	Corrugated Pipe Material
(S)	Smooth Pipe Material
(SS)	Semi-Smooth Pipe Material

Circular pipe is shown as diameter in inches
Deformed pipe is shown as area in square feet

NOTE TO REVIEWER:
Based on previous project experience, LaPorte District preference for pipe material type is concrete.

	SCALE	BRIDGE FILE
		DESIGNATION
		2301097
		SHEETS
		24 of 36
		CONTRACT
		R-45147

[illegible]

NOT FOR CONSTRUCTION	DESIGNED FOR APPROVAL		DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE	BRIDGE FILE
	DESIGNED: JPF						DESIGNATION
							2301597
	DRAWN: GEM						
	CHECKED: JPF						
	CHECKED: DGA						
				UNDERDRAIN TABLE			
				SHEETS			36
				25			1 of
				CONTRACT			R-6347

SHEET SIGN & POST SUMMARY

PLAN SHEET			SIGN			GROUND - MOUNTED			GROUND - MOUNTED			POST				
NO / LINE			SIGN LOCATION (3/4")	SIGN CODE	SIGN SIZE (IN x IN)	SIGN AREA (FT ²)		DOUBLE-FACED SIGN AREA (FT ²)	2 1/2" x 2 1/2" - 12 GA. (TYPE 3) UNREINFORCED ANCHOR		2" x 2" - 12 GA. (TYPE 2) UNREINFORCED ANCHOR		2 1/2" x 2 1/2" - 12 GA. (TYPE 1) UNREINFORCED ANCHOR			
						0.090"	0.100"	0.125"	0.080"	0.100"	1	2	1	2	1	TOTAL
Line "N"																
			961+30 RL	R5-1	36 x 36		9.00								11.0	11.0
			961+30 RL	R5-1	36 x 36		9.00								11.0	11.0
			961+60 RL	R6-1(U)	54 x 18	6.75									16.5	16.5
				R1-2	48 x 48 x 48	7.00										
				R5-1	36 x 36	9.00										
			961+80 RL	M3-1(S)	36 x 18	4.50										
				M1-5	36 x 36	9.00										
				M6-1(L)(S)	21 x 15	2.19									13.5	13.5
			962+00 RL	R6-1(L)	54 x 18	6.75					9.25	9.25	18.5			
			962+39 RL	R5-1	36 x 36	9.00									11.0	11.0
			962+46 LL	M3-1(S)	36 x 18	4.50										
				M1-5	36 x 36	9.00									16.0	16.0
				U-Turn	36 x 36	9.00										
			964+75 RL	R3-7(R)	36 x 36	9.00										
			968+30 LL	M3-1(S)	36 x 18	4.50									11.0	11.0
				M1-5	36 x 36	9.00									16.0	16.0
				U-Turn	36 x 36	9.00										
			968+30 LL	M3-3(S)	36 x 18	4.50									14.0	14.0
				M1-5	36 x 36	9.00										
				M6-3(S)	21 x 15	2.19										
			969+00 LL	R3-7(L)	36 x 36	9.00					9.25	9.25	18.5		11.0	11.0
			969+25 RL	D1-1a	96 x 18			12.00								
			969+75 RL	R5-1	36 x 36	9.00									11.0	11.0
			971+06 RL	R1-2	48 x 48 x 48	7.00									12.0	12.0
			971+25 LL	D1-1b	72 x 36			18.00			10.75	10.75	21.5			
			971+50 LL	R6-1(R)	54 x 18	6.75					9.25	9.25	18.5			
			971+65 RL	D1-1c	72 x 36			18.00			10.75	10.75	21.5			
			971+78 RL	R6-1(R)	54 x 18	6.75					12.25	12.25	24.5			
				R5-1	36 x 36	9.00										
			SUB TOTAL 1:			4.38	185.00	48.00			18.50		104.50		154.00	

SHEET SIGN & POST SUMMARY

[illegible]

NOTE: Indicates signs to be mounted on common post(s)

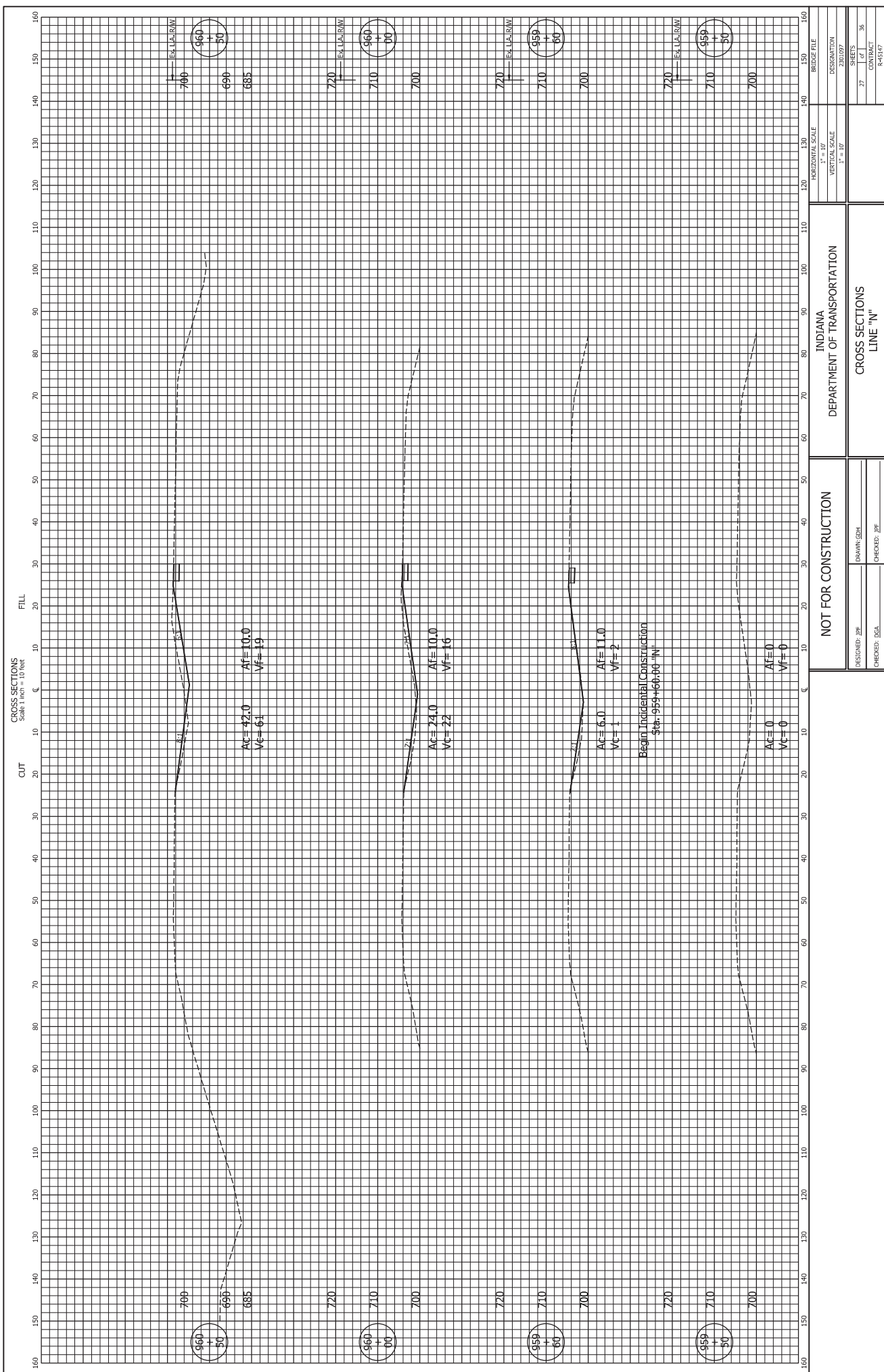
* = Sinns to be double faced

NOTE:

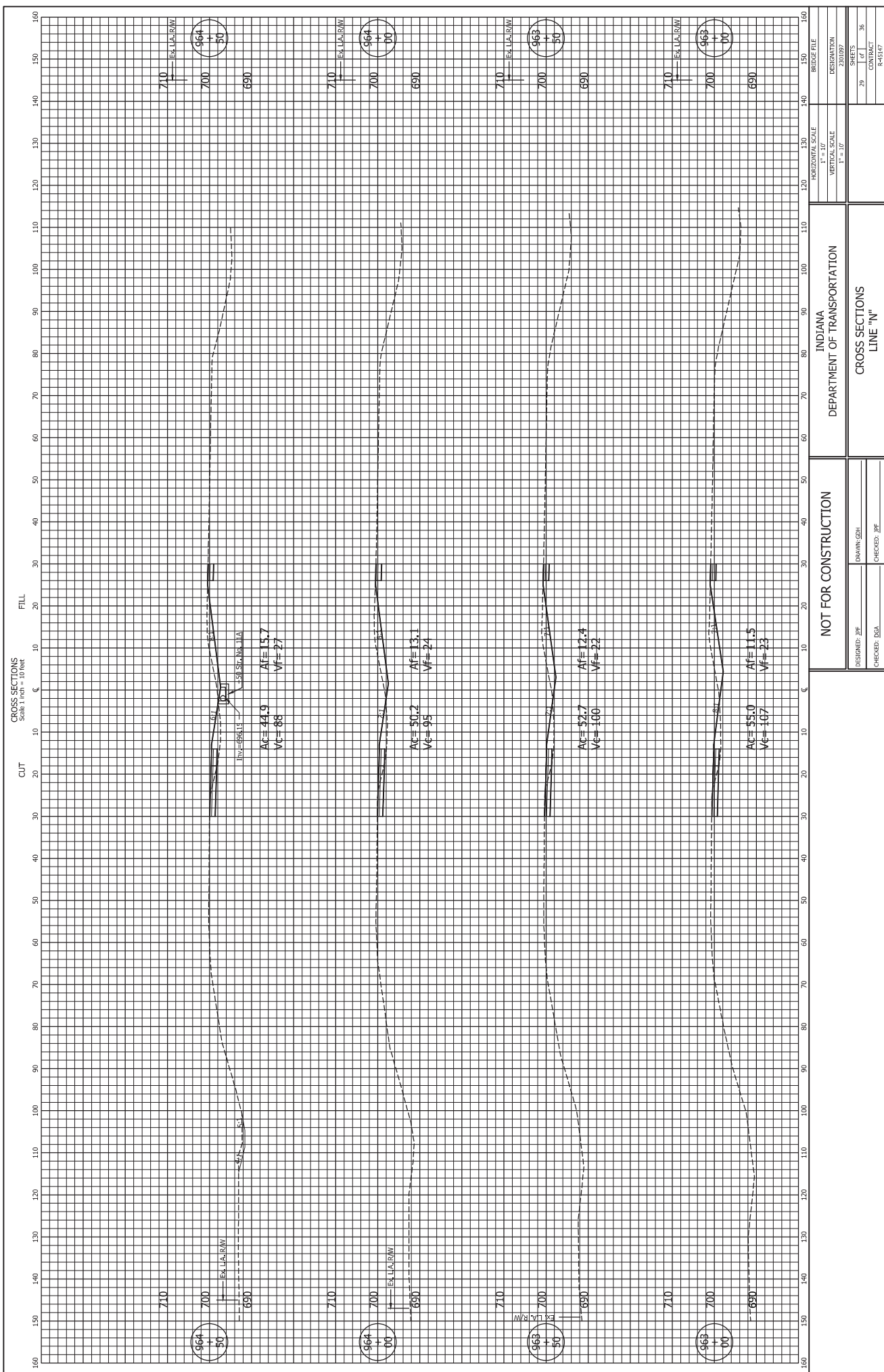
NOT FOR
CONSTRUCTION

B-40

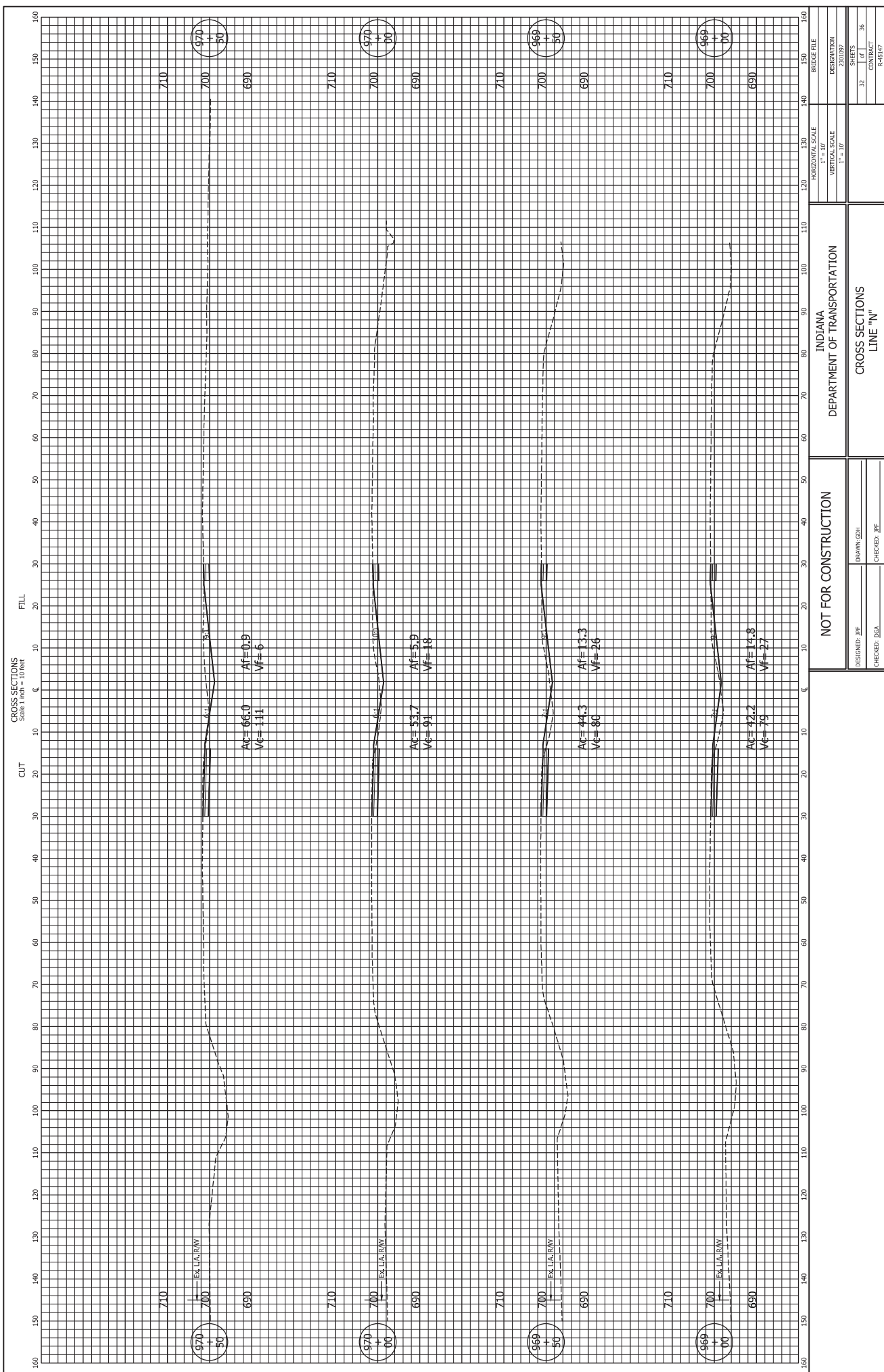
RECOMMENDED FOR AWARD BY _____	INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE _____
DESIGNED BY _____	DESIGN ENGINEER _____	DATE _____	SCALE _____
CHECKED BY _____	DRAWN BY _____		
CHECKED BY _____			
			SHEETS _____
			26 of 36
			CONTRACT _____
			R-45147



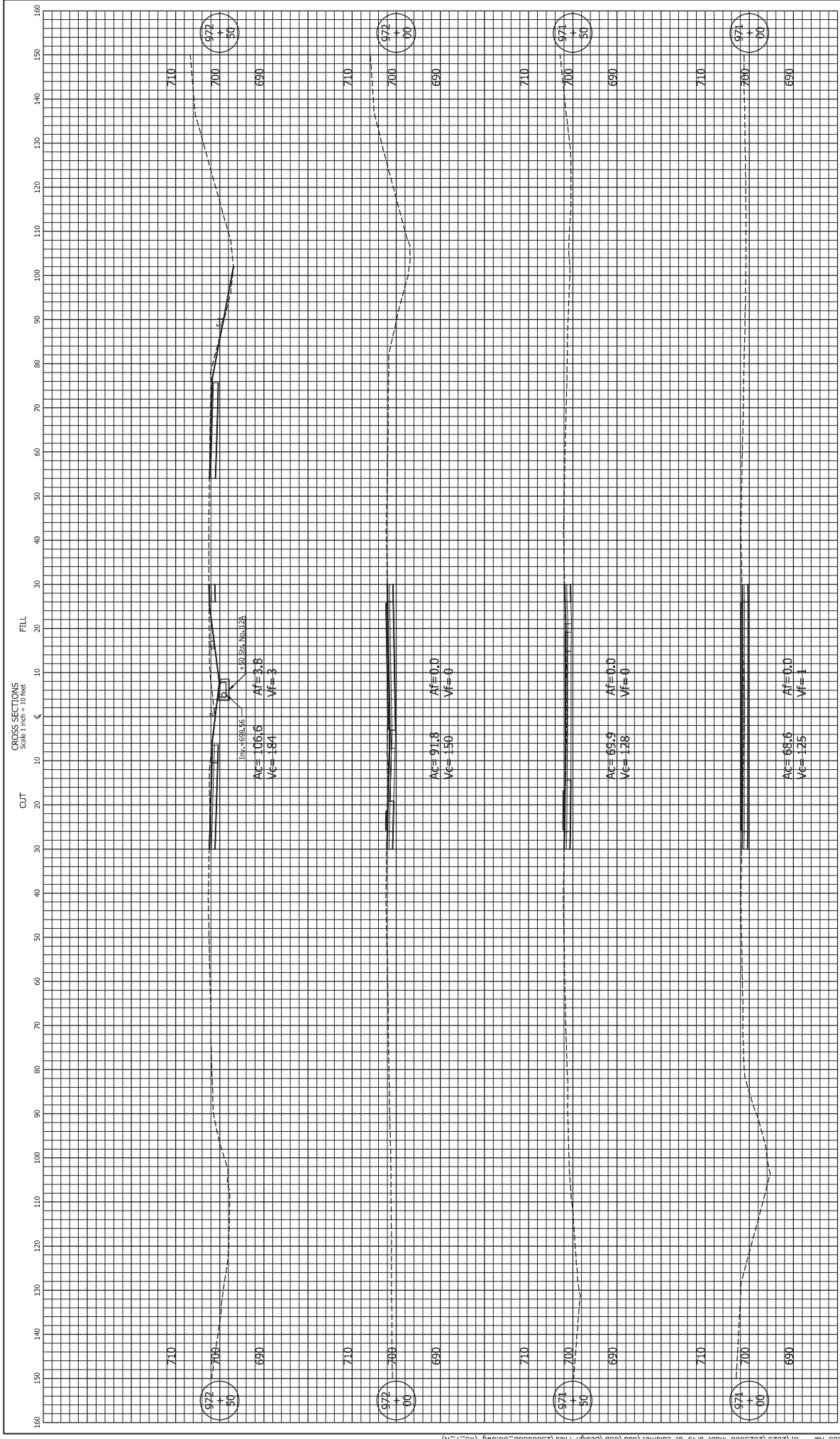




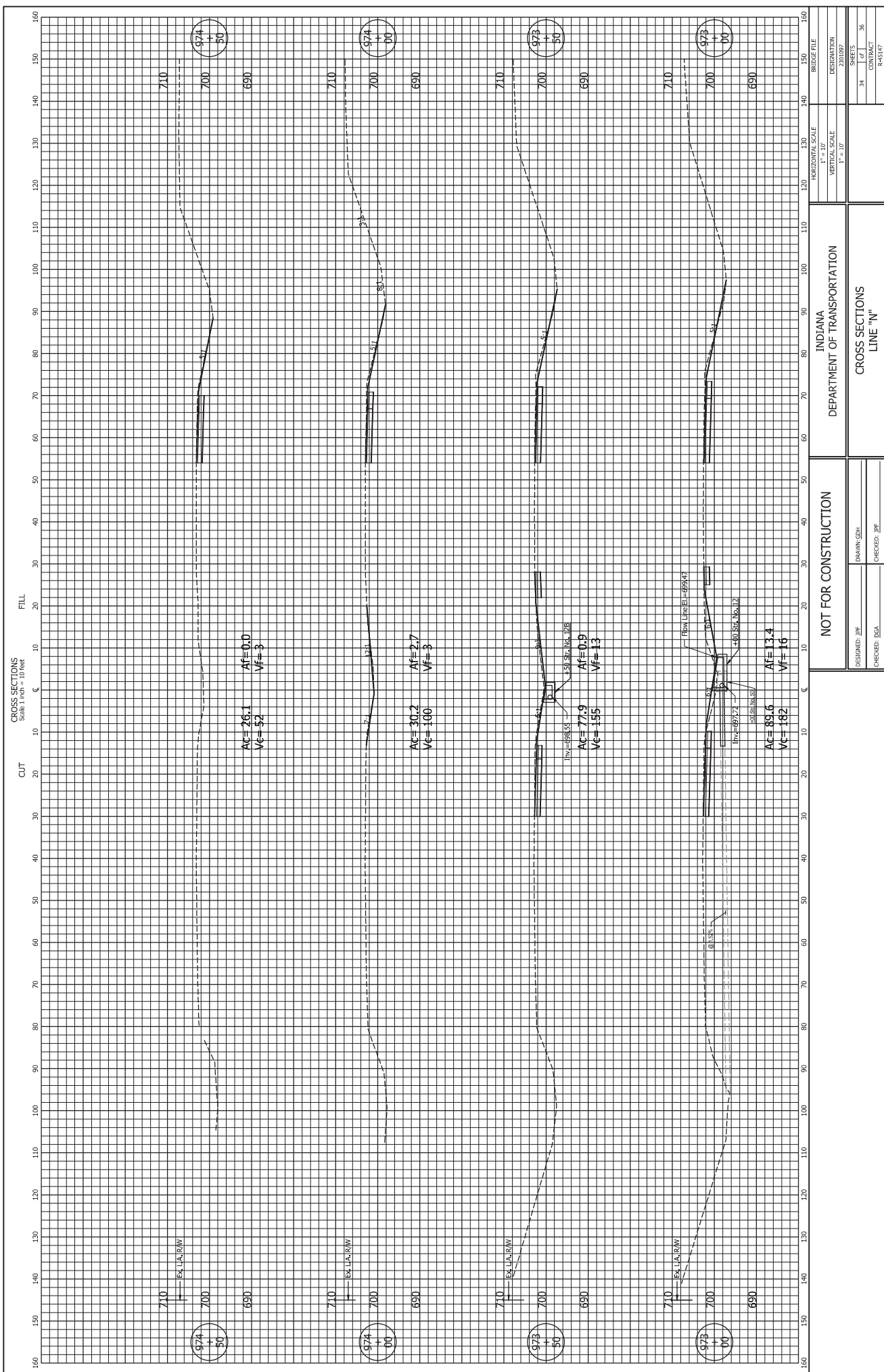
NOT FOR CONSTRUCTION		INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE	
DESIGNED: JPF		CROSS SECTIONS LINE "N"		VERTICAL SCALE 1" = 30'	
DRAWN: GPH				HORIZONTAL SCALE 1" = 30'	
CHECKED: BJA				DESIGNATION 2310297	
				SHEETS 29 of 36	
				CONTRACT R-45147	



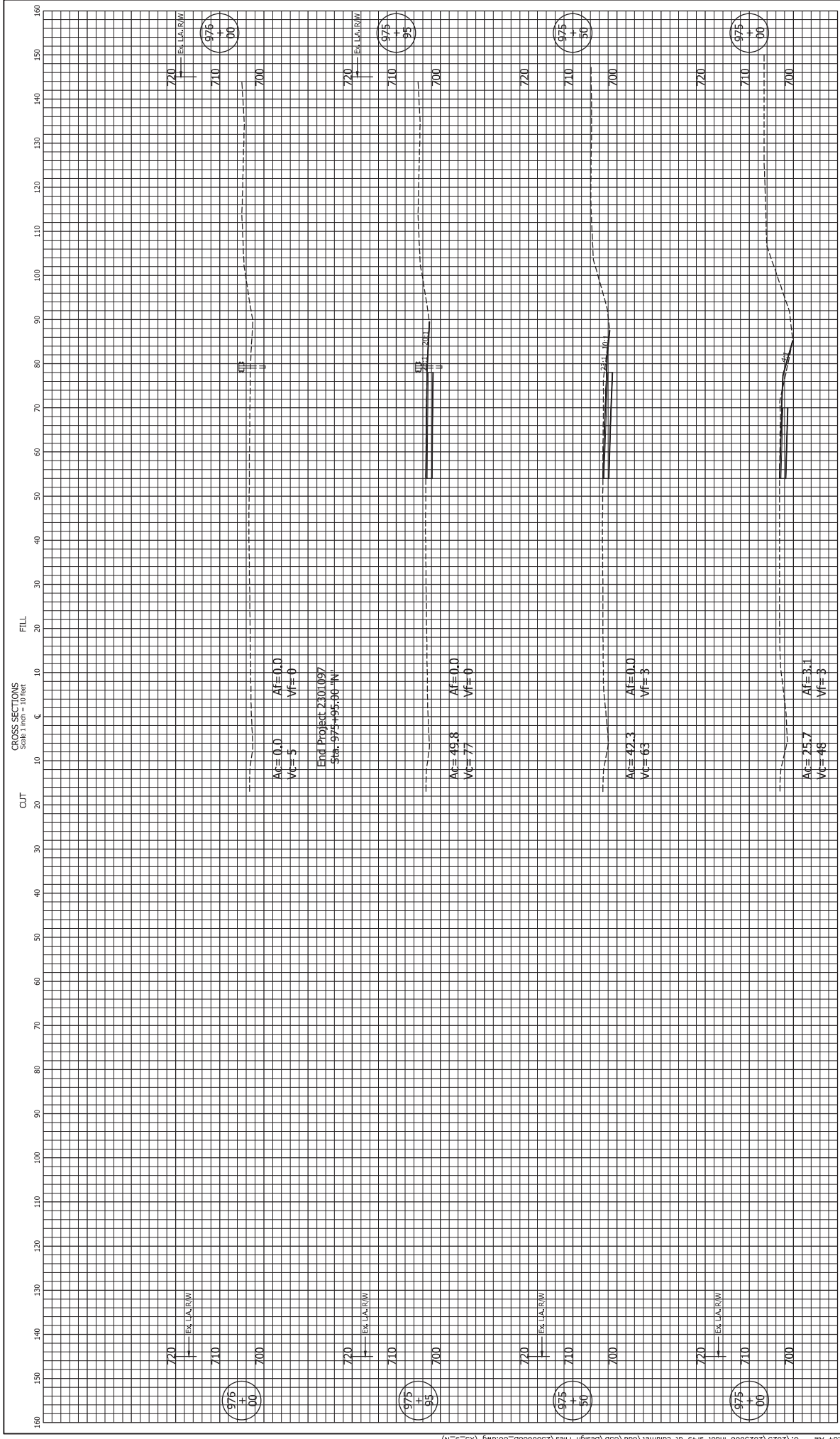
INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE	
CROSS SECTIONS LINE "N"		HORIZONTAL SCALE 1" = 30'	
DESIGNED: JPF		VERTICAL SCALE 1" = 30'	
DRAWN: GPH		DESIGNATION 2310197	
CHECKED: BJA		SHEETS 32 OF 36	
		CONTRACT R-45147	



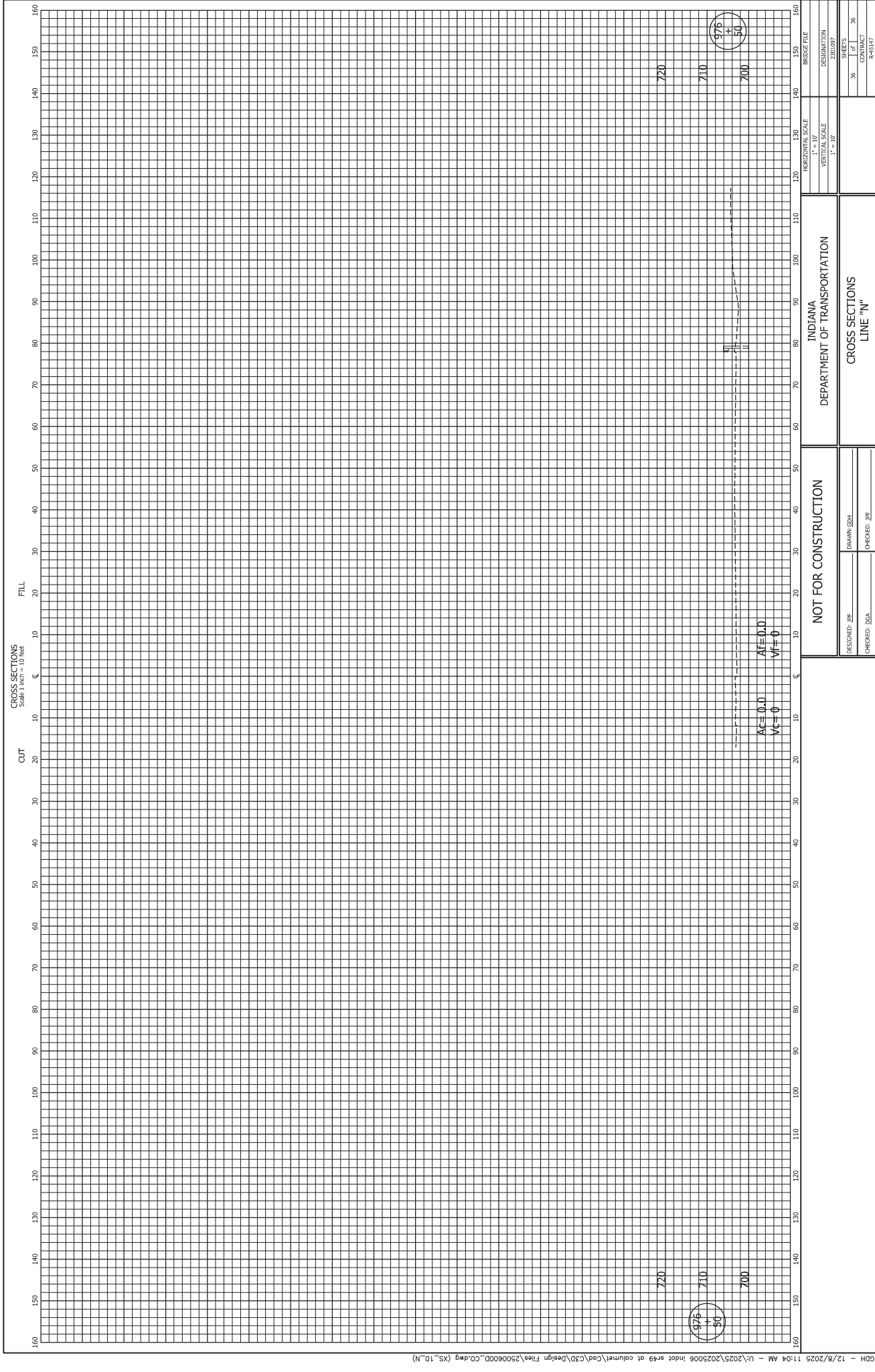
NOT FOR CONSTRUCTION		INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE	
				HORIZONTAL SCALE 1" = 10'	
				VERTICAL SCALE 1" = 10'	
DESIGNED: JPF CHECKED: BJA DRAWN: GPH CHECKED: JPF		CROSS SECTIONS LINE "N"		DESIGNATION 2310197	
				SHEETS 33 of 36	
				CONTRACT R-45147	



NOT FOR CONSTRUCTION		INDIANA DEPARTMENT OF TRANSPORTATION		CROSS SECTIONS LINE "N"	
DESIGNED: JPF	CHECKED: BJA	DRAWN: GPH		CHECKED: JPF	
BRIDGE FILE		DESIGNATION		SHEETS	
2506000		2506000		34 of 36	
CONTRACT		R-45147			



CROSS SECTIONS		INDIANA		BRIDGE FILE	
Scale 1 inch = 10 feet		DEPARTMENT OF TRANSPORTATION		DESIGNATION	
CUT		CROSS SECTIONS		VERTICAL SCALE	
FILL		LINE "N"		1" = 10'	
10		DESIGNED: JF		SHEETS	
20		DRAWN: GPH		35	
30		CHECKED: BGL		36	
40		NOT FOR CONSTRUCTION		CONTRACT	
50		R-45147			
60					
70					
80					
90					
100					
110					
120					
130					
140					
150					
160					





APPENDIX C EARLY COORDINATION



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Mike Braun, Governor
Lyndsay Quist, Commissioner

**SAMPLE
Early Coordination
Letter**

November 26, 2025

Division of Fish and Wildlife
Indiana Department of Natural Resources
(Email: environmentalreview@dnr.in.gov)

Re: Early Coordination Letter, Des. No.: 2301097, SR 49 Intersection Improvement w/Added Turn Lanes, 1.5 Miles North of US 6 at CR 950 North and Calumet Avenue, Porter County, Indiana

Dear Recipient:

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with an intersection improvement project in Porter County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

The project is located on SR 49, 1.5 Miles North of US 6 at CR 950 N and Calumet Avenue, Porter County, Indiana. Specifically, the project is located in Section 18, Township 36 N, Range 5 W, Liberty Township, as illustrated on the Chesterton, Indiana 7.5 minute United States Geological Survey (USGS) topographic quadrangle.

This section of SR 49 is classified as a *Principal Arterial - Other*. The existing SR 49 approach cross section consists of (typical) two 12-ft travel lanes, a 4-ft paved inside shoulder, and 11-ft paved outside shoulder in each direction, with a variable width center grass median. SR 49 is a limited access corridor, with access points only at major intersections and no mid-block connections. There are no roadway deficiencies within the project limits. The posted speed limit is 55 miles per hour through the project area.

The purpose of the project is to address the operational safety of the intersection of SR 49, CR 950 N and N Calumet Avenue that contributes to the high frequency of crashes while maintaining an acceptable operational level of service. The need for this project is driven by a higher-than-expected accident rate at this intersection. A review of the crash data for the intersection of SR 49 and CR 950 N revealed forty-eight crashes within the project limits during a three-year period (2019-2021). The most predominant crash type was rear end collisions with approximately 60% of identified crashes. The second most predominant crash type was turning crashes, including left turn, right turn, and right-angle collisions with 22% of identified crashes. It was indicated by the crash data that this intersection is performing considerably worse than expected regarding crash frequency and crash severity.



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Mike Braun, Governor
Lyndsay Quist, Commissioner

The project proposes a Modified Median U-Turn (MUT) intersection consisting of constructing a new median cut for a MUT approximately 950-feet south of the intersection and installing a new 15-inch diameter by 79-feet long culvert underneath for drainage. The southbound left turn lane will remain, be perpetuated and develop into the new MUT lane. The northbound right turn lane from Calumet Avenue will be expanded for a 400-ft acceleration lane into the shoulder on the northeast corner of the intersection. Four concrete center curbs will be installed in the intersection with CR 950 N and Calumet Avenue to prevent traffic from directly crossing SR 49. A delineator curb will be installed along the shoulder of the expanded acceleration lane, one rolled curb will be installed at the new MUT to guide traffic through the new turnaround, and permanent lighting will be installed at the intersection of SR 49 at CR 950 N/Calumet Avenue as well as the new MUT location. Six small inlet drainage structures would be installed in two locations in the median (650-feet south of the intersection and 150-feet north of the intersection), each consisting of one Mod. N-12 inlet and two Mod. P-12 inlets. Signage will be installed at the new MUT, the SR 49 intersection with CR 950 N/Calumet Avenue, and in the median up to the intersection of SR 49 and the I-80/I-90 Toll Road entrance. Wetlands are located within or adjacent to the project area. No right-of-way acquisition is anticipated. The project will be approximately 0.27 mile along SR 49. The proposed method of traffic maintenance is anticipated to utilize a phased construction. No tree clearing is anticipated as part of this project. Project construction is anticipated to begin Fall 2027.

Land use along SR 49 primarily consists of residential and agricultural parcels, with a commercial property on the northwest corner of the CR 950 N intersection. Land use along CR 950 N is primarily residential on the north side of the roadway, and agricultural on the south side. The INDOT Ecology, Waterway Permitting, and Stormwater Office will perform waters and wetlands determinations to identify water resources that may be present. The project is anticipated to qualify for the Rangewide Programmatic Agreement for the Indiana bat and northern long-eared bat by completing the Information for Planning and Consultation (IPaC). Coordination will occur with INDOT Cultural Resources Office (CRO) to evaluate the project area for archaeological and historic resources and for Section 106 compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence as appropriate.

Please provide your response within thirty (30) calendar days from the date of this letter. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact Lisa Harris, MSES-MPA, Lawson-Fisher Associates P.C., lharris@lawson-fisher.com, 574-234-3167, or John Krueckeberg, INDOT, jkrueckeberg@indot.in.gov, 219-325-7520. Thank you in advance for your input.

Sincerely,

Lisa Harris, MSES-MPA
Environmental Document Specialist
Lawson-Fisher Associates, P.C.

LAH/maf
Attachment –
Maps/Graphics (Location, Aerial, Topographic, Photographs)



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Mike Braun, Governor
Lyndsay Quist, Commissioner

The following agencies received Early Coordination Letters:

Erica Tait
Federal Highway Administration
(Email: erica.tait@dot.gov)

Paige Story
Federal Highway Administration
(Email: paige.story@dot.gov)

Patrick Lamb
Office of Aviation
Indiana Department of Transportation
(Email: plamb@indot.in.gov)

John Krueckeberg, Project Manager
LaPorte District
Indiana Department of Transportation
(Email: JKrueckeberg@indot.IN.gov)

Stewart Michels, Environmental Section Manager
LaPorte District
Indiana Department of Transportation
(Email: smichels@indot.in.gov)

Division of Fish and Wildlife
Indiana Department of Natural Resources
(Email: environmentalreview@dnr.in.gov)

ONLINE FORM
Indiana Geological and Water Survey
(Email: <https://igws.indiana.edu/eAssessmen>)

John Allen, State Soil Scientist
Natural Resources Conservation Service
(Email: john.allen@usda.gov)

Ty Warner, Executive Director
Northwestern Indiana
Regional Planning Commission
(Email: twarner@nirpc.org)

Charles Bradsky, Transportation Projects Manager
Northwestern Indiana
Regional Planning Commission
(Email: cbradsky@nirpc.org)

Paul Leffler, Chief
Environmental Resources, Chicago District
US Army Corps of Engineers
(Email: ChicagoRequests@usace.army.mil)

Erik R. Sandstedt
Chicago Regional Office
US Department of Housing & Urban Development
(Email: Erik.r.sandstedt@hud.gov)

Jaime J. Blakesley
US Department of Housing & Urban Development
(Email: Jaime.J.Blakesley@hud.gov)

Melanie H. Castillo
US Department of Housing & Urban Development
(Email: melanie.h.castillo@hud.gov)

Robin McWilliams
US Fish and Wildlife Service (USFWS)
(Email: Robin_mcowilliams@fws.gov)

Alisha Turnbow
Section Chief, Groundwater Section
Indiana Department of Environmental Management
(Email: ATurnbow@idem.in.gov)

Matt Gavelek, P.E.
Floodplain Administrator
Town of Chesterton
(Email: mgavelek@chestertonin.org)

Mark O'Dell, P.E.
Town Engineer, MS4 Superintendent
Town of Chesterton
(Email: modell@chestertonin.org)

Jim Ton
Town Council, District 1
Town of Chesterton
(Email: jton@Chestertonin.org)



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Mike Braun, Governor
Lyndsay Quist, Commissioner

The following agencies received Early Coordination Letters:

Tim Richardson, Chief
Chesterton Police Department
Town of Chesterton
(Email: trichardson@chestertonin.org)

Sean G. O'Donnell, Chief
Chesterton Fire Department
Town of Chesterton
(Email: sodonnell@chestertonfire.org)

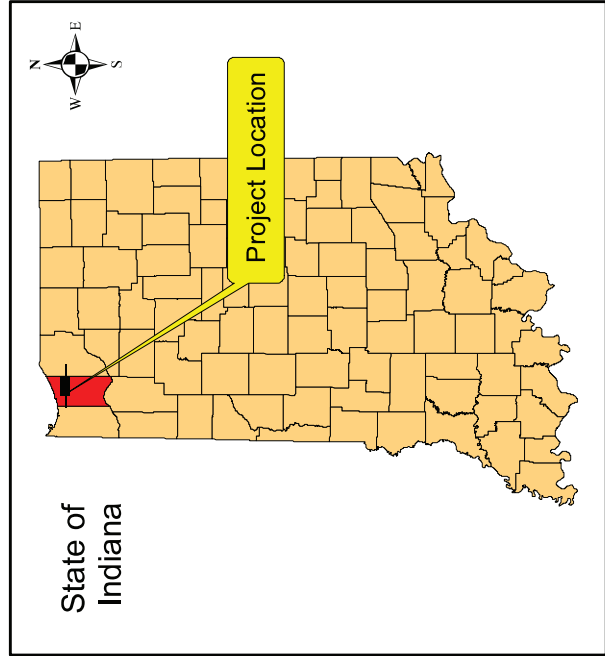
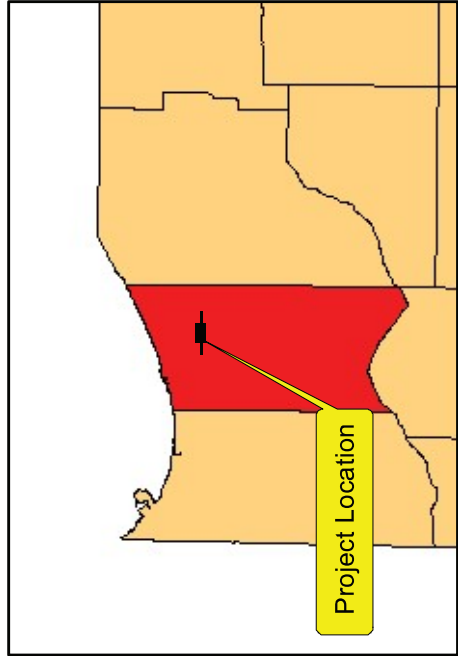
Kevin Breitzke
Surveyor
Porter County
(Email: kbreitzke@portercountyin.gov)

Ronald "Red" Stone
County Council, District 1
Porter County
(Email: Red.Stone@portercountyin.gov)

Jim Polarek, Superintendent
Highway Department
Porter County
(Email: Jim.polarek@portercountyin.gov)

Jim Biggs
Board of Commissioners, District 3
Porter County
(Email: jim.biggs@portercountyin.gov)

Kathy Merle, Administrative Assistant
Commissioner's Office
Porter County
(Email: kathy.merle@portercountyin.gov)



SR 49 Intersection Improvement w/
Added Turn Lanes,
1.5 miles North of US 6 at
CR 950N/Calumet Ave
Des. No. 2301097
Porter County, Indiana

LFA
LAWSON FISHER ASSOCIATES P.C.
525 W WASHINGTON AVENUE
SOUTH BEND, INDIANA 46601
PH. (574) 234-3167



LEA
LAWSON FISHER ASSOCIATES P.C.

525 W WASHINGTON AVENUE
SOUTH BEND, INDIANA 46601
PH: (574) 234-3167

Figure 2

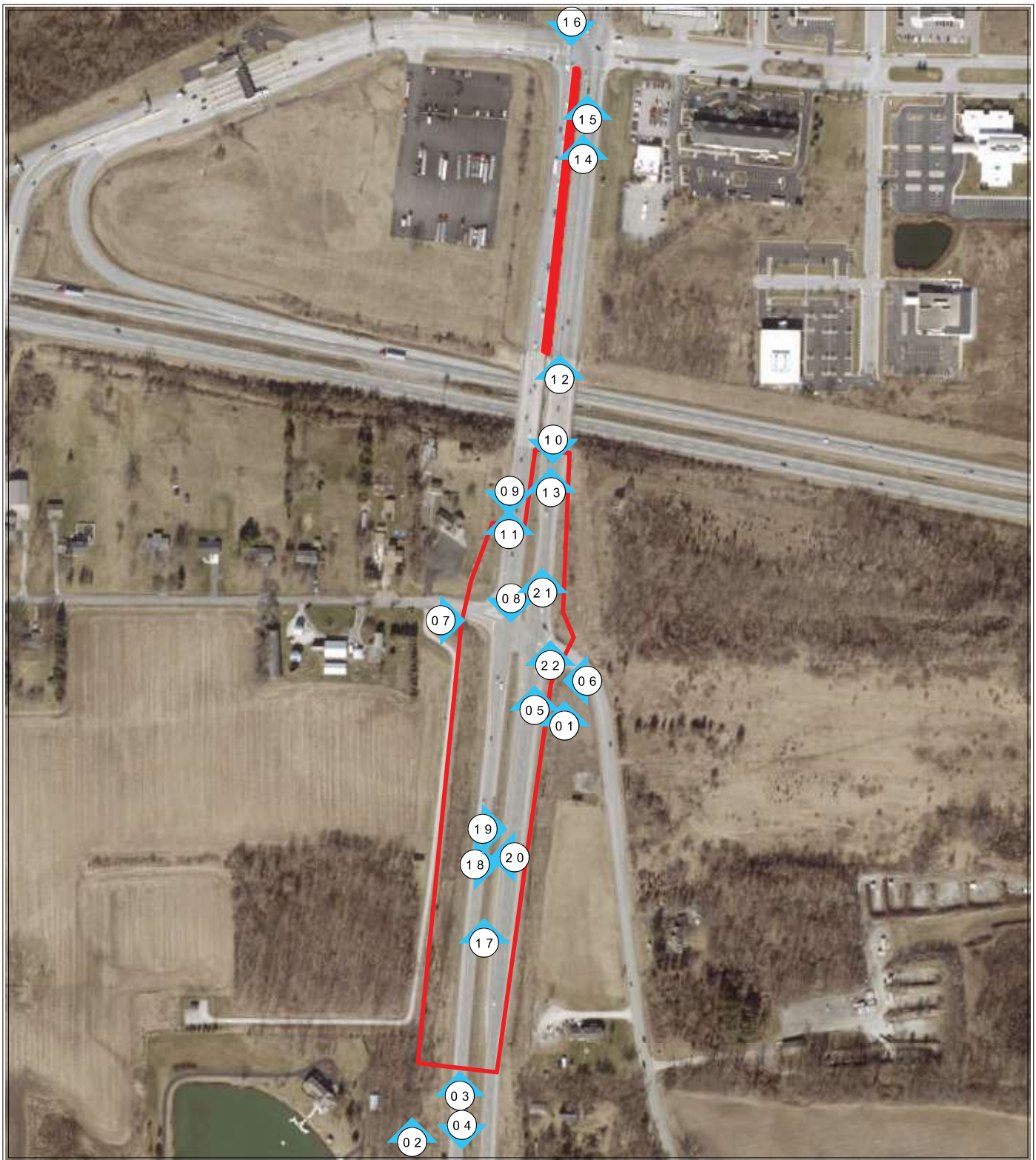


 Photo Designation

Figure 1

LFA
LAWSON-FISHER ASSOCIATES P.C.
525 W WASHINGTON AVENUE
SOUTH BEND, INDIANA 46601
PH. (574) 234-3167

C-7

*SR 49 Intersection Improvement w/
Added Turn Lanes, Des. No. 2301097
1.5 miles North of US 6 at
CR 950N/Calumet Ave
Porter County, Indiana*



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 1: Aerial view of S.R.49 C.R. 950 N/Calumet Avenue Intersection Looking North



Photograph 2: Aerial View of S.R.49 Looking North from South End of Project Area



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 3: Looking North from South End of Project Area



Photograph 4: Looking South from South End of Project Area



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 5: Looking North at S.R.49 C.R.950 N/Calumet Avenue Intersection



Photograph 6: Looking West Across S.R. 49 C.R. 950 N/Calumet Avenue Intersection



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 7: Looking East Across S.R. 49 C.R. 950 N/Calumet Avenue Intersection



Photograph 8: Looking South at S.R.49 C.R. 950 N/Calumet Avenue Intersection



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 9: Looking South Along Southbound Lane at North End of Project Area



Photograph 10: Looking South from Northbound Lane at North End of Project Area



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 11: Looking North at North End of Project Area



Photograph 12: Looking North from South End of Northern Project Area



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 13: Looking North Over 80-90 Overpass at North End of Project Area



Photograph 14: Looking North at Gateway Boulevard Proposed U-turn



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 15: Looking North at Gateway Boulevard Intersection Proposed U-turn



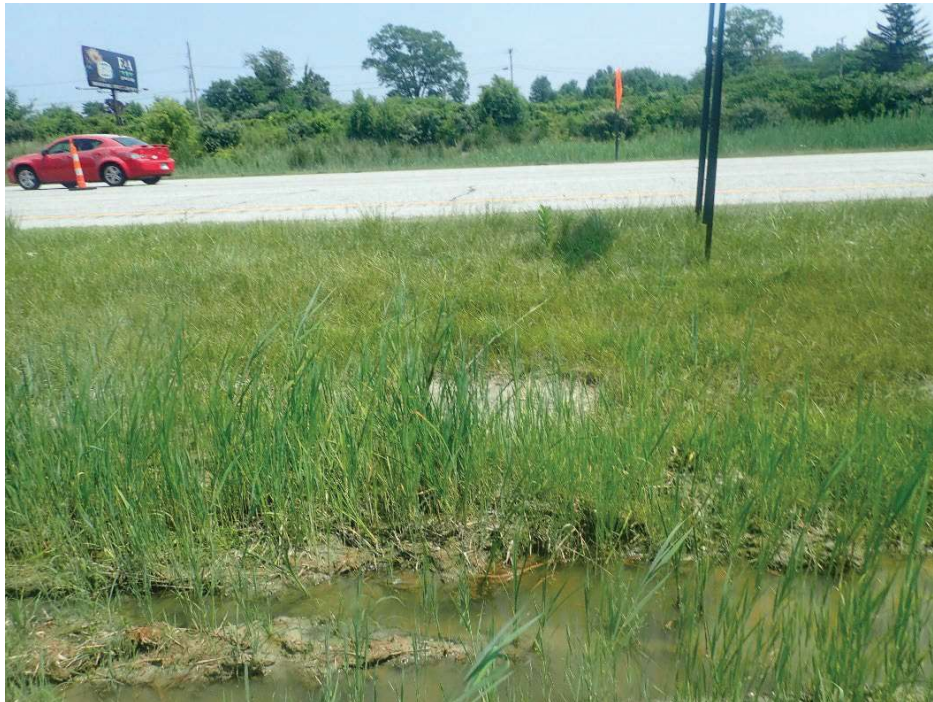
Photograph 16: Looking South at Gateway Boulevard Proposed U-turn



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 17: Looking North Along East Side of Road at Site of Proposed Structure No. 10



Photograph 18: Looking East From Median Site of Proposed Structure Nos. 11, 11a, and 11b



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 19: Looking East From Median Site of Proposed Structure Nos. 11, 11a, and 11b



Photograph 20: Looking West Across Median at Site of Proposed Structure Nos. 11a and 11b



**S.R. 49 AT C.R. 950 N/CALUMET AVENUE
INTERSECTION IMPROVEMENT WITH ADDED TURN LANES
INDIANA DEPARTMENT OF TRANSPORTATION – LAPORTE DISTRICT
DES. NO. 2301097**



Photograph 21: Looking North at Proposed Structure Nos. 12, 12a, and 12b Site in Median



Photograph 22: Looking North Along East Side of S.R. 49 at Proposed Right Turn Acceleration Lane



Organization and Project Information

Organization Name: Lawson-Fisher Associates
P.C.

First Name: Lisa

Last Name: Harris

Phone: (574) 234-3167

Email: lharris@lawson-fisher.com

Address Line 1: 525 West Washington Avenue

City: South Bend

State: IN

Zip: 46601

Project ID: 2025006.20

Project Title: SR 49 Intersection Improvement
RCI-MUT

Destination ID: 2301097

Project Description: SR49 intersection with CR 950 N/Calumet Ave - the project will construct a RCI/MUT; install concrete intersection curbs; construct a new median cut for UTurn; incorporate a new northbound acceleration lane from intersection; install new signage and lighting; install 7 small drainage structures in the median including one 15" diameter by 79' long culvert.

Environmental Assessment Report

Geological Hazards:

1. Moderate liquefaction potential

Mineral Resources:

1. Sand and Gravel Resource: Low Potential

Disclaimer:

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

This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

C-19

Phone: (812) 855-7428





Metadata:

https://portal.igs.indiana.edu/arcgis/rest/services/Seismic_Earthquake_Liquefaction_Potential/MapServer/info/metadata/

https://portal.igs.indiana.edu/arcgis/rest/services/Industrial_Minerals_SandAndGravel_Resources/MapServer/info/metadata/

THIS IS NOT A PERMIT

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

DNR#: ER-27962

Request Received: November 26, 2025

Requestor:

Lisa Harris
Lawson-Fisher Associates PC
525 West Washington Avenue
South Bend, IN 46601

Project:

SR 49 & CR 950 North / North Calumet Avenue intersection improvements, including small structure installation, and turn lane construction, 1.5 miles north of US 6; Des #2301097

County/Site Info: Porter County

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

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

Regulatory Assessment:

Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database:

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

Fish and Wildlife Comments:

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

A) Small Culvert Construction

Even small culverts/roadside drainage structures can provide some level of fish and wildlife passage under a roadway. For these types of structure replacements, ensuring that wildlife can get into and out of the culvert as desired would be the primary concern. For aquatic organism passage and some terrestrial species, material should not be placed on the streambed above the existing flowline. Riprap should be countersunk so as not to extend above the existing/proposed grade. For most terrestrial species, access into or out of the culvert should be dry, flat, and free of riprap or other material incompatible with wildlife movement. Backfilling riprap scour protection with compacted aggregate or natural substrate is recommended as needed to ensure that wildlife can access a culvert as desired.

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

1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only.
2. Minimize and contain within the project limits all brush clearing.
3. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
4. Do not use broken concrete as riprap.
5. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
6. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
7. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

Our agency appreciates this opportunity to be of service. Please contact me at eadkins@dnr.IN.gov or (317) 234-2719 if we can be of further assistance.


Elizabeth Adkins

Date: December 22, 2025

Environmental Program Coordinator
Division of Fish, Wildlife, and Nature Preserves

December 1, 2025

Lisa Harris
525 West Washington Avenue
South Bend, Indiana 46601

Dear Lisa Harris:

The proposed project SR 49 Intersection Improvement w/Added Turn Lanes in Porter County, Indiana (Des. No. 2301097), as referred to in your letter received November 26, 2025, will not cause a conversion of prime farmland.

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

Sincerely,

JOHN ALLEN

JOHN ALLEN
State Soil Scientist

Digitally signed by JOHN ALLEN
Date: 2025.12.01 21:28:10 -05'00'

Re: Environmental Early Coordination - SR 49 Intersection Improvement Project - Des No. 2301097

From Lamb, Patrick A <PLamb@indot.IN.gov>

Date Wed 11/26/2025 1:18 PM

To Lisa Harris <lharris@lawson-fisher.com>

Hello Lisa!

The project site is roughly 39,500 ft from the nearest public-use airport. If any structure or equipment, temporary or permanent in any configuration is taller than 200 feet please follow up with our office.

Hope this helps!

Patrick Lamb

Aviation Program Manager

Indiana Department of Transportation

Central Office

Mobile: (317) 495-4875

Email: plamb@indot.in.gov

Find us on social media!



From: Lisa Harris <lharris@lawson-fisher.com>

Sent: Wednesday, November 26, 2025 11:15 AM

To: Lamb, Patrick A <PLamb@indot.IN.gov>

Subject: Environmental Early Coordination - SR 49 Intersection Improvement Project - Des No. 2301097

EXTERNAL EMAIL: This email was sent from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Good Morning,

On behalf of the Indiana Department of Transportation (INDOT), please find the attached pdf containing information related to the Environmental Early Coordination Efforts for the SR 49 Intersection Improvement w/Added Turn Lanes in Porter County, Indiana (INDOT Des No. 2301097).

Please feel free to contact me with any questions or comments.

Thank you,

Lisa



Lisa Harris, MSES/MPA | Environmental Document Specialist

525 West Washington Avenue | South Bend, IN 46601

O: 574-234-3167

C: 802-989-5403

www.lawson-fisher.com

RE: Environmental Early Coordination - SR 49 Intersection Improvement Project - Des No. 2301097

From Michels, Stewart <SMichels@indot.IN.gov>

Date Mon 12/1/2025 2:24 PM

To Lisa Harris <lharris@lawson-fisher.com>

Lisa,

Thank you for providing a copy of the early coordination letter for Des 2301097 to the LaPorte District Environmental Services. We do not have any comment at this time. Thank you, again, for contacting us.

Regards,

Stew

Stewart Michels

Environmental Manager Supervisor

Indiana Department of Transportation

LaPorte District

Cell: (219) 402-7315

Email: SMichels@indot.in.gov

[Find us on social media!](#)



From: Lisa Harris <lharris@lawson-fisher.com>

Sent: Wednesday, November 26, 2025 10:21 AM

To: Michels, Stewart <SMichels@indot.IN.gov>

Subject: Environmental Early Coordination - SR 49 Intersection Improvement Project - Des No. 2301097

EXTERNAL EMAIL: This email was sent from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Good Morning,

On behalf of the Indiana Department of Transportation (INDOT), please find the attached pdf containing information related to the Environmental Early Coordination Efforts for the SR 49 Intersection Improvement w/Added Turn Lanes in Porter County, Indiana (INDOT Des No. 2301097).

Please feel free to contact me with any questions or comments.

Thank you,

Lisa



Lisa Harris, MSES/MPA | Environmental Document Specialist

525 West Washington Avenue | South Bend, IN 46601

O: 574-234-3167

C: 802-989-5403

www.lawson-fisher.com



United States Department of the Interior

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



In Reply Refer To:

03/27/2026 13:52:13 UTC

Project Code: 2026-0018971

Project Name: S.R. 49 at C.R. 950 N/Calumet Ave. Intersection Improvement RCI-MUT - Des No 2301097

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

To Whom It May Concern:

The purpose of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Act.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. You can complete this verification formally or informally or request an updated list by visiting the IPaC website at regular intervals during project planning and implementation.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at [Midwest Section 7 Technical Assistance | U.S. Fish & Wildlife Service](#). This website contains step-by-step instructions to help you determine if your project will have an adverse effect on listed species and to lead you through the Section 7 process.?

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

Other Trust Resources and Activities?

Bald and Golden Eagles?- Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a [permit](#). A [nest take permit](#) is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.?

Migratory Birds?- The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.?

Communication Towers?- Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).?

Transmission Lines?- Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.?

Wind Energy?- To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

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

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

PROJECT SUMMARY

Project Code: 2026-0018971

Project Name: S.R. 49 at C.R. 950 N/Calumet Ave. Intersection Improvement RCI-MUT - Des No 2301097

Project Type: Road/Hwy - Maintenance/Modification

Project Description: The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), intends to proceed with a project involving the reconfiguration of an intersection in Porter County, Indiana (Des No. 2301097). The project is located on S.R. 49 at County Road (C.R.) 950 N/Calumet Avenue, 1.5 miles north of U.S. 6. Specifically, the project is located in Section 18, Township 36 North, Range 5 West in Liberty Township, Porter County, Indiana.

The proposed project is anticipated to reconfigure the intersection by installing concrete islands in the S.R. 49 intersection with C.R. 950 N and Calumet Avenue, construct a median U-turn south of the intersection, widen the right turn acceleration lane from Calumet Avenue onto S.R. 49 and address associated guardrail, replace two median inlets, add a storm sewer culvert at the median U-turn location, install lighting at the intersection, and add signage to direct traffic through the new configurations.

Suitable bat summer habitat is located within or adjacent to the project limits. Trees are not anticipated to be removed. No right-of-way acquisition is anticipated. No mitigation is anticipated. Temporary lighting may be utilized during construction. Permanent lighting will be installed at the intersection and new median U-turn.

A review of the U.S. Fish and Wildlife Service (USFWS) database by INDOT LaPorte District on November 20, 2025, did not indicate the presence of endangered bat species within 0.5 mile of the project area. The two small existing drainage structures to be upgraded are 12-inch. and 15-inch. in diameter, which are not considered suitable habitat per the USFWS Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines, March 2024. Therefore, no Bridge/Culvert inspections were performed.

Construction activities are expected to begin in Spring 2028.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.5721621,-87.04614717410959,14z>



Counties: Porter County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

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

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

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

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

MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Western Regal Fritillary <i>Argynnis idalia occidentalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

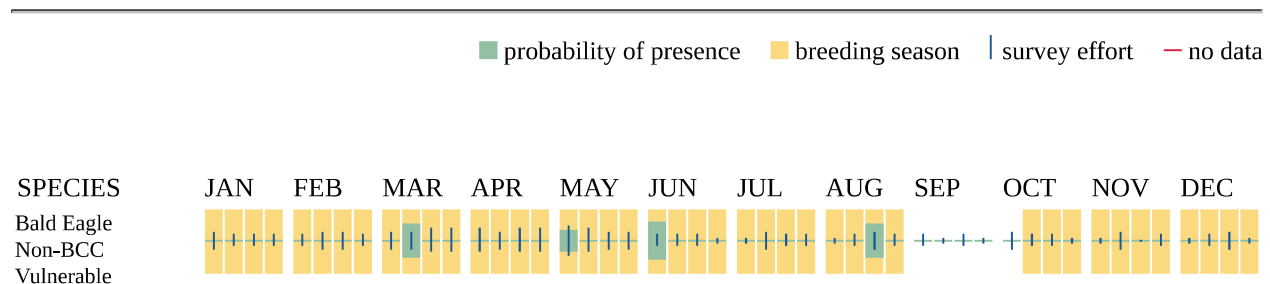
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

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



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Cerulean Warbler <i>Setophaga cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 21 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Henslow's Sparrow <i>Centronyx henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Kentucky Warbler <i>Geothlypis formosa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20

NAME	BREEDING SEASON
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prairie Loggerhead Shrike <i>Lanius ludovicianus excubitorides</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8833	Breeds Feb 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10633	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

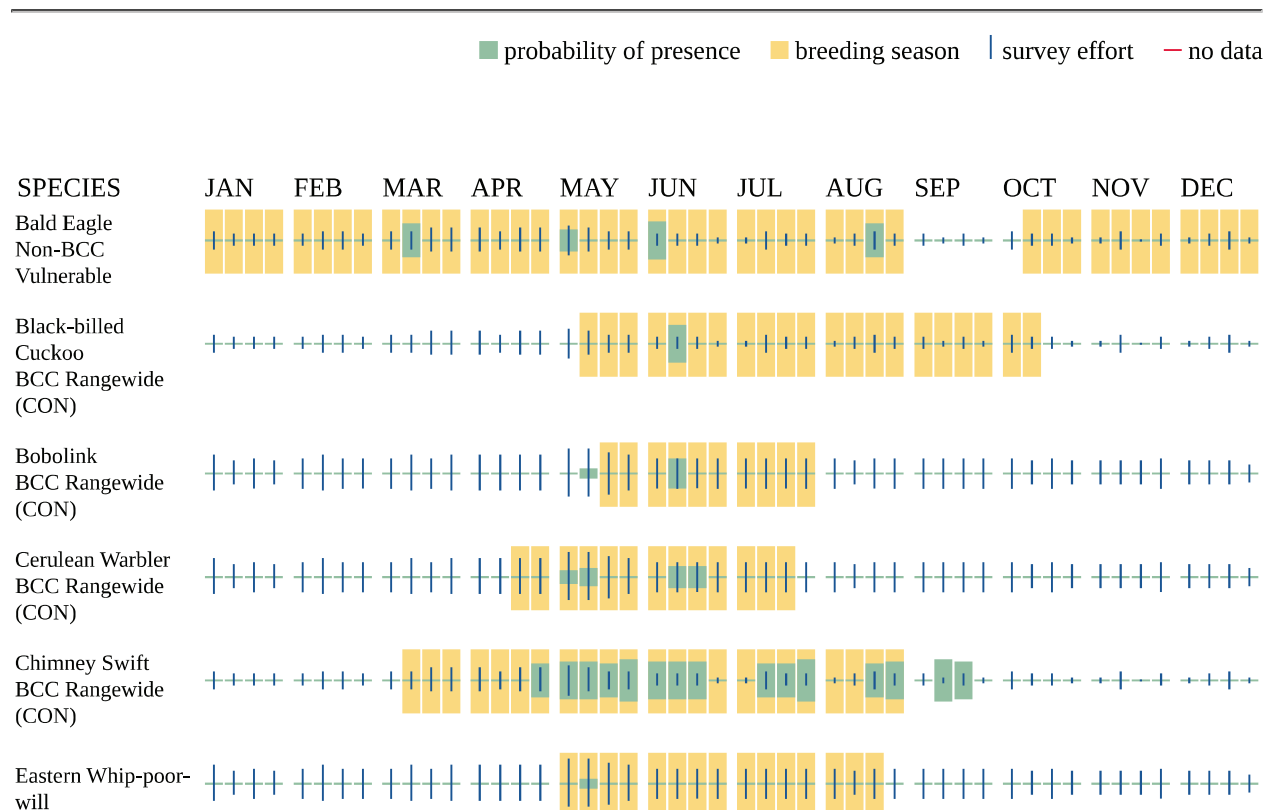
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

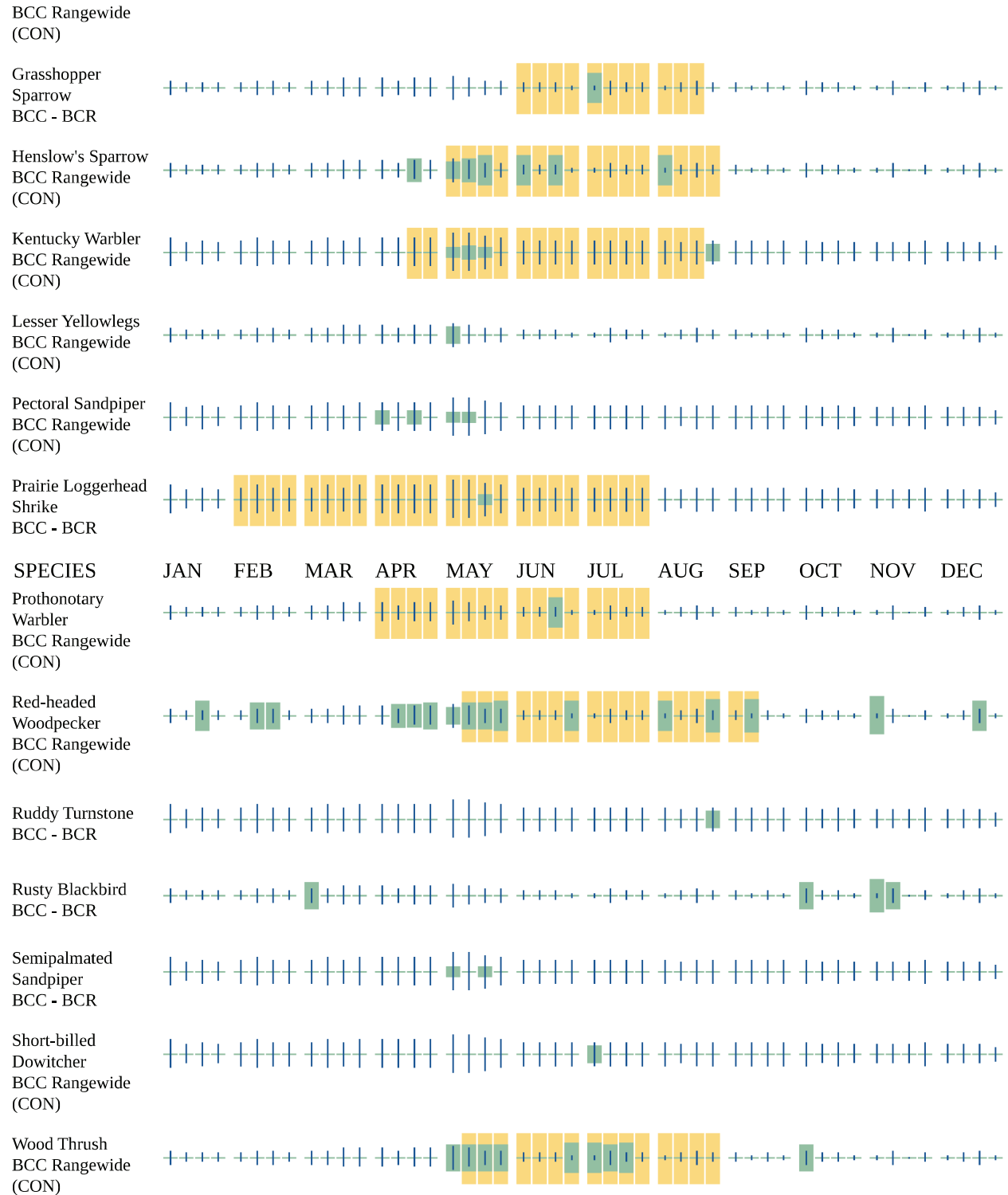
Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

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





Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>

- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

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

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

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Lisa Harris

Address: 525 W Washington Avenue

City: South Bend

State: IN

Zip: 46601

Email lharris@lawson-fisher.com

Phone: 5742343167

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

You have indicated that your project falls under or receives funding through the following special project authorities:

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)



United States Department of the Interior

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



In Reply Refer To:

03/23/2026 13:29:30 UTC

Project code: 2026-0018971

Project Name: S.R. 49 at C.R. 950 N/Calumet Ave. Intersection Improvement RCI-MUT - Des No 2301097

Subject: Not Likely to Adversely Affect Technical assistance letter for the 'S.R. 49 at C.R. 950 N/Calumet Ave. Intersection Improvement RCI-MUT - Des No 2301097' project under the December 13, 2024, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat, Northern Long-eared Bat, and Tricolored Bat.

To whom it may concern:

This letter records the determination of effects to federally listed (or proposed) bat species anticipated to result from the S.R. 49 at C.R. 950 N/Calumet Ave. Intersection Improvement RCI-MUT - Des No 2301097 (the Project). This determination is based upon information you entered into the assisted determination key (Dkey) associated with the above referenced Programmatic Biological Opinion/Conference Opinion (PBO/PCO) in the U.S. Fish and Wildlife Service's (Service) Information for Planning and Consultation (IPaC) system on the date listed above. **This letter does not satisfy compliance requirement under section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (16 USC 1536), as amended.** Those requirements will be met upon taking the actions described below.

Ensuring Accurate Determinations When Using IPaC:

The Service developed the IPaC system and this Dkey in accordance with the ESA and based on the PBO/PCO. All information submitted by the project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in the Dkey invalidates this letter. Answers to certain questions in the Dkey commit the project proponent to implementation of conservation measures that must be followed for the ESA determinations to remain valid. Carefully review this letter, your ESA requirements are NOT yet complete.

Determinations:

Based on the information you provided (Project Description shown below), you have determined that the Project is within the scope and adheres to the criteria of the PBO/PCO, including the adoption of applicable avoidance and minimization measures. Based on your IPaC submission and the PBO/PCO, the Project is consistent with the following effect determinations:

Species	Listing Status	Determination
Indiana Bat (<i>Myotis sodalis</i>)	Endangered	NLAA
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	NLAA
Tricolored Bat (<i>Perimyotis subflavus</i>)	Proposed Endangered	NLAA

The tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can confer under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a no effect or not likely to adversely affect (NLAA) determination from the key to confirm that the determination is still accurate.

This "may affect - not likely to adversely affect" determination becomes effective when the lead Federal action agency or designated non-federal representative requests the Service rely on the PBO/PCO to satisfy the agency's consultation requirements for this project. **To fulfill the next steps in the consultation process, add the lead Federal action agency or designated non-federal representative as a Project Member in the IPaC system and provide this letter to the lead Federal action agency or its designated non-federal representative with a request for review, and as the agency deems appropriate, submit for concurrence verification through the IPaC system. ESA section 7 compliance for this Proposed Action is NOT yet complete until the Federal action agency or its designated non-federal representative receives a not likely to adversely affect verification letter from the Service IPaC system.**

If the Project is modified, or new information reveals that it may affect the Indiana bat, northern long-eared bat, or tricolored bat in a manner or to an extent not considered in the PBO/PCO, further review to conclude the requirements of ESA section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:

If your initial bridge, culvert, or structure assessment failed to detect Indiana bat, northern long-eared bat, or tricolored bat use or occupancy, yet bats are later detected prior to, or during construction, promptly notify the local Service Field Office within 2 working days of the discovery. In addition, please document whether incidental take occurred, and if so, the type (i.e. kill or harm) and amount (i.e. number of individuals) and submit documentation to the local Service Field Office within 5 working days from the completion of the bridge, culvert, or structure construction (use Appendix E - Post Assessment Discovery of Bats at Bridge/Culvert or

Structure Form in the [User's Guide](#)). In these instances, potential incidental take of Indiana bats, northern long-eared bats, or tricolored bats may be exempted provided that the take is reported to the Service. In these instances, potential incidental take of Indiana bats, northern long-eared bats, or tricolored bats may be exempted provided that the take is reported to the Service.

If the Project may affect any other federally listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Field Office is required for those species/designated critical habitat. If the Project has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency to contact this Service Field Office

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

- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Western Regal Fritillary *Argynnis idalia occidentalis* Proposed Threatened

PROJECT DESCRIPTION

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

NAME

S.R. 49 at C.R. 950 N/Calumet Ave. Intersection Improvement RCI-MUT - Des No 2301097

DESCRIPTION

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), intends to proceed with a project involving the reconfiguration of an intersection in Porter County, Indiana (Des No. 2301097). The project is located on S.R. 49 at County Road (C.R.) 950 N/Calumet Avenue, 1.5 miles north of U.S. 6. Specifically, the project is located in Section 18, Township 36 North, Range 5 West in Liberty Township, Porter County, Indiana.

The proposed project is anticipated to reconfigure the intersection by installing concrete islands in the S.R. 49 intersection with C.R. 950 N and Calumet Avenue, construct a median U-turn south of the intersection, widen the right turn acceleration lane from Calumet Avenue onto S.R. 49 and address associated guardrail, replace two median inlets, add a storm sewer culvert at the median U-turn location, install lighting at the intersection, and add signage to direct traffic through the new configurations.

Suitable bat summer habitat is located within or adjacent to the project limits. Trees are not anticipated to be removed. No right-of-way acquisition is anticipated. No mitigation is anticipated. Temporary lighting may be utilized during construction. Permanent lighting will be installed at the intersection and new median U-turn.

A review of the U.S. Fish and Wildlife Service (USFWS) database by INDOT LaPorte District on November 20, 2025, did not indicate the presence of endangered bat species within 0.5 mile of the project area. The two small existing drainage structures to be upgraded are 12-inch. and 15-inch. in diameter, which are not considered suitable habitat per the USFWS Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines, March 2024. Therefore, no Bridge/Culvert inspections were performed.

Construction activities are expected to begin in Spring 2028.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.5721621,-87.04614717410959,14z>



DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the Indiana bat, northern long-eared bat or tricolored bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the Programmatic Biological Opinion/Conference Opinion for Transportation Projects in the Range of the Indiana bat, northern long-eared bat, and tricolored bat, dated December 13, 2024.

QUALIFICATION INTERVIEW

1. Which Federal Agency is the lead federal agency the action?

A) Federal Highway Administration (FHWA)

2. Does the Action Area intersect the species list area of the Northern long-eared bat?

Automatically answered

Yes

3. Does the Action Area intersect the species list area of the Indiana bat?

Automatically answered

Yes

4. Does the Action Area intersect the species list area of the tricolored Bat (TCB)?

Automatically answered

Yes

5. Is the project within 0.5 miles radius of an entrance/opening to any known Indiana bat hibernaculum?

No

6. [Semantic] Is any portion of the action area within a 0.5 mile radius of an entrance/opening to any known NLEB or TCB hibernacula?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact the Field Office listed in the letterhead of this letter.

Automatically answered

No

7. Does your project's activities include raising the road profile above the tree canopy in documented habitat for the Indiana bat, NLEB, or TCB?

Note: For the definition of documented habitat, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>

No

8. Is your project located within a karst area?

No

9. Will the project include bridge, culvert, or structure removal, replacement, and/or alteration activities?

Note: For definitions of bridge, culvert, and structure, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>.

Yes

10. Do your project's activities involve tree removal/trimming, temporary lighting, new/additional permanent lighting, ground disturbance, percussives that involves noise/vibration above existing background levels, vibrations, or slash pile burning?

Yes

11. Is there suitable summer habitat for the Indiana bat, NLEB, or TCB within the project action area?

Note: See the Service's summer survey guidance for current definitions of suitable habitat [<https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>].

Yes

12. Have P/A surveys for the Indiana bat, NLEB, or TCB been conducted within the suitable summer habitat located within your project action area? This refers to mist-netting or acoustic surveys, not bridge assessments.

Note: See the Service's survey guidance <https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>

No

13. Will the project involve the removal or trimming of trees within suitable habitat for the Indiana bat, NLEB, or TCB?

No

14. Does your project include activities involving the temporary or permanent exclusion of Indiana bats, NLEBs, or TCBs from a bridge/culvert or structure that is occupied by a large number of covered bats (>5)?

Note: exclusion is conducted to deny bats' entry or reentry into a bridge/culvert or structure. To be effective and to avoid harming bats, it should be done according to established standards. Coordinate with the local Service Field Office for additional assistance.

No

15. Does your project involve the use of temporary lighting within Indiana bat, NLEB, or TCB suitable habitat?

Note: For the definition of lighting, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>

Yes

16. Will the use of temporary lighting be conducted during the Indiana bat, NLEB, or TCB active season?

Note: For the definition of active season, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>

Yes

17. Will temporary lighting be directed away from Indiana bat, NLEB, or TCB suitable habitat)?

Yes

18. Will the project substantially increase baseline light conditions via the use of permanent lighting (replacement or new/additional) in suitable habitat.

Yes

19. When installing new/additional permanent lighting, can downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting) be used?

Yes

20. Will your project include percussive activities?

Note: Refer to Stressor #2 Noise/Vibration on page 109 of the PBO/PCO.

No

21. Will the project include **bridge** removal, replacement, and/or alteration activities?

No

22. Does the project include **culvert** removal, replacement, and/or alteration activities?

Yes

23. Does the culvert equal or exceed 23 feet (7.0 meters) in length?

Yes

24. Are the interior dimensions of the culvert less than 3 ft. in diameter/height?

Yes

25. Does the project include **structure** removal, replacement, and/or alteration activities?

No

26. Does the Action Area intersect the species list area of the Indiana bat?

Automatically answered

Yes

27. Does the Action Area intersect the species list area of the tricolored Bat (TCB)?

Automatically answered

Yes

28. Does the Action Area intersect the species list area of the northern long-eared bat (NLEB)?

Automatically answered

Yes

PROJECT QUESTIONNAIRE

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

Yes

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

No

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

GAMM1

Ensure all operators, employees, and contractors working in areas of Indiana bat, NLEB, or TCB suitable habitat are aware of all Transportation Agency environmental commitments, including all applicable AMMs.

LAMM1

Direct temporary lighting away from suitable habitat during the active season

LAMM2

When installing new/additional permanent lighting or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those Transportation Agencies using the Backlight Uplight and Glare (BUG) system developed by the Illuminating Engineering Society, the project should be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. http://www.escolighting.com/PDFfiles/BUG_rating.pdf

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING IBAT, NLEB, OR TCB

This key was last updated in IPaC on February 24, 2026. Keys are subject to periodic revision.

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

This decision key should only be used to verify project applicability with the Service's Programmatic Biological Opinion/Conference Opinion for Transportation Projects in the Range of the Indiana bat, northern long-eared bat, and tricolored bat, dated December 13, 2024. The programmatic consultation limited transportation activities that may affect the covered bat species and addresses situations that are both likely and not likely to adversely affect the covered bat species. This decision key will assist in identifying the effect of a specific project/activity and the applicability of the programmatic consultation. The programmatic consultation is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic consultation, or that may affect ESA-listed species other than the Indiana bat, northern long-eared bat, or tricolored bat, or their designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Lisa Harris

Address: 525 W Washington Avenue

City: South Bend

State: IN

Zip: 46601

Email: lharris@lawson-fisher.com

Phone: 5742343167

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

You have indicated that your project falls under or receives funding through the following special project authorities:

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)



APPENDIX D

SECTION 106 OF THE NHPA

RE: Des No. 2301097 - S.R. 49 at C.R. 950 N/Calumet Avenue

From Kelly, Clint <CKelly1@indot.IN.gov>

Date Tue 12/16/2025 3:53 PM

To Lisa Harris <lharris@lawson-fisher.com>

Cc Branigin, Susan <SBranigin@indot.IN.gov>; Michels, Stewart <SMichels@indot.IN.gov>; Krueckeberg, John <JKrueckeberg@indot.IN.gov>; Dan Delgado <ddelgado@lawson-fisher.com>; Dmitri Adams <dadams@lawson-fisher.com>; Chris Jeter <cjeter@lawson-fisher.com>; Coon, Matthew <mcoon@indot.IN.gov>

Hi Lisa,

Thank you for the submittal of this project information for our review. We have determined that this project falls under Category B-1, B-2, B-3, B-4, and B-9 of the Minor Projects PA, thus concluding the Section 106 process. The completed documentation can be found in PW for inclusion in the CE: MPPA Determinaton Form_B-1 B-2 B-3 B-4 B-9_Des2301097_2025-12-16.docx.

Please keep in mind that if the project's scope or limits should change, CRO will need to re-examine the information in order to determine whether the MPPA can still be applied. Feel free to contact us should you have any questions or need additional information.

Thanks,
Clint

Clint Kelly

Section 106 Specialist/Historian

Cultural Resources Office

Environmental Services

100 N. Senate Ave., Rm. N758-ES

Indianapolis, IN 46204

Office: (317) 447-8707

Email: ckelly1@indot.in.gov

Core Office Hours: M-F 7:30-3:30

[Find us on social media!](#)



From: Branigin, Susan <SBranigin@indot.IN.gov>

Sent: Wednesday, November 5, 2025 12:53 PM

To: Lisa Harris <lharris@lawson-fisher.com>

Cc: Kelly, Clint <CKelly1@indot.IN.gov>; Blum, Kaylee <KBlum@indot.IN.gov>; Michels, Stewart <SMichels@indot.IN.gov>; Krueckeberg, John <JKrueckeberg@indot.IN.gov>; Dan Delgado <ddelgado@lawson-fisher.com>; Dmitri Adams <dadams@lawson-fisher.com>; Chris Jeter <cjeter@lawson-fisher.com>

Subject: RE: Des No. 2301097 - S.R. 49 at C.R. 950 N/Calumet Avenue

Lisa,

Thank you for the above submission. The materials have been added to CRO's review queues.

Best regards,

Susan R. Branigin, MS
History Team Lead/Supervisor
Cultural Resources Office (CRO)

Indiana Department of Transportation
100 North Senate Ave., N758 —Environmental Services
Indianapolis, IN 46204

Core Hours: 7A-3P

Cell: 317.417.1622

Email: sbranigin@indot.in.gov

[Find us on social media!](#)



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

****Link to the CRO-Public Web Map App can be found [here](#)**

From: Lisa Harris <lharris@lawson-fisher.com>

Sent: Tuesday, November 4, 2025 4:16 PM

To: INDOT ESD.CRO <ESDCRO@indot.IN.gov>

Cc: Dan Delgado <ddelgado@lawson-fisher.com>; Dmitri Adams <dadams@lawson-fisher.com>; Chris Jeter <cjeter@lawson-fisher.com>

Subject: Des No. 2301097 - S.R. 49 at C.R. 950 N/Calumet Avenue

EXTERNAL EMAIL: This email was sent from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Hello CRO Team,

Please find information below for your review for the above-mentioned project.

LPA Project? No

Historic Bridge Project? No

Level of Section 106 Review: MPPA

If MPPA, does the project area contain any undisturbed soils: No

If Full Section 106:

1)Reason why the MPPA does not apply. N/A

2)Potential for Section 106 adverse effects? N/A

3)Potential for Section 4(f) use of a historic property? N/A

RFC Date: 9/14/2027

Items for Review:

ProjectWise Links to submitted documents (MPPA Form, Maps, STG2 Plans, Photos):

SR49RCI-MUT_Des2301097_MPPA_2025-11-04.docx

SR49RCI-MUT_Des2301097_MPPA_Maps_2025-11-04.pdf

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Thank you!

Lisa



Lisa Harris, MSES/MPA | Environmental Document Specialist

525 West Washington Avenue | South Bend, IN 46601

O: 574-234-3167

C: 802-989-5403

[https://protect.checkpoint.com/v2/r01/___www.lawson-fisher.com][www.lawson-fisher.com](https://protect.checkpoint.com/v2/r01/___www.lawson-fisher.com) .YzJ1OnN0YXRlb2ZpbmRpYW5hOmM6bzplMzhhYTl1ODMzNDAwNjdiNzk1YWVmZGQ4Mzc3ZWE3ZT
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Minor Projects PA Project Submittal and Assessment Form

SECTION 1

Submittal of this form is only required for projects where Category B applies. Projects qualifying under Category A do not require submittal of this form. SECTION 2 (for Conditions of Category B-1 for curb/sidewalk) or SECTION 3 (for Conditions of Category B-9 for drainage structures) may be required as determined by INDOT-Cultural Resources Office (INDOT-CRO) review. INDOT-CRO will notify applicant if the Minor Projects PA does not apply.

Part I: Project Information-Completed by Applicant (Consultant/PM/Project Sponsor/INDOT District Staff) *

**A qualified professional historian (QP) is not required to complete Part I. INDOT-CRO staff will be responsible for completion of Part II.*

Original Submission Date: November 4, 2025

Amended Submission Date*:

Consult with INDOT-CRO to determine whether an amendment is required. For revisions/updates to original form, please detail in applicable sections below. Please use **red font to distinguish the revisions/updates.*

Submitted By (Provide Name and Firm/Organization):

Lisa Harris, MSES-MPA
Lawson-Fisher Associates P.C.
525 West Washington Avenue
South Bend, Indiana 46601

Project Designation Number: 2301097

Route Number: S.R. 49 at CR 950 N/Calumet Avenue Intersection

Feature crossed (if applicable): N/A

City/Township: Town of Chesterton/Liberty Township

County: Porter County

Project Description: The project involves the improvement of the intersection of State Road (S.R.) 49 at County Road (C.R.) 950 N/Calumet Avenue with construction of a Reduced Conflict Intersection (RCI). The project will extend along S.R. 49 for 0.27 mile from the southern location of the proposed median U-turn (MUT) to the northern end of a new acceleration lane on the east side of the northbound lane. Construction will primarily occur within and along the median and the intersection.

The purpose of this project is to improve the safety at the intersection of S.R. 49 at C.R. 950 N/Calumet Avenue while maintaining an acceptable operational level of service. The need for this project is driven by the significant crash history present at the intersection, and the poor operational Level of Service currently present or anticipated within the next twenty years.

This project proposes to reconstruct and reconfigure the intersection crossover access by removing the pavement in the median and installing four concrete center curbs; constructing a new median cut approximately 1200 feet south for a U-turn; and, incorporating an acceleration lane on the northeast corner of the intersection extending 400 ft along the northbound lane for traffic from Calumet Avenue.

S.R. 49 northbound traffic wishing to turn left onto CR 950 N will travel to the signalized intersection of S.R. 49 and the I-80/I-90 Indiana Toll Road entrance before completing the intended movement. S.R. 49 southbound traffic wishing to turn left onto Calumet Avenue will travel to the new MUT and turn into the S.R. 49 northbound lane to complete the intended movement.

The southbound left turn lane will remain, be perpetuated, and develop into the turn lane for the MUT. The northbound right turn lane will be expanded for 400 ft along S.R. 49 and into the shoulder to accommodate merging traffic and large vehicle U-turns.

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Signage will be installed at the new MUT, at the S.R. 49 intersection with CR 950 N at Calumet Avenue, along the median north of the I-80/90 overpass, and south of the intersection of S.R. 49 and the I-80/I-90 Indiana Toll Road entrance to direct drivers to the new U-turn location at the traffic light.

Seven drainage structures will be installed within the project area. One 15-inch diameter by 79- linear feet (lft) small culvert will be installed approximately 950-feet south of the intersection under the new MUT. One 18-inch diameter by 18-lft N-12 Mod inlet pipe and two 15-inch diameter by 48-lft P-12 pipes will be installed in the median approximately 650-feet south of the intersection. One 12-inch by 14-lft N-12 Mod inlet pipe and two 12-inch by 48-lft P-12 pipes will be installed in the median approximately 150-feet north of the intersection.

Four concrete center curbs will be installed in the intersection to restrict traffic from crossing S.R. 49. A delineator tuff curb will be installed along the shoulder of the right turn lane from Calumet Avenue onto northbound S.R. 49. One rolled curb will be installed at the new MUT at the south end of the project limits to guide traffic through the new turnaround. New lighting will be installed at the intersection of S.R. 49 at C.R. 950 N/ Calumet Avenue and at the new crossover.

Table 1
Small Structures and Curbs

Structure #	Type	Diameter inches	Length lft	Location
10	Culvert	15	79	950 ft south of intersection
11	Mod inlet N-12	18	18	650 ft south of intersection
11A	Mod inlet P-12	15	48	650 ft south of intersection
11B	Mod inlet P-12	15	48	650 ft south of intersection
12	Mod inlet N-12	12	14	150 ft north of intersection
12A	Mod inlet P-12	12	48	150 ft north of intersection
12B	Mod inlet P-12	12	48	150 ft north of intersection
Curbs	Type			Location
1	Rolled Curb			930 ft south of Intersection
4	Concrete Center Curbs			Within Intersection
1	Delineator, Tuff Curb			NE Corner of Intersection

If the project includes any curb, curb ramp, or sidewalk work, please specify the location(s) of such work:

A rolled curb is proposed to be installed at the new MUT, four concrete center curbs are proposed to be installed on S.R. 49 within the location of the current intersection with C.R. 950 N/Calumet Avenue, and one delineator tuff curb is proposed to be installed along the northeast corner of the S.R. 49 at C.R. 950 N/Calumet Avenue intersection.

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type: Three small drainage structures are proposed for this project. One new 15-inch diameter 79 lft crossing culvert pipe with 2-end sections, structure 10, will be installed in the median underneath the new MUT at the south end of the project; an 18-inch diameter 18 lft N-12 pipe, structure 11, will extend an existing pipe on the west side of the median and connect with two new flanking inlet 15-inch diameter by 48 lft P-12 pipes, structures 11a and 11b, in the median approximately 300 feet north of the new turnaround location; and, a 12-inch diameter, 14 lft N-12 pipe, to extend an existing pipe on the west side of the median and connect with two new flanking inlet 12-inch diameter by 48 lft P-12 pipes, structures 12a and 12b, in the median just north of the S.R. 49 intersection with C.R. 950 N/Calumet Avenue.

For bridge projects, is the bridge included in INDOT's Historic Bridge Inventory (<https://www.in.gov/indot/2531.htm>)?

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☐ Yes ☒ No

If yes, did the inventory determine the bridge eligible for or listed in the National Register of Historic Places? Please provide page # of entry in Historic Bridge Inventory.

☐ Yes ☐ No

Inventory Page # _____

Will there be right-of-way acquisition as part of this project?

☐ Yes ☒ No

If yes was checked above, please check all that apply:

☐ Permanent ☐ Temporary ☐ Reacquisition

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way: N/A

Is there any potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?

☐ Yes ☒ No

Archaeology (check one):

☒ All proposed activities are presumed to occur in previously disturbed soils. *

**INDOT-CRO will notify you if project area includes undisturbed soils and requires an archaeological reconnaissance.*

☐ Project takes place in undisturbed soils, and the archaeology report is included with the submission. *

**If an archaeology report is required, the Minor Projects PA Form will not be finalized until the report is reviewed and approved by INDOT-CRO. For INDOT-sponsored projects, INDOT-CRO may be able to complete the archaeological investigation. If you would like to request that INDOT-CRO complete an archaeological investigation, please contact the INDOT-CRO Archaeology Team Lead. See CRM Pt. 1 Ch. 3 for current contact information.*

Please specify all applicable categories and condition(s) (INDOT will highlight applicable conditions in yellow):

B-1. Replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when such projects are associated with roadway work such as surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking, under the following conditions [**BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied**]:

Condition A (Archaeological Resources)

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

- i. Work occurs in previously disturbed soils; OR
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the Division of Historic Preservation

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and Archaeology (DHPA) and any archaeological site form information will be entered directly into the State Historic Architectural and Archaeological Database (SHAARD) by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on IN SCOPE.

Condition B (Above-Ground Resources)

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

- i. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *OR*
- ii. Work occurs adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource under one of the two additional conditions listed below (*EITHER Condition a OR Condition b must be met, and field work and documentation must be completed as described below*):
 - a. No unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *OR*
 - b. Unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible individual above-ground resource or district and ANY ONE of the conditions (1, 2, or 3) listed below must be fulfilled:
 1. Unusual features described above will not be impacted by the project. Firm commitments regarding the avoidance of these features must be listed in the MPPA determination form and the NEPA document and must be entered into the INDOT Project Commitments Database. These projects will also be flagged for quality assurance reviews by INDOT Cultural Resources Office during/after project construction.
 2. Unusual features described above have been determined not to contribute to the significance of the historic resource by INDOT Cultural Resources Office in consultation with the SHPO based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.
 3. Impacts to unusual features described above have been determined by INDOT Cultural Resources Office to be so minimal that they do not diminish any of the characteristics that contribute to the significance of the historic resource, based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.

B-2. Installation of new lighting, signals, signage, and other traffic control devices under the following conditions [BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]:

Condition A (Archaeological Resources)

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

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

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information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

- B-3.** Construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration, and deceleration lanes) and shoulder widening under the following conditions *[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]*:

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

- B-4.** Installation of new safety appurtenances, including but not limited to, guardrails, barriers, glare screens, and crash attenuators, under the following conditions *[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]*:

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

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- B-9** Installation, replacement, repair, lining, or extension of culverts and other drainage structures under the conditions listed below **[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]**:

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

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

- i. Work does not involve installation of a new culvert and other drainage structure, and there are no impacts to unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under one of the following conditions (Condition a, Condition b, or Condition c must be satisfied):
 - a. The structure exhibits no wood, stone, or brick structures or parts therein; OR
 - b. The structure exhibits only modern wood, stone, or brick structures or parts therein; OR
 - c. The structure exhibits non-modern wood, stone, or brick structures or parts therein and the following conditions are met (BOTH Condition 1 AND Condition 2 must be met):
 1. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; AND
 2. The structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.
- ii. Work involves the installation of a new culvert and other drainage structures AND/OR there may be impacts to unusual features, including historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under the following conditions (*BOTH Condition a and Condition b must be satisfied*):
 - a. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; AND
 - b. The subject structure exhibits one of the characteristics described below (*Condition 1, Condition 2 or Condition 3 must be satisfied*).
 1. The structure exhibits no wood, stone, or brick structures or parts therein; OR
 2. The structure exhibits only modern wood, stone, or brick structures or parts therein; OR
 3. The structure exhibits non-modern wood, stone, or brick structures or parts therein but lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.

Minor Projects PA Project Submittal and Assessment Form

Check ☐ if SECTION 2: Minor Projects PA Category B-1, Condition B-ii Submission is included.

Check ☐ if SECTION 3: Minor Projects PA Category B-9, Condition B-i-c-2 or B-ii-b-3 Submission is included.

Part II: Completed by INDOT-CRO

Information reviewed (please check all that apply):

General project location map ☒ USGS map ☐ Aerial photographs ☒ Soil survey data ☐

General project area photos ☒ Archaeology Reports ☐ Historic Property Reports ☐

Indiana Historic Buildings, Bridges, and Cemeteries Map/Interim Report ☒

Bridge inspection information/iTAMS ☐ Historic Bridge Inventory Database ☐

SHAARD ☒ SHAARD GIS ☒ Streetview Imagery ☒ County GIS Data/Property Cards ☒

Other (please specify):

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

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

Additional Comments:

Above-ground Resources

An INDOT Cultural Resources historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Porter County. No listed resources are located within 0.25 mile of the project area, a distance that serves as an adequate potential area of effects.

The Indiana Historic Sites and Structures Inventory (IHSSI) and National Register information for Porter County are available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The *Porter County Interim Report* (1991; Liberty Township) was also referenced. The INDOT-CRO historian reviewed the IHBBCM, which contains the most up-to-date survey information. No IHSSI documented resources are located within 0.25 mile of the project area:

According to the IHSSI rating system, generally properties rated "Contributing" do not possess the level of historical or architectural significance necessary to be considered individually National Register-eligible, although they would contribute to a historic district. If they retain material integrity, properties rated "Notable" might possess the necessary level of significance after further research. Properties rated "Outstanding" usually possess the necessary level of significance to be considered National Register- eligible if they retain material integrity.

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The INDOT-CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, and the Porter County GIS website. The project area is located on a two-lane highway in exurban setting. The adjacent building stock consists primarily of mid-twentieth to twenty-firsts century residential and commercial structures. None of the structures immediately adjacent appear to possess either the age and/or significance/integrity required to be considered National Register-eligible

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

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the proposed project area, conducted a desktop review, and prepared an archaeological assessment. According to SHAARD, no archaeological sites have been previously recorded within or adjacent to the proposed project area.

The proposed work is limited to previously disturbed portions of the existing SR 49R/W consisting of the paved road, ditched median, and side ditches. Given the disturbed setting, there is no potential to impact intact archaeological sites.

Therefore, there are no archaeological concerns provided the project scope and footprint do not change.

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction within 100 feet of the discovery will be stopped, and INDOT-CRO and the Indiana Department of Natural Resources-Division of Historic Preservation and Archaeology (IDNR-DHPA) will be notified immediately.

INDOT-CRO staff reviewer(s): Clint Kelly and Matt Coon

INDOT Approval Date: 12/16/2025

Amendment Approval Date (if applicable):

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



APPENDIX E

RED FLAG INVESTIGATION



INDIANA DEPARTMENT OF TRANSPORTATION

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

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

Mike Braun, Governor
Lyndsay Quist, Commissioner

Date: June 11, 2026

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

From: Lisa Harris, MSES-MPA
Lawson-Fisher Associates P.C.
525 West Washington Avenue
South Bend, Indiana 46601
lharris@lawson-fisher.com

Re: RED FLAG INVESTIGATION
DES# 2301097, State Project
Intersection Improvement w/Added Turn Lanes
State Road (S.R.) 49, 1.5 miles North of United States (U.S.) 6
at County Road (C.R.) 950 N/Calumet Avenue
Porter County, Indiana

PROJECT DETAILS

This project proposes the following to reconfigure the existing intersection of S.R. 49 with C.R. 950 N/Calumet Avenue: install concrete islands in the S.R. 49 intersection with C.R. 950 N/Calumet Avenue; widen the right turn acceleration lane for north-bound traffic exiting Calumet Avenue onto S.R. 49; construct a new median U-turn with a rolled curb south of the intersection; replace median inlets at two locations and install riprap with grading at one of the locations; add a crossing culvert under the new median U-turn; install new permanent lighting at the intersection and new median U-turn locations; and install new signage along the median to guide motorists through the new configuration. Guardrail will be removed and reinstalled at the acceleration lane. No right-of-way acquisition is anticipated. No tree clearing activities are anticipated.

Table 1
Proposed Excavation Depths

Structure Type	Location	Activity	Estimated Depth of Excavation (ft below ground surface)
Structure #10	SR 49 Median, 950 ft S of Intersection	Install new culvert	3.5 ft-bgs
Median cut	SR 49 Median, 950 ft S of Intersection	Install new median cut	3 ft-bgs
Concrete curb and gutter	SR 49 Median, 950 ft S of Intersection	Install new concrete curb and gutter	3 ft-bgs
Structure #11 (CLV-110970) Inlet storm pipe	SR 49 Median, 600 ft. S of Intersection	Remove section of pipe, install new section	5 ft-bgs
Structures #11a & #11b Inlet storm pipes	SR 49 Median, 600 ft. S of Intersection	Install new on east end of Structure #11	3.5 ft-bgs
Structure #12 (CLV-110974) Inlet storm pipe	SR 49 Median, 150 ft. N of Intersection	Remove section of pipe, install new section	6 ft-bgs
Structures #12a & #12b Inlet storm pipes	SR 49 Median, 150 ft. N of Intersection	Install new on east end of Structure #12	5 ft-bgs
Side ditches	SR 49 & Calumet Ave NE corner acceleration lane, Median at Structure #11 and #11b	Relocation and re-grading	2.5 ft-bgs
Acceleration lane	SR 49 & Calumet Ave NE corner	Install new lane	3 ft-bgs
Acceleration lane	SR 49 & Calumet Ave NE corner	Regrading	1 ft-bgs
Concrete center curbs	SR 49 & CR 950 intersection	Install new	3 ft-bgs
Signage	Along SR 49 at Intersection, at median U-turn, and intersection with Gateway Blvd	Install new	3.5 ft-bgs
Lighting	At SR 49 Intersection and new Median U-turn	Install new	8 ft-bgs

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

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

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

Culvert Work Included in Project: Yes ☒ No ☐ Structure #(s) CLV-110974 and CLV-110970

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

Type and proposed depth of excavation: Excavation depths ranging from 1-ft to 8-ft below ground surface (ft-bgs) will occur at multiple locations. Please see Table 1, Proposed Excavation Depths.

Maintenance of traffic (MOT): MOT involves keeping 1 lane open for northbound S.R. 49 traffic and 2 lanes open for southbound S.R. 49 traffic.

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

Anticipated NEPA document level: CE-2

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	N/A	Recreational Facilities	2*
Airports ¹	N/A	Pipelines	3
Cemeteries	N/A	Railroads	2
Hospitals	N/A	Trails	5
Schools	N/A	Managed Lands	1

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

Explanation:

Recreational Facilities*: Two (2) recreational facilities, one (1) mapped and one (1) unmapped, are located within the 0.5-mile search radius. The nearest facility, North Porter County Conservation Club, is unmapped and is located 0.14 mile east of the southern portion of the project area. No impact is expected.

Pipelines: Three (3) pipeline segments are located within the 0.5-mile search radius. The nearest pipeline segment, associated with ANR Pipeline Co., is located within the project area. Coordination with INDOT Utilities and Railroads will occur.

Railroads: Two (2) railroads are located within the 0.5-mile search radius. The nearest segment, associated with CSX, is located 0.26 mile south of the project area. No impact is expected.

Trails: Five (5) trails are located within the 0.5-mile search radius. The nearest trail, Dunes Kankakee Trail, runs adjacent to and within the project area, and is a planned trail. Coordination with Northwestern Indiana Regional Planning Commission will occur.

Managed Lands: One (1) managed land is located within the 0.5-mile search radius. This area, associated with Coffee Creek Watershed Conservancy, is located 0.17 mile northeast of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Karst Springs	N/A	NWI - Wetlands	45
Canal Structures – Historic	N/A	Lakes	6
NPS NRI Listed	N/A	Floodplain - DFIRM	1
IDEM 303d Listed Streams and Lakes (Impaired)	5	Cave Entrance Density	N/A
Rivers and Streams	24	Sinkhole Areas	N/A
Canal Routes - Historic	N/A	Sinking-Stream Basins	N/A

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

Explanation:

IDEM 303d Listed Streams and Lakes (Impaired): Five (5) impaired stream segments are located within the 0.5-mile search radius. The nearest stream, an unnamed tributary associated with Coffee Creek, is located 0.29 mile west of the project area. No impact is expected.

Rivers and Streams: Twenty-four (24) river and stream segments are located within the 0.5-mile search radius. The nearest stream, an unnamed tributary, is located 0.36 mile south of the project area. No impact is expected.

NWI – Wetlands: Forty-five (45) wetland polygons are located within the 0.5-mile search radius. The nearest wetland polygon, a freshwater pond, is located 0.08 mile southwest of the project area. No impact is expected.

Lakes: Six (6) lakes are located within the 0.5-mile search radius. The nearest lake, a freshwater pond, is located 0.08 mile southwest of the project area. No impact is expected.

Floodplain – DFIRM: One (1) floodplain polygon is located within the 0.5-mile search radius. This floodplain polygon is located 0.38 mile northeast of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Explanation:

No mining/mineral exploration resources were identified within the 0.5-mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	1	Landfill Boundaries	N/A
Voluntary Remediation Program	N/A	Confined Feeding Operations (CFO)	N/A
Construction Demolition Waste	N/A	Brownfields	N/A
Solid Waste Landfill	N/A	Notice of Contamination Sites	N/A
Infectious/Medical Waste Sites	N/A	Institutional Controls	N/A
Leaking Underground Storage (LUST) Sites	2	NPDES Facilities	12
		NPDES Pipe Locations	N/A

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

Explanation:

Underground Storage Tank (UST) Sites: One (1) UST site is located within the 0.5-mile search radius. Duneland School Corporation, 1012 N Old SR 49, AI ID #51125, is located 0.31 mile northwest of the project area. According to the 4th Quarter 2025 Quarterly Monitoring Report and No Further Action Request Report dated January 20, 2026, no soil Contaminants of Concern (COCs) were identified above the Remediation Closure Guide (RCG) Soil Migration to Groundwater Screening Levels (SMTG SLs), nor were soil COCs identified above R2 Soil Published Levels (PLs). Finally, no groundwater COCs were identified above R2 Groundwater PLs. No impact is expected.

Leaking Underground Storage (LUST) Sites: Two (2) LUST sites are located within the 0.5-mile search radius.

- The nearest LUST site, associated with Speedway 5522, 502 Gateway Blvd, AI ID #14280, is located 0.05 mile northeast of the project area. No LUST is listed for this site. IDEM conducted an Underground Storage Tank Inspection on July 30, 2025, and the facility was found to be out of compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9; however, documentation reviewed does not indicate that a release occurred. No impact is expected.
- Chesterton Toll Road Plaza, 980 N SR 49, Milepost 30.9, AI ID #52138, is located 0.17 mile west of the project area. IDEM issued a No Further Action Determination pursuant to Risk Integrated System of Closure (RISC) Guidance on December 2, 2010. Petroleum COCs were all below the RISC residential default closure levels for soil and groundwater. No impact is expected.

NPDES: Twelve (12) NPDES Facilities are located within the 0.5-mile search radius. The nearest facility, associated with INDOT Des 1702995 Intersection Improvement, SR 49 and Gateway Boulevard, Permit #INRA09381, is adjacent to the west of the project area. The permit was terminated on May 6, 2024. No impact is expected.

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE:

Pipelines: ANR Pipeline Co., is located within the project area. Coordination with INDOT Utilities and Railroads will occur.

Trails: Dunes Kankakee Trail, runs adjacent to and within the project area, and is a planned trail. Coordination with Northwestern Indiana Regional Planning Commission will occur.

WATER RESOURCES: N/A

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

Prepared by:  (Signature)

Lisa Harris, MSES-MPA

Environmental Document Specialist

Lawson-Fisher Associates P.C.

QA/QC Completed by:  (Signature)

Christopher J. Jeter, P.E.

Project Manager

Lawson-Fisher Associates P.C.

INDOT ESD concurrence:  Tracy Barnes (Signature)
Digitally signed by Tracy Barnes
Date: 2026.06.11 16:32:22 -04'00'

Graphics:

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

SITE LOCATION: YES

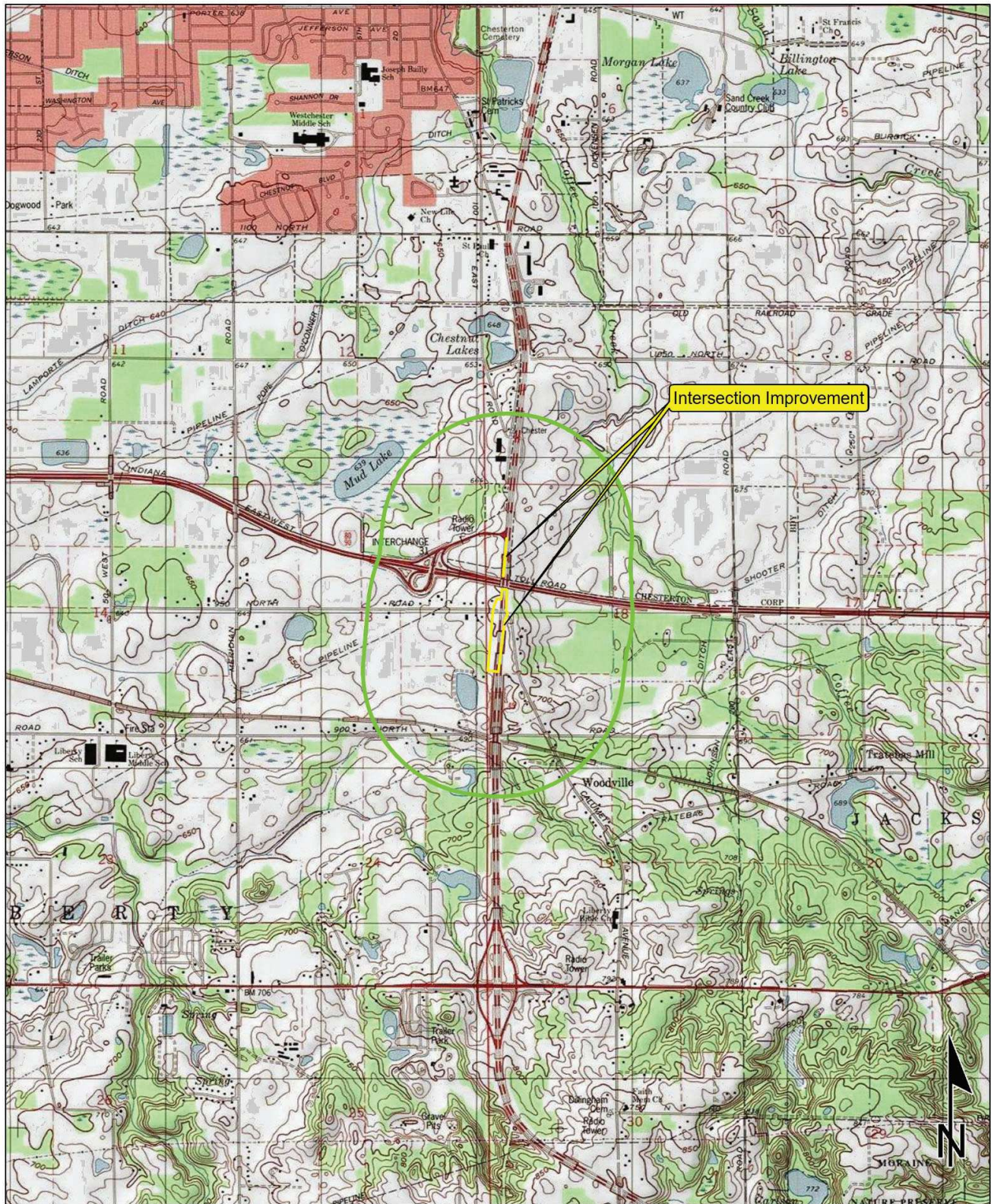
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: YES

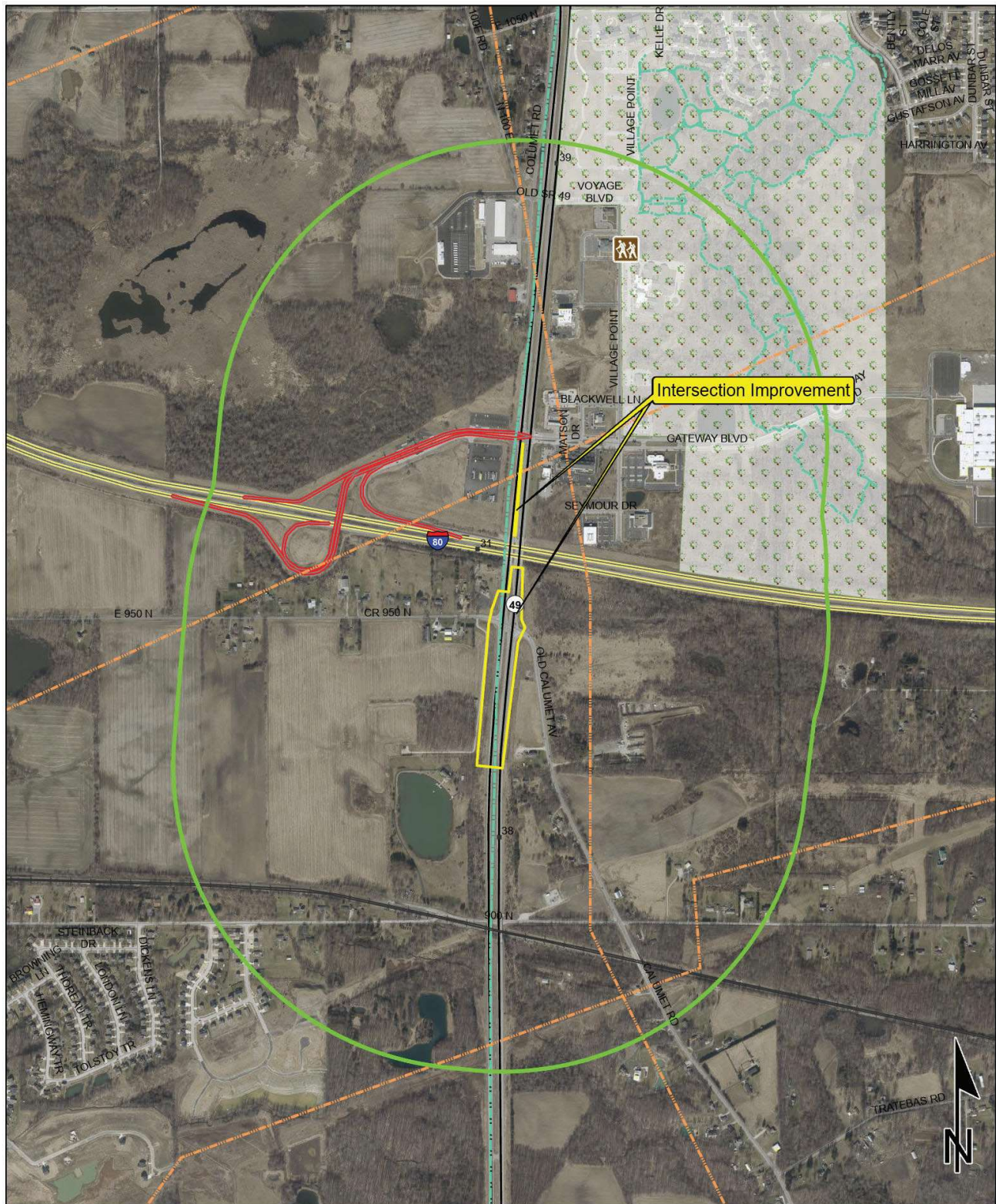
Red Flag Investigation - Site Location
 SR 49, 1.5 miles North of US 6 at CR 950N/Calumet Ave
 Des No. 2301097, Intersection Improvement w/ Added Turn Lanes
 Porter County, Indiana



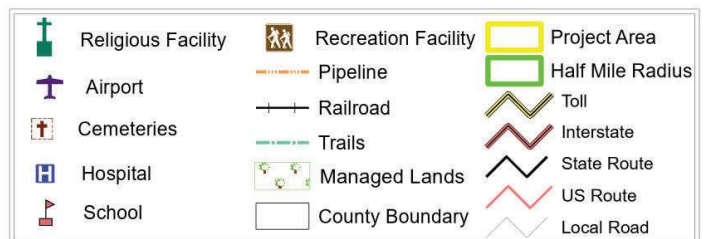
Sources: 0.45 0.23 0 0.45 Miles
 Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
 Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
 Map Projection: UTM Zone 16 N Map Datum: NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

CHESTERTON QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Infrastructure
SR 49, 1.5 miles North of US 6 at CR 950N/Calumet Ave
Des. No. 2301097, Intersection Improvement w/ Added Turn Lanes
Porter County, Indiana



Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
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Red Flag Investigation - Water Resources
SR 49, 1.5 miles North of US 6 at CR 950N/Calumet Ave
Des. No. 2301097, Intersection Improvement w/ Added Turn Lanes
Porter County, Indiana



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

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Red Flag Investigation - Hazardous Material Concerns
SR 49, 1.5 miles North of US 6 at CR 950N/Calumet Ave
Des. No. 2301097, Intersection Improvement w/ Added Turn Lanes
Porter County, Indiana



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

0.2 0.1 0 0.2
Miles

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

E-10

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