

## Indiana Department of Transportation

County Warrick Route Third Street Des. No. 1600891

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

|                                     |                                                                                                           |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Road No./County:</b>             | <b>Third Street, Boonville, Warrick County, Indiana</b>                                                   |
| <b>Designation Number:</b>          | <b>1600891</b>                                                                                            |
| <b>Project Description/Termini:</b> | <b>Road Rehabilitation Project on Third Street from Sycamore Street to 460 feet north of Olive Street</b> |

After completing this form, I conclude that this project qualifies for the following type of Categorical Exclusion (FHWA must review/approve if Level 4 CE):

|          |                                                                                                                                                                                                                         |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>X</b> | <b>Categorical Exclusion, Level 2</b> – The proposed action meets the criteria for Categorical Exclusion Manual Level 2 - table 1, CE Level Thresholds. Required Signatories: ESM (Environmental Scoping Manager)       |
|          | <b>Categorical Exclusion, Level 3</b> – The proposed action meets the criteria for Categorical Exclusion Manual Level 3 - table 1, CE Level Thresholds. Required Signatories: ESM, ES (Environmental Services Division) |
|          | <b>Categorical Exclusion, Level 4</b> – The proposed action meets the criteria for Categorical Exclusion Manual Level 4 - table 1, CE Level Thresholds. Required Signatories: ESM, ES, FHWA                             |
|          | <b>Environmental Assessment (EA)</b> – EAs require a separate FONSI. Additional research and documentation is necessary to determine the effects on the environment. Required Signatories: ES, FHWA                     |

Note: For documents prepared by or for Environmental Services Division, it is not necessary for the ESM of the district in which the project is located to release for public involvement or sign for approval.

**Approval**

|                         |               |                       |               |
|-------------------------|---------------|-----------------------|---------------|
| _____<br>ESM Signature  | _____<br>Date | _____<br>ES Signature | _____<br>Date |
| _____<br>FHWA Signature | _____<br>Date |                       |               |

**Release for Public Involvement**

|                       |               |                                               |
|-----------------------|---------------|-----------------------------------------------|
| N/A                   |               | 6/10/2020                                     |
| _____<br>ESM Initials | _____<br>Date | <u>BDM</u> <u>REB</u><br>_____<br>ES Initials |
|                       |               | _____<br>Date                                 |

**Certification of Public Involvement** \_\_\_\_\_  
Office of Public Involvement Date

Note: Do not approve until after Section 106 public involvement and all other environmental requirements have been satisfied.

INDOT ES/District Env.  
Reviewer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name and Organization of CE/EA Preparer: Aimee Cooper – Beam, Longest, and Neff, LLC

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Part I - PUBLIC INVOLVEMENT

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

Does the project have a historic bridge processed under the Historic Bridges PA\*? [ ] [X]
If No, then:
Opportunity for a Public Hearing Required? [X] [ ]

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

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

Remarks: Notice of Entry
Notice of Entry letters were mailed to potentially affected property owners near the project area on June 5, 2018 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.
Section 106
The project qualifies under the Minor Projects Programmatic Agreement, Category B-1. Federal Highway Administration (FHWA) responsibilities under Section 106 are satisfied.
Project Does Meet
The project will meet the minimum requirements described in the current Indiana Department of Transportation (INDOT) Public Involvement Manual which requires the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

Public Controversy on Environmental Grounds
Will the project involve substantial controversy concerning community and/or natural resource impacts? [ ] [X]

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

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

Sponsor of the Project: City of Boonville INDOT District: Vincennes
Local Name of the Facility: Third Street

Funding Source (mark all that apply): Federal [X] State [ ] Local [X] Other\* [ ]

\*If other is selected, please identify the funding source: N/A

PURPOSE AND NEED:

Describe the transportation problem that the project will address. The solution to the traffic problem should NOT be discussed in this section. (Refer to the CE Manual, Section IV.B.2. Purpose and Need)

Need: The need for the project is due to the current pavement being distressed, and the surface is exhibiting significant wear. Resurfacing of the pavement over the years has reduced the exposure of the curb surface and the surface water drainage is inadequate. The current sidewalks are deteriorated and do not provide continuous pedestrian routes due to missing sections of sidewalk and deteriorated conditions.

Purpose: The purpose of this project is to improve the current condition of the existing pavement, sidewalks, curbs, and roadside drainage of the existing Third Street, for both motorized and non-motorized traffic.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Warrick Municipality: City of Boonville

Limits of Proposed Work: From Sycamore Street to 460 feet north of Olive Street

Total Work Length: 0.69 Mile(s) Total Work Area: 4.7 Acre(s)

Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required? Yes No
If yes, when did the FHWA grant a conditional approval for this project? Date: X

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

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*In the remarks box below, describe existing conditions, provide in detail the scope of work for the project, including the preferred alternative. Include a discussion of logical termini. Discuss any major issues for the project and how the project will improve safety or roadway deficiencies if these are issues.*

**Location:**

The project is on the near northwest side of the City of Boonville in Boon Township, Warrick County, Indiana. Specifically, the project is located in Section 26, Township 5 South, Range 8 West, as shown on the *Boonville, Indiana 7.5-minute USGS quadrangle map*. The proposed improvements will extend from Sycamore Street to 460 feet north of Olive Street (NCL Boonville); the total project length is approximately 0.69 miles. Location can be shown in the site map and aerial map (Appendix B-1)

**Existing Conditions:**

Third Street is a two-lane, north/south roadway that is approximately 30 feet wide (two travel lanes at 15 feet each) bordered by concrete curbs and/or asphalt shoulders that vary from 0 to 3 feet wide. The existing right-of-way varies from 24 feet to 60 feet in width. Third Street was formerly SR 61, but was relinquished to the City of Boonville subsequent to construction of a bypass around the west side of the city. Third Street is still classified as an Urban Principal Arterial. Third Street is not an element of the National Highway System or the National Truck Route. Third Street serves as a gateway for access into the City of Boonville from Interstate 64 to the north, and rural Warrick County. The horizontal alignment of the roadway is tangent, and the vertical alignment is at grade. The posted speed limit is 30 mph. Overhead utility lines run parallel to both sides of Third Street, and a six-inch natural gas line passes under the roadway near Centennial Street. Drainage along Third Street is handled via curb inlets, which are connected to an existing combined sanitary/storm sewer trunk line.

**Preferred Alternative:**

It is proposed to provide two 11 feet wide travel lanes bordered by concrete curb and gutter. New curb inlets will be installed to channel stormwater to outlet to the existing trunk line. As part of this project, patching of the existing pavement at defined locations will be completed before the roadway is milled and resurfaced to improve functional and structural life of the pavement. The proposed design speed of 30 mph will match the current posted speed limit along the corridor. The existing horizontal alignment and vertical profile for the proposed roadway will essentially remain the same to reduce additional right-of-way requirements and impacts to utilities. The existing sidewalks and access ramps have been evaluated for Americans with Disabilities Act (ADA) compliance and will be repaired or replaced as necessary. New street lighting will be installed to provide safer travel for all users of the corridor. Project plans can be found in Appendix B-10.

Reducing the pavement width has the benefit of increasing green space along the corridor and reducing the amount of stormwater runoff. The additional greenspace will allow trees to be planted between the sidewalks and the curbs. Separation between the sidewalks and travel lanes will also improve safety for pedestrians using the sidewalks. Completion of the Boonville Bypass will reduce the number of trucks using Third Street and the need for wider travel lanes. It is anticipated that a maximum of 1.5 acres of additional permanent and 0.25 acre of temporary right-of-way will be required. The estimated construction cost is \$3,100,000.00 (2022)

A maintenance of traffic (MOT) plan was developed in coordination with the City and the Indiana Department of Transportation (INDOT). The road will be closed to through traffic during construction and the bypass will be used as the detour route. A detour route utilizing West Main Street to North Eskew Road to New Harmony Road will be marked for use, an approximate 5.3-mile route. Third Street will be closed one block at a time. Cross streets will remain open. Access to local businesses and residences will be maintained throughout the whole project.

Upon the completion of construction, the structural deficiencies of the existing pavement, sidewalks/access ramps and poor (surface) drainage will be improved. Pedestrian and other non-motorized traffic will be enhanced by the construction, providing increased safety for all these modes of transportation.

Termini will be from the intersection of Sycamore Street and 3<sup>rd</sup> Street to 460 feet north of Olive Street on 3<sup>rd</sup> Street. Utility will be independent as the roadway and sidewalks will be connected to existing roadways and sidewalks and ensure continuity





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Remarks: The MOT for the project will require the closure of Third Street to through traffic only during construction. A detour route utilizing W Main St to N Eskew Rd to New Harmony Rd will be marked for use, an approximate 5.3-mile route. Access to local businesses and residences will be maintained throughout the whole project. Third Street will be closed one block at a time. Cross streets will remain open.

The 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 will cease upon project completion. Delays may occur during construction but will cease with project completion.

**ESTIMATED PROJECT COST AND SCHEDULE:**

Engineering: \$ 600,000 (2019) Right-of-Way: \$ 548,250 (2020) Construction: \$ 3,100,000 (2022)

Anticipated Start Date of Construction: Summer 2020

Date project incorporated into STIP July 2, 2019

Is the project in an MPO Area? **Yes** **No**

If yes,  
 Name of MPO Evansville Metropolitan Planning Organization

Location of Project in TIP Page 81 in 2020-2024 TIP (Appendix H)

Date of incorporation by reference into the STIP July 2, 2019

**RIGHT OF WAY:**

| Land Use Impacts     | Amount (acres) |             |
|----------------------|----------------|-------------|
|                      | Permanent      | Temporary   |
| Residential          | 1.50           | 0.25        |
| Commercial           | 0.00           | 0.00        |
| Agricultural         | 0.00           | 0.00        |
| Forest               | 0.00           | 0.00        |
| Wetlands             | 0.00           | 0.00        |
| Other:               | 0.00           | 0.00        |
| Other:               | 0.00           | 0.00        |
| <b>TOTAL (Acres)</b> | <b>1.50</b>    | <b>0.25</b> |

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

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Remarks: The existing right-of-way is approximately 60 feet of platted right-of-way in segments with a width of 24 feet assumed based on the limits of the existing pavement. There is no record of right-of-way in non-platted segments.

The project requires approximately 1.5 acres of permanent right-of-way from residential properties adjacent to Third Street. The project also requires approximately 0.25 acre of temporary right-of-way from residential properties adjacent to Third Street for grading and construction of private sidewalks and steps.

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

**SECTION A – ECOLOGICAL RESOURCES**

|                                                                   | <u>Presence</u> | <u>Impacts</u> |           |
|-------------------------------------------------------------------|-----------------|----------------|-----------|
|                                                                   |                 | <u>Yes</u>     | <u>No</u> |
| <b>Streams, Rivers, Watercourses &amp; Jurisdictional Ditches</b> |                 |                |           |
| Federal Wild and Scenic Rivers                                    |                 |                |           |
| State Natural, Scenic or Recreational Rivers                      |                 |                |           |
| Nationwide Rivers Inventory (NRI) listed                          |                 |                |           |
| Outstanding Rivers List for Indiana                               |                 |                |           |
| Navigable Waterways                                               |                 |                |           |

Remarks: **No presence, no impact:**  
 Based on a desktop review, a site visit on October 2, 2018 by BLN personnel, the aerial map of the project area (Appendix B-3), and the water resources map in the Red Flag Investigation (RFI) report (Appendix E-1), there is one stream within the 0.5 mile search radius. The nearest river or stream is 2,165 feet (0.41 mile) west of the project area. There are no other rivers or streams within the 0.5-mile search radius. Therefore, no impacts are expected.

**Early Coordination:**  
 Early coordination letters were sent to the Indiana Department of Natural Resources (IDNR), Indiana Department of Environmental Management (IDEM), and United States Fish and Wildlife Service (USFWS) on February 13, 2019. In their letter dated July 6, 2019, the IDNR recommended that all bare and disturbed land is re-vegetated as soon as possible upon project completion and that appropriate design erosion control measures be implemented and maintained for the duration of the project. IDEM made comments that applicable water impacts should be properly permitted. USFWS states that any work below low-water in streams should be restricted. All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

|                                   | <u>Presence</u> | <u>Impacts</u> |           |
|-----------------------------------|-----------------|----------------|-----------|
|                                   |                 | <u>Yes</u>     | <u>No</u> |
| <b>Other Surface Waters</b>       |                 |                |           |
| Reservoirs                        |                 |                |           |
| Lakes                             |                 |                |           |
| Farm Ponds                        |                 |                |           |
| Detention Basins                  |                 |                |           |
| Storm Water Management Facilities |                 |                |           |

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Other: \_\_\_\_\_

Remarks: **No presence, no impact:**  
 Based on a desktop review, a site visit on October 2, 2018 by BLN personnel, the aerial map of the project area (Appendix B-3), and the water resources map in the RFI report (Appendix E-1), there are 20 lakes located within the 0.5 mile search radius. The nearest lake is 106 feet (0.02 miles) north of the project area. Therefore, no impacts are expected.

**Early Coordination:**  
 Early coordination letters were sent to IDNR, IDEM, and USFWS on February 13, 2019. In their letter dated July 6, 2018, the IDNR recommended that all bare and disturbed land is re-vegetated as soon as possible upon project completion and that appropriate design erosion control measures be implemented and maintained for the duration of the project. IDEM made comments that applicable water impacts should be properly permitted. USFWS states that any work below low-water in streams should be restricted. All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

|                 |                          |                          |                          |
|-----------------|--------------------------|--------------------------|--------------------------|
|                 | <b><u>Presence</u></b>   | <b><u>Impacts</u></b>    |                          |
|                 |                          | <b>Yes</b>               | <b>No</b>                |
| <b>Wetlands</b> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Total wetland area: N/A acre(s) Total wetland area impacted: N/A acre(s)

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

| Wetland No. | Classification | Total Size (Acres) | Impacted Acres | Comments |
|-------------|----------------|--------------------|----------------|----------|
|             |                |                    |                |          |

|                                       |                             |                                 |
|---------------------------------------|-----------------------------|---------------------------------|
|                                       | <b><u>Documentation</u></b> | <b><u>ES Approval Dates</u></b> |
| <b>Wetlands</b> (Mark all that apply) |                             |                                 |
| Wetland Determination                 | <input type="checkbox"/>    | <input type="checkbox"/>        |
| Wetland Delineation                   | <input type="checkbox"/>    | <input type="checkbox"/>        |
| USACE Isolated Waters Determination   | <input type="checkbox"/>    | <input type="checkbox"/>        |
| Mitigation Plan                       | <input type="checkbox"/>    | <input type="checkbox"/>        |

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

|                                                                                       |                          |
|---------------------------------------------------------------------------------------|--------------------------|
| Substantial adverse impacts to adjacent homes, business or other improved properties; | <input type="checkbox"/> |
| Substantially increased project costs;                                                | <input type="checkbox"/> |
| Unique engineering, traffic, maintenance, or safety problems;                         | <input type="checkbox"/> |
| Substantial adverse social, economic, or environmental impacts, or                    | <input type="checkbox"/> |
| The project not meeting the identified needs.                                         | <input type="checkbox"/> |

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Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.

Remarks: **No presence, no impact:**  
 Based on a review of the National Wetlands Inventory (NWI) online mapper (<https://www.fws.gov/wetlands/data/Mapper.html>), the USGS topographic map (Appendix B-2), and the RFI report (Appendix E-1) showed there are 29 NWI wetlands located within the 0.5 mile search radius. The nearest wetland is 435 feet (0.08 miles) north of the project area. A site visit was conducted on October 2, 2018 by BLN personnel and no wetland areas were located along the project corridor. There are no other wetlands closer to the corridor than 425 feet (0.08 mile). Therefore, no impacts are expected.

**Early Coordination:**  
 Early coordination letters were sent to IDNR, IDEM, and USFWS on February 13, 2019. In their letter dated July 6, 2018, the IDNR recommended that all bare and disturbed land is re-vegetated as soon as possible upon project completion and that appropriate design erosion control measures be implemented and maintained for the duration of the project. IDEM made comments that applicable water impacts should be properly permitted. USFWS states that any work below low-water in streams should be restricted. All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

|                                | <b><u>Presence</u></b>              | <b><u>Impacts</u></b>               |                          |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|
|                                |                                     | Yes                                 | No                       |
| <b>Terrestrial Habitat</b>     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Unique or High-Quality Habitat | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |

Use the remarks box to identify each type of habitat and the acres impacted (i.e. forested, grassland, farmland, lawn, etc).

Remarks: **Presence, with impact:**  
 Based on a desktop review, a site visit on October 2, 2018 by BLN personnel, the aerial map of the project area (Appendix B-3) there is terrestrial habitat. The terrestrial habitat located within the project area includes trees. Five trees are located within the project area that will be removed. These include the following characterized by their diameters at breast height (DBH): a 4" Maple, a 4" Redbud, a 12" Poplar, a 36" Maple, and a 4" Redbud. This is approximately 0.45 acres of tree removal.

**Early Coordination:**  
 Early coordination letter was sent to IDNR and USFWS on February 13, 2019. The agency issued recommendations to minimize adverse impacts on terrestrial resources. In their letter dated July 6, 2018, the IDNR recommended that all bare and disturbed land is re-vegetated as soon as possible upon project completion and that appropriate design erosion control measures be implemented and maintained for the duration of the project. USFWS commented that the project should not clear trees or understory vegetation outside the construction zone boundaries. All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole corridor for animal movement, consideration of utilizing wildlife crossings should be taken.

|                                                                                            | <b><u>Yes</u></b>        | <b><u>No</u></b>                    |
|--------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|
| <b>Karst</b>                                                                               |                          | <input checked="" type="checkbox"/> |
| Is the proposed project located within or adjacent to the potential Karst Area of Indiana? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Are karst features located within or adjacent to the footprint of the proposed project?    | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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If yes, will the project impact any of these karst features?

*Use the remarks box to identify any karst features within the project area. (Karst investigation must comply with the Karst MOU, dated October 13, 1993)*

Remarks: **Outside karst area:**  
 Based on a desktop review, the topo map of the project area (Appendix B-2), the proposed project is located outside the designated karst region of Indiana as outlined in the October 13, 1993 Memorandum of Understanding (MOU). There are no karst features identified within the project area. In the early coordination response, the Indiana Geological Survey (IGS) did not indicate that karst features may exist in the project area (Appendix C-14). IGS did indicate that there are active and abandoned underground and surface coal mines in the area. The features will not be affected because of their locations outside of the project corridor. Therefore, no impacts are expected.

**Early Coordination:**  
 Early coordination letters were sent to the IGS on February 13, 2019. In their letter dated February 19, 2019, the IGS provided an Environmental Assessment Report. The IGS response was provided to the designer on January 7, 2020. All applicable IGS recommendations are included in the Environmental Commitments section of this CE document.

| <b>Threatened or Endangered Species</b>                                  | <u>Presence</u>                     | <u>Impacts</u>           |                                     |
|--------------------------------------------------------------------------|-------------------------------------|--------------------------|-------------------------------------|
|                                                                          |                                     | Yes                      | No                                  |
| Within the known range of any federal species                            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Any critical habitat identified within project area                      | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| Federal species found in project area (based upon informal consultation) | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| State species found in project area (based upon consultation with IDNR)  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |

Is Section 7 formal consultation required for this action?  Yes  No

Remarks: Based on a desktop review and the RFI (Appendix E-1), completed by BLN personnel on October 17, 2018 the IDNR Warrick County Endangered, Threatened and Rare (ETR) Species List has been checked and is included in (Appendix E-13). The highlighted species on the list reflect the federal and state identified ETR species located within the county. According to the IDNR-DFW early coordination response letter dated March 15, 2019 (Appendix C-13), the Natural Heritage Program's Database has 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.

**Indiana Bat and Northern Long-Eared Bat**

**Bats, Programmatic Informal Consultation – Not Likely to Adversely Affect**  
 The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and the northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), and USFWS. Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix I-1) and no additional species were found within the project area. Warrick County is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat

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(*Myotis septentrionalis*). In addition, an effect determination key was completed on June 13, 2019, and based on the responses provided, the project was found to be “not likely to adversely affect” the Indiana bat and/or the NLEB (Appendix I-7). INDOT reviewed and verified the effect finding on June 13, 2019 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. Avoidance and Mitigation Measures (AMMs) are included as firm commitments in the Environmental Commitments section of this document. 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.

**SECTION B – OTHER RESOURCES**

|                                 | <u>Presence</u> | <u>Impacts</u> |           |
|---------------------------------|-----------------|----------------|-----------|
|                                 |                 | <u>Yes</u>     | <u>No</u> |
| <b>Drinking Water Resources</b> |                 |                |           |
| Wellhead Protection Area        |                 |                |           |
| Public Water System(s)          | <b>X</b>        |                | <b>X</b>  |
| Residential Well(s)             |                 |                |           |
| Source Water Protection Area(s) | <b>X</b>        |                | <b>X</b>  |
| Sole Source Aquifer (SSA)       |                 |                |           |

If a SSA is present, answer the following:

|                                                  | <u>Yes</u> | <u>No</u> |
|--------------------------------------------------|------------|-----------|
| Is the Project in the St. Joseph Aquifer System? |            |           |
| Is the FHWA/EPA SSA MOU Applicable?              |            |           |
| Initial Groundwater Assessment Required?         |            |           |
| Detailed Groundwater Assessment Required?        |            |           |

Remarks:

**Sole Source Aquifer**  
**Outside of Sole Source Aquifer (SSA):**  
 The project is located in Warrick 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/Environmental Protection Agency (EPA) Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project. No impacts are expected.

**Source Water Area**  
**Located in a Source Water Area:**  
 The Indiana Department of Environmental Management’s (IDEM) Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on March 12, 2019 by BLN personnel. This project is located within a Source Water Area. The features will not be affected due to the nature of the project. The contact person for Evansville Water Utility, Richard L. Glover, was emailed on July 23, 2019. No response was received.

**Water Wells**  
**No wells present, no impacts:**  
 The Indiana Department of Natural Resources Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on March 12, 2019 by BLN personnel. No wells are located near this project. Therefore, no impacts are expected.

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**Urban Area Boundary**  
**In an Urban Area Boundary Location:**  
 Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) by BLN personnel on January 15, 2019 and the RFI report (Appendix E-1); this project is located in an Urban Area Boundary (UAB) location. An early coordination letter was sent on February 13, 2019, to the City of Boonville and the Evansville Metropolitan Planning Organization (MPO). The MS4 coordinator did not respond within the 30-day time frame.

**Public Water System**  
**In a Public Water System Location**  
 Based on a desktop review, a site visit on October 2, 2018 by BLN personnel, the aerial map of the project area (Appendix B-3), this project is located where there is a public water system. The public water system will be affected because a water line will require relocation due to curb inlets. An early coordination letter was sent on February 13, 2019, to the City of Boonville. No response was received.

| <b>Flood Plains</b>                                                 | <b>Presence</b>          | <b>Impacts</b>           |                          |
|---------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
|                                                                     |                          | <b>Yes</b>               | <b>No</b>                |
| Longitudinal Encroachment                                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Transverse Encroachment                                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Project located within a regulated floodplain                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Homes located in floodplain within 1000' up/downstream from project | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Remarks: *Discuss impacts according to classification system described in the "Procedural Manual for Preparing Environmental Studies".*  
**Not in floodplain**  
 The Indiana Department of Natural Resources Indiana Floodway Information Portal website (<http://dnrmmaps.dnr.in.gov/appsphp/fdms/>) was accessed on March 12, 2019 by BLN personnel. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F-2). 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.

| <b>Farmland</b>           | <b>Presence</b>          | <b>Impacts</b>           |                          |
|---------------------------|--------------------------|--------------------------|--------------------------|
|                           |                          | <b>Yes</b>               | <b>No</b>                |
| Agricultural Lands        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Prime Farmland (per NRCS) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Total Points (from Section VII of CPA-106/AD-1006\* \_\_\_\_\_  
*\*If 160 or greater, see CE Manual for guidance.*

Remarks: *See CE Manual for guidance to determine which NRCS form is appropriate for your project.*  
**No presence, no impact**  
 Based on a desktop review, a site visit on October 2, 2018 by BLN personnel, the aerial map of the project area (Appendix B-3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected.

**SECTION C – CULTURAL RESOURCES**

| Category | Type | INDOT Approval Dates | N/A |
|----------|------|----------------------|-----|
|----------|------|----------------------|-----|

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Minor Projects PA Clearance 

|          |          |
|----------|----------|
| <b>B</b> | <b>1</b> |
|----------|----------|

|                      |
|----------------------|
| <b>April 4, 2019</b> |
|----------------------|

**Eligible and/or Listed  
Resource Present**

**Results of Research**

Archaeology 



  
 NRHP Buildings/Site(s) 



  
 NRHP District(s) 



  
 NRHP Bridge(s)

**Project Effect**

No Historic Properties Affected  No Adverse Effect  Adverse Effect

**Documentation  
Prepared**

**Documentation** (mark all that apply)

|                                              | <b>ES/FHWA<br/>Approval Date(s)</b>                           | <b>SHPO<br/>Approval Date(s)</b>                              |
|----------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Historic Properties Short Report             | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| Historic Property Report                     | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| Archaeological Records Check/ Review         | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| Archaeological Phase Ia Survey Report        | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| Archaeological Phase Ic Survey Report        | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| Archaeological Phase II Investigation Report | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| Archaeological Phase III Data Recovery       | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| APE, Eligibility and Effect Determination    | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |
| 800.11 Documentation                         | <table border="1" style="width: 100%; height: 20px;"></table> | <table border="1" style="width: 100%; height: 20px;"></table> |

Memorandum of Agreement (MOA)

**MOA Signature Dates** (List all signatories)

*Describe all efforts to document cultural resources, including a detailed summary of the Section 106 process, using the categories outlined in the remarks box. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of paper(s) and the comment period deadline. Likewise include any further Section 106 work which must be completed at a later date, such as mitigation or deep trenching.*

Remarks: 

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Minor Project PA Category B projects:</b><br/>                     On April 4, 2019 the INDOT Cultural Resources Office (CRO) determined that this project falls within the guidelines of Category B, Type 1 under the Minor Projects Programmatic Agreement, (Appendix D-1), which includes projects that are replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when projects are associated with roadway work such as surface replacement, reconstruction, rehabilitation, or resurfacing projects.</p> <p>A qualified professional archaeologist conducted a records check and field reconnaissance. The records check and field reconnaissance did not identify any cultural materials within the project area. No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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**SECTION D – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES**

**Section 4(f) Involvement** (mark all that apply)

**Parks & Other Recreational Land**

- Publicly owned park
- Publicly owned recreation area
- Other (school, state/national forest, bikeway, etc.)

Presence

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

Use

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

Evaluations

Prepared

- Programmatic Section 4(f)\*
- “De minimis” Impact\*
- Individual Section 4(f)

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FHWA  
Approval date

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**Wildlife & Waterfowl Refuges**

- National Wildlife Refuge
- National Natural Landmark
- State Wildlife Area
- State Nature Preserve

Presence

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

Use

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

Evaluations

Prepared

- Programmatic Section 4(f)\*
- “De minimis” Impact\*
- Individual Section 4(f)

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FHWA  
Approval date

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**Historic Properties**

- Sites eligible and/or listed on the NRHP

Presence

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

Use

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

Evaluations

Prepared

- Programmatic Section 4(f)\*
- “De minimis” Impact\*
- Individual Section 4(f)

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FHWA  
Approval Date

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*\*FHWA approval of the environmental document also serves as approval of any Section 4f Programmatic and/or De minimis evaluation(s) discussed below. Discuss Programmatic Section 4(f) and "de minimis" Section 4(f) impacts in the remarks box below. Individual Section 4(f) documentation must be separate Draft and Final documents. For further discussions on Programmatic, "de minimis" and Individual Section 4(f) evaluations please refer to the "Procedural Manual for the Preparation of Environmental Studies". Discuss proposed alternatives that satisfy the requirements of Section 4(f).*

Remarks: **No presence, no impact:**  
 Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife / waterfowl refuges, and NRHP eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.  
  
 Based on a desktop review, a site visit on October 2, 2018 by BLN personnel, the aerial map of the project area (Appendix B-3), and the RFI report (Appendix E-1) there are no Section 4(f) resources within or adjacent to the project area. Therefore, no impacts are expected.

**Section 6(f) Involvement** Presence Use  
Yes No  
**Section 6(f) Property**

*Discuss proposed alternatives that satisfy the requirements of Section 6(f). Discuss any Section 6(f) involvement.*

Remarks: **No presence, no impact:**  
 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 Land and Water Conservation Fund (LWCF) website at <https://www.lwcfcoalition.com/tools> revealed a total of zero properties in Warrick County (Appendix I-1). Therefore, there will be no impacts to 6(f) resources as a result of this project.

**SECTION E – Air Quality**

**Air Quality**

| <b>Conformity Status of the Project</b>                              | <b>Yes</b>                          | <b>No</b>                           |
|----------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Is the project in an air quality non-attainment or maintenance area? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| If YES, then:                                                        |                                     |                                     |
| Is the project in the most current MPO TIP?                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Is the project exempt from conformity?                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| If the project is NOT exempt from conformity, then:                  |                                     |                                     |
| Is the project in the Transportation Plan (TP)?                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Is a hot spot analysis required (CO/PM)?                             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Level of MSAT Analysis required?

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

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Remarks: **STIP/TIP**  
 This project is included in the Fiscal Year (FY) 2020-2024 Evansville Metropolitan Planning Organization Transportation Improvement Program (MPO TIP) and the 2020-2024 Statewide Transportation Improvement Program (STIP) (Appendix H-1).

**Attainment Status**  
**Maintenance area**  
**Ozone:** This project is located in Warrick County, which is currently a maintenance area for 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. The projects design concept and scope are accurately reflected in both the Evansville Metropolitan Planning Organization Transportation Plan (TP) and the Transportation Improvement Program (TIP) and both conform to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.

**MSAT**  
**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.

**SECTION F - NOISE**

|                                                                                                    |                          |                                     |
|----------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|
| <b>Noise</b>                                                                                       | <b>Yes</b>               | <b>No</b>                           |
| Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

|                                    | No                       | Yes/ Date                |
|------------------------------------|--------------------------|--------------------------|
| <b>ES Review of Noise Analysis</b> | <input type="checkbox"/> | <input type="checkbox"/> |

Remarks: **Type III Project:**  
 This project is a Type III project. In accordance with 23 CFR 772 and the current *Indiana Department of Transportation Traffic Noise Analysis Procedure*, this action does not require a formal noise analysis.

**SECTION G – COMMUNITY IMPACTS**

|                                                                                              | Yes                                 | No                                  |
|----------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Will the proposed action comply with the local/regional development patterns for the area?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Will the proposed action result in substantial impacts to community cohesion?                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Will the proposed action result in substantial impacts to local tax base or property values? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Will construction activities impact community events (festivals, fairs, etc.)?               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Does the community have an approved transition plan?                                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| If No, are steps being made to advance the community's transition plan?                      | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Does the project comply with the transition plan? (explain in the remarks box)               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

Remarks: There may be temporary inconveniences associated with construction such as increased travel times, possible construction noise and fugitive dust. There will be no substantial impacts on community cohesion or property

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values as a result of the project. Furthermore, no permanent or temporary economic effects are expected to result from the proposed project. Acquisition of the additional permanent and temporary right-of-way would not appreciably affect the property tax base of the City of Boonville or Warrick County. A review of the City of Boonville website and www.fairsandfestivals.net, an online resource for local fairs and festivals, there are no scheduled festivals or other public events that will be impacted as a result of the project. As required by the Americans with Disabilities Act (ADA) each of the communities within Warrick County, as well as the city itself, has developed an ADA Transition Plan. The proposed project complies with the Warrick County ADA Transition Plan. In addition, the project complies with local and regional development patterns for the area. The existing sidewalks and access ramps will be evaluated for ADA compliance and repaired or replaced as necessary.

Indirect and Cumulative Impacts

Will the proposed action result in substantial indirect or cumulative impacts?

Yes No [ ] [X]

Remarks:

Indirect impacts are effects which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate. Cumulative impacts affect the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions. Because this project is a serviceability improvement project, it will not contribute to or stimulate an increase in commercial or residential development in the project area. No change in land use, population density, or growth rate is expected as a result of the project. No indirect or cumulative impacts are expected as a result of the project.

Public Facilities & Services

Will the proposed action result in substantial impacts on health and educational facilities, public and private utilities, emergency services, religious institutions, airports, public transportation or pedestrian and bicycle facilities? Discuss how the maintenance of traffic will affect public facilities and services.

Yes No [ ] [X]

Remarks:

Presence, no impacts: Based on a desktop review, a site visit on October 2, 2018 by BLN personnel, the aerial map of the project area (Appendix B-3), and the RFI report (Appendix E-1), there are 11 religious facilities, two cemeteries, one airport, four schools, five recreational facilities, three pipelines, a railroad and a managed land located within the 0.5 mile radius of the project. One underground natural gas pipeline runs through the project area north of Mill St. This pipeline will not be affected by the proposed project. Water lines will be relocated to match the planned curb inlets. Access to all properties will be maintained during construction. Therefore, no permanent impacts are expected. Early Coordination: Early coordination letters were sent to the City of Boonville and the Evansville MPO on February 11, 2019. Neither agency respond to the early coordination letter. Clark – Dietz Inc., a subconsultant, coordinated with the utility that owns the natural gas pipeline. At this time, the company poses no objections to the project. It is the responsibility of the project sponsor to notify school corporation and emergency services at least two weeks prior to any construction that would block or limit access.

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**Environmental Justice (EJ)** (Presidential EO 12898)

During the development of the project were EJ issues identified?

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

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

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

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

Remarks:

**EJ Analysis, No EJ Populations**

Under FHWA Order 6640.23A, FHWA and the City of Boonville, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent right-of-way. The project will require 1.5 acres of additional permanent right-of-way from residential properties adjacent to Third Street. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Warrick County, IN. The community that overlaps the project limits is called the affected community (AC). In this project, the AC is Boonville, IN. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the Census Tract 306 was obtained from the US Census Bureau Website <https://factfinder.census.gov/> on January 2, 2020 by BLN personnel. The data collected for minority and low-income populations within the AC are summarized in the below table.

| Table: Minority and Low-Income Data (ACS, 2013-2017) |                    |                  |
|------------------------------------------------------|--------------------|------------------|
|                                                      | COC Warrick County | AC Boonville, IN |
| Percent Minority                                     | 7.20               | 8.32             |
| 125% of COC                                          | 9.00               |                  |
| EJ Population of Concern                             |                    | No               |
| Percent Low-Income                                   | 7.69               | 17.61            |
| 125% of COC                                          | 9.61               |                  |
| EJ Population of Concern                             |                    | Yes              |

AC, Boonville, IN has a percent minority of 8.32% which is below 50% and is below the 125% COC threshold. Therefore, AC does not contain minority populations of EJ concern.

AC, Boonville, IN has a percent low-income of 17.61% which is below 50% and is above the 125% COC threshold. Therefore, AC is a low-income populations of EJ concern.

**Conclusion**

Approximately 1.5 acres of permanent residential right-of-way and 0.25 acres of temporary residential right-of-way will be required for this project. No relocations, changes in access, or changes in community cohesion will occur. The affected community will see a net benefit because this project will separate the sidewalks and

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travel lanes which will improve safety for pedestrians using this sidewalks, trees will be planted between the travel lanes and sidewalks adding greenspace, and stormwater runoff will be reduced. On February 7, 2020 INDOT-ESD stated that they “would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low income populations of EJ concern relative to non EJ population in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.

**Relocation of People, Businesses or Farms**

|                                                                                   | Yes                                 | No                                  |
|-----------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Will the proposed action result in the relocation of people, businesses or farms? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Is a Business Information Survey (BIS) required?                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Is a Conceptual Stage Relocation Study (CSRS) required?                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Has utility relocation coordination been initiated for this project?              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

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

Remarks: *If a BIS or CSRS is required, discuss the results in the remarks box.*

**No Relocations**  
No relocations of people, businesses, or farms will take place as a result of this project.

**Utility Coordination**  
Utility coordination has been conducted by Clark Dietz Inc.

**SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES**

**Documentation**

**Hazardous Materials & Regulated Substances** (Mark all that apply)

|                                                       |                                     |
|-------------------------------------------------------|-------------------------------------|
| Red Flag Investigation                                | <input checked="" type="checkbox"/> |
| Phase I Environmental Site Assessment (Phase I ESA)   | <input type="checkbox"/>            |
| Phase II Environmental Site Assessment (Phase II ESA) | <input type="checkbox"/>            |
| Design/Specifications for Remediation required?       | <input type="checkbox"/>            |

|                                    | No                       | Yes/ Date        |
|------------------------------------|--------------------------|------------------|
| <b>ES Review of Investigations</b> | <input type="checkbox"/> | January 15, 2019 |

Remarks: *Include a summary of findings for each investigation.*

**Presence, no impact**  
Based on a review of GIS and available public records, a Red Flag Investigation (RFI) was completed on October 17, 2018 by BLN personnel and approved on January 15, 2019 by INDOT Environmental Services (Appendix E-1). One state cleanup site, seven underground storage tanks (UST), six leaking underground storage tanks (LUSTs), one restricted waste site and five brownfields are located within 0.5 mile of the project area and one of the UST sites is located adjacent to the project area on the west side of Third Street at the intersection of Mill Street; however, no hazmat sites were identified in or within 0.5 mile of the project

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area that will impact the project. Other types of hazmat sites and the proximity of the nearest site to Third Street are as follows:

State cleanup site – 0.46 mile  
 LUST – 0.15 mile  
 Restricted waste site – Closed  
 Brownfield – 0.11 mile

No impacts are expected. Further investigation for hazardous material concerns is not required at this time.

**SECTION I – PERMITS CHECKLIST**

**Permits (mark all that apply)** Likely Required

|                                                         |  |                          |
|---------------------------------------------------------|--|--------------------------|
| <b>Army Corps of Engineers (404/Section10 Permit)</b>   |  |                          |
| Individual Permit (IP)                                  |  | <input type="checkbox"/> |
| Nationwide Permit (NWP)                                 |  | <input type="checkbox"/> |
| Regional General Permit (RGP)                           |  | <input type="checkbox"/> |
| Pre-Construction Notification (PCN)                     |  | <input type="checkbox"/> |
| Other                                                   |  | <input type="checkbox"/> |
| Wetland Mitigation required                             |  | <input type="checkbox"/> |
| Stream Mitigation required                              |  | <input type="checkbox"/> |
| <b>IDEM</b>                                             |  |                          |
| Section 401 WQC                                         |  | <input type="checkbox"/> |
| Isolated Wetlands determination                         |  | <input type="checkbox"/> |
| Rule 5                                                  |  | <b>X</b>                 |
| Other                                                   |  | <input type="checkbox"/> |
| Wetland Mitigation required                             |  | <input type="checkbox"/> |
| Stream Mitigation required                              |  | <input type="checkbox"/> |
| <b>IDNR</b>                                             |  |                          |
| Construction in a Floodway                              |  | <input type="checkbox"/> |
| Navigable Waterway Permit                               |  | <input type="checkbox"/> |
| Lake Preservation Permit                                |  | <input type="checkbox"/> |
| Other                                                   |  | <input type="checkbox"/> |
| Mitigation Required                                     |  | <input type="checkbox"/> |
| <b>US Coast Guard Section 9 Bridge Permit</b>           |  | <input type="checkbox"/> |
| <b>Others (Please discuss in the remarks box below)</b> |  | <input type="checkbox"/> |

Remarks: A Rule 5 Notice of Intent and erosion control plan will be necessary as more than one acre of land disturbance is anticipated.

Applicable recommendations provided by USFWS, INDOT, IDNR and IDEM are included in the Environmental Commitments section of this document. If a Rule 5 permit is found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.

It is the responsibility of the City of Boonville to identify and obtain all required permits.

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**SECTION J- ENVIRONMENTAL COMMITMENTS**

*The following information should be provided below: List all commitments, name of agency/organization requesting the commitment(s) and indicating which are firm and which are for further consideration. The commitments should be numbered.*

Remarks:

- Firm:**
1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT Vincennes District Environmental Section will be contacted immediately. (INDOT- ESD and INDOT Vincennes)
  2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT-ESD)
  3. General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
  4. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
  5. Lighting AMM 2: When installing new 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 BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three rating with a priority of “uplight” of 0 and “backlight” as low as practicable. (USFWS)
  6. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.
  7. Tree Removal AMM 2: Apply time of year restrictions for tree removal, April 1 through June 30<sup>th</sup>, when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of the year within 100 feet of existing road rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS)
  8. Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits.) (USFWS)
  9. Tree Removal AMM 4: Do not remove documented Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or documented forage habitat any time of the year. (USFWS)
- For Further Consideration:**
10. Plant five trees, at least two inches in diameter at breast height for each tree that is removed that is 10 inches or greater in diameter at breast height. (IDNR)

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|                                      |
|--------------------------------------|
| <b>SECTION K- EARLY COORDINATION</b> |
|--------------------------------------|

*Please list the date coordination was sent and all agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received. INDOT and FHWA are automatically considered early coordination participants and should only be listed if a response is received.*

Remarks: Early coordination was initiated on February 13, 2019 with applicable federal, state, and local agencies. A copy of the outgoing early coordination letter is included in Appendix C. The agencies that were contacted and the date on which they replied are identified below.

| EARLY COORDINATION RECIPIENTS          | RESPONSE RECEIVED | APPENDIX |
|----------------------------------------|-------------------|----------|
| National Park Service, Midwest Region  | No Response       | -        |
| Natural Resources Conservation Service | No Response       | -        |
| City of Boonville                      | No Response       | -        |
| Evansville MPO                         | No Response       | -        |
| IDEM – electronic response             | February 19, 2019 | C-4      |
| IDEM – Ground Water Section            | February 22, 2019 | C-8      |
| USFWS, Bloomington Field Office        | March 4, 2019     | C-10     |
| IDNR- Division of Fish and Wildlife    | March 15, 2019    | C-12     |
| Indiana Geological Survey              | February 19, 2019 | C-13     |
| INDOT Vincennes District               | February 15, 2019 | C-16     |

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# **Appendix A:**

# **INDOT Supporting Documentation**

## Categorical Exclusion Level Thresholds

|                                                                                                                                | PCE                                                                                                                            | Level 1                                                | Level 2                             | Level 3                      | Level 4 <sup>1</sup>                                         |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|------------------------------|--------------------------------------------------------------|
| <b>Section 106</b>                                                                                                             | Falls within guidelines of Minor Projects PA                                                                                   | "No Historic Properties Affected"                      | "No Adverse Effect"                 | -                            | "Adverse Effect" Or Historic Bridge involvement <sup>2</sup> |
| <b>Stream Impacts</b>                                                                                                          | No construction in waterways or water bodies                                                                                   | < 300 linear feet of stream impacts                    | ≥ 300 linear feet of stream impacts | -                            | Individual 404 Permit                                        |
| <b>Wetland Impacts</b>                                                                                                         | No adverse impacts to wetlands                                                                                                 | < 0.1 acre                                             | -                                   | < 1 acre                     | ≥ 1 acre                                                     |
| <b>Right-of-way<sup>3</sup></b>                                                                                                | Property acquisition for preservation only or none                                                                             | < 0.5 acre                                             | ≥ 0.5 acre                          | -                            | -                                                            |
| <b>Relocations</b>                                                                                                             | None                                                                                                                           | -                                                      | -                                   | < 5                          | ≥ 5                                                          |
| <b>Threatened/Endangered Species (Species Specific Programmatic for Indiana bat &amp; northern long eared bat)</b>             | "No Effect", "Not likely to Adversely Affect" (Without AMMs <sup>4</sup> or with AMMs required for all projects <sup>5</sup> ) | "Not likely to Adversely Affect" (With any other AMMs) | -                                   | "Likely to Adversely Affect" | Project does not fall under Species Specific Programmatic    |
| <b>Threatened/Endangered Species (Any other species)</b>                                                                       | Falls within guidelines of USFWS 2013 Interim Policy                                                                           | "No Effect", "Not likely to Adversely Affect"          | -                                   | -                            | "Likely to Adversely Affect"                                 |
| <b>Environmental Justice</b>                                                                                                   | No disproportionately high and adverse impacts                                                                                 | -                                                      | -                                   | -                            | Potential <sup>6</sup>                                       |
| <b>Sole Source Aquifer</b>                                                                                                     | Detailed Assessment Not Required                                                                                               | -                                                      | -                                   | -                            | Detailed Assessment                                          |
| <b>Floodplain</b>                                                                                                              | No Substantial Impacts                                                                                                         | -                                                      | -                                   | -                            | Substantial Impacts                                          |
| <b>Coastal Zone Consistency</b>                                                                                                | Consistent                                                                                                                     | -                                                      | -                                   | -                            | Not Consistent                                               |
| <b>National Wild and Scenic River</b>                                                                                          | Not Present                                                                                                                    | -                                                      | -                                   | -                            | Present                                                      |
| <b>New Alignment</b>                                                                                                           | None                                                                                                                           | -                                                      | -                                   | -                            | Any                                                          |
| <b>Section 4(f) Impacts</b>                                                                                                    | None                                                                                                                           | -                                                      | -                                   | -                            | Any                                                          |
| <b>Section 6(f) Impacts</b>                                                                                                    | None                                                                                                                           | -                                                      | -                                   | -                            | Any                                                          |
| <b>Added Through Lane</b>                                                                                                      | None                                                                                                                           | -                                                      | -                                   | -                            | Any                                                          |
| <b>Permanent Traffic Alteration</b>                                                                                            | None                                                                                                                           | -                                                      | -                                   | -                            | Any                                                          |
| <b>Coast Guard Permit</b>                                                                                                      | None                                                                                                                           | -                                                      | -                                   | -                            | Any                                                          |
| <b>Noise Analysis Required</b>                                                                                                 | No                                                                                                                             | -                                                      | -                                   | -                            | Yes                                                          |
| <b>Air Quality Analysis Required</b>                                                                                           | No                                                                                                                             | -                                                      | -                                   | -                            | Yes <sup>7</sup>                                             |
| <b>Approval Level</b>                                                                                                          | Concurrence by INDOT District Environmental or Environmental Services                                                          | Yes                                                    | Yes                                 | Yes                          | Yes                                                          |
| <ul style="list-style-type: none"> <li>• District Env. Supervisor</li> <li>• Env. Services Division</li> <li>• FHWA</li> </ul> |                                                                                                                                |                                                        |                                     | Yes                          | Yes                                                          |

<sup>1</sup>Coordinate with INDOT Environmental Services. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

<sup>2</sup>Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

<sup>3</sup>Permanent and/or temporary right-of-way.

<sup>4</sup>AMMs = Avoidance and Mitigation Measures.

<sup>5</sup>AMMs determined by the IPAC decision key to be needed that are listed in the USFWS *User's Guide for the Range-wide Programmatic Consultation for Indiana bat and Northern long-eared bat* as "required for all projects".

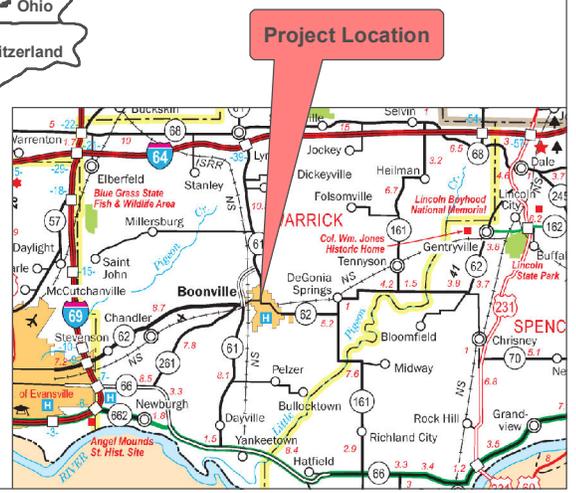
<sup>6</sup>Potential for causing a disproportionately high and adverse impact.

<sup>7</sup>Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

\*Substantial public or agency controversy may require a higher-level NEPA document.

# **Appendix B:**

## **Graphics**



Source: Indiana MAP  
 1:2,250,000  
 1 in = 187,500 ft

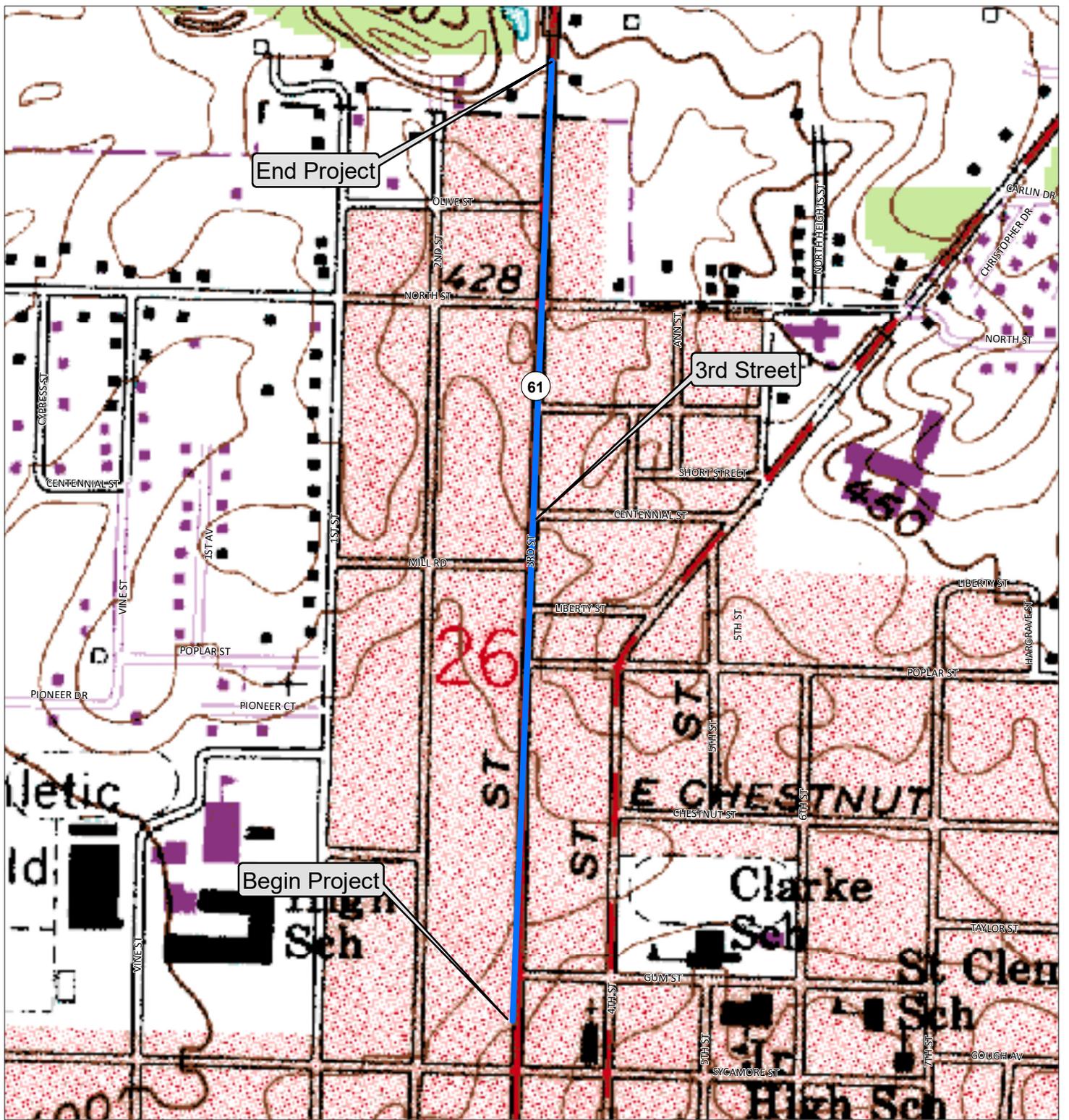
**Legend**

- Project County
- County Boundary



**Project Location Map**  
 Roadway Rehabilitation  
 3rd Street from Sycamore Street to 460 ft North of Olive  
 Street Warrick County, Indiana  
 Des. No. 1600891

June 14, 2018



Source: U.S. Geological Survey

1:6,000

1 in = 500 ft

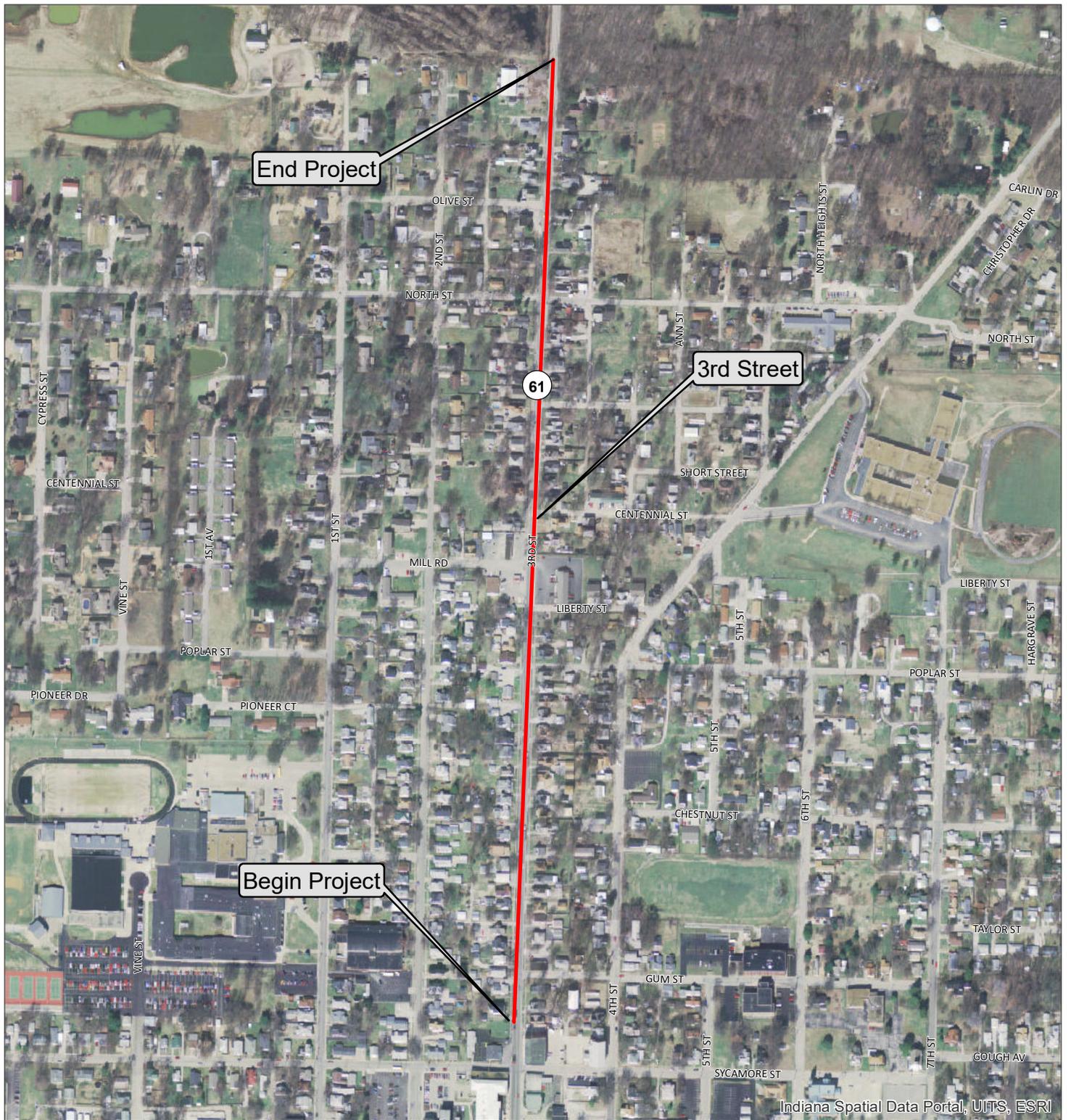


**USGS Topographic Map**  
 Roadway Rehabilitation  
 3rd Street from Sycamore Street to 460 ft North of Olive  
 Warrick County, Indiana  
 Des. No. 1600891

**Legend**

 Project Alignment

June 15, 2018



Indiana Spatial Data Portal, UITS, ESRI



Source: Indiana MAP  
 1:6,000  
 1 in = 500 ft



**Legend**

 Project Alignment

**Aerial Map**  
 Roadway Rehabilitation  
 3rd Street from Sycamore Street to 460 ft North of Olive  
 Warrick County, Indiana  
 Des. No. 1600891

June 15, 2018



**1. View Looking South on Third Street at North Terminus**



**2. View Looking North on Third Street at Olive Street**



**3. View Looking South on Third Street at Olive Street**



**4. View Looking North on Third Street at Center Street**

**Photo Log Taken October 2, 2018**

Roadway Rehabilitation  
3rd Street from Sycamore Street to 460 ft North of Olive  
Boonville, Warrick County, Indiana Des. No. 1600891



**5. View Looking North on Third Street at Centennial Street**



**6. View Looking South on Third Street at Centennial Street**

**Photo Log Taken October 2, 2018**

Roadway Rehabilitation  
3rd Street from Sycamore Street to 460 ft North of Olive  
Boonville, Warrick County, Indiana Des. No. 1600891



**7. View Looking North on Third Street at Liberty Street**



**8. View Looking East on Liberty Street at Third Street**



**9. View Looking North on Third Street at Poplar Street**



**10. View Looking South on Third Street at Poplar Street**

**Photo Log Taken October 2, 2018**

Roadway Rehabilitation  
3rd Street from Sycamore Street to 460 ft North of Olive  
Boonville, Warrick County, Indiana Des. No. 1600891



**11. View Looking North on Third Street at Sycamore Street, just South of South Terminus**



**12. View Looking South on Third Street at Sycamore Street, just South of the South Terminus**

|          |             |
|----------|-------------|
| PROJECT  | DESIGNATION |
| 1600891  | 1600891     |
| CONTRACT | BRIDGE FILE |
| R-39840  | N.A.        |

# INDIANA DEPARTMENT OF TRANSPORTATION



## ROAD PLANS

### PROJECT NO. 1600891 P.E. 1600891 CONST.

Road Rehabilitation of 3rd Street From Sycamore Street to North Corporate Limit of Boonville (± 460 Feet North of Olive Street)  
All in Section 26, T-5-S, R-8-W, Boone Township, City of Boonville, Warrick County, Indiana

BEGIN PROJECT NO. 1600891  
P.O.T. STA. 5+60.36 LINE "A"

END PROJECT NO. 1600891  
P.O.T. STA. 39+86.00 LINE "A"  
NORTH CORPORATE LIMIT OF BOONVILLE



| TRAFFIC DATA              |  |                            |
|---------------------------|--|----------------------------|
| A.A.D.T. (2021)           |  | 5,700 V.P.D.               |
| A.A.D.T. (2041)           |  | 6,300 V.P.D.               |
| D.H.V (2041)              |  | 567 V.P.H.                 |
| DIRECTIONAL DISTRIBUTION  |  | 50 %                       |
| TRUCKS                    |  | 7 % A.A.D.T.<br>4 % D.H.V. |
| DESIGN DATA               |  |                            |
| DESIGN SPEED              |  | 30 M.P.H.                  |
| PROJECT DESIGN CRITERIA   |  | 3R NON-FREEWAY             |
| FUNCTIONAL CLASSIFICATION |  | OTHER PRINCIPAL ARTERIAL   |
| RURAL/URBAN               |  | URBAN (SUBURBAN)           |
| TERRAIN                   |  | LEVEL                      |
| ACCESS CONTROL            |  | NONE                       |



LATITUDE: 38° 03' 19" N LONGITUDE: 87° 16' 27" W

HUC: 051420211101

|                |      |     |
|----------------|------|-----|
| GROSS LENGTH:  | 0.59 | MI. |
| BRIDGE LENGTH: | 0.00 | MI. |
| NET LENGTH:    | 0.59 | MI. |
| MAX. GRADE:    | 3.52 | %   |

INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 2018  
TO BE USED WITH THESE PLANS

P:\180031 - Boonville 3rd Street\09Road\04 Design files\02 DGN\Plans\180031\_01\_Sht\_Title.dgn 1/12/2020 1:04:39 PM



|                       |                              |                                |
|-----------------------|------------------------------|--------------------------------|
| PLANS PREPARED BY:    | Beam, Longest & Neff, L.L.C. | (317) 849-5832<br>PHONE NUMBER |
| CERTIFIED BY:         |                              | DATE                           |
| APPROVED FOR LETTING: |                              | DATE                           |

|             |             |  |
|-------------|-------------|--|
|             | BRIDGE FILE |  |
|             | N.A.        |  |
|             | DESIGNATION |  |
|             | 1600891     |  |
| SURVEY BOOK | SHEETS      |  |
| ELECTRONIC  | 1 of 94     |  |
| CONTRACT    | PROJECT     |  |
| R-39840     | 1600891     |  |

### UTILITIES

AT&T  
240 N. Meridian St., Room 1791  
Indianapolis, IN 46204  
Attn: Matt Spindler  
Ph: 317-265-3050  
Email: ms4822@att.com

Veolia Water  
117 E. Locust Street  
Boonville, IN 47601  
Attn: Shawn Wright  
Ph: 812-897-2118  
Fax: 812-897-6819  
Email: shawn.wright@veoliawaterna.com

Boonville/Chandler Natural Gas  
1425 North Rockport Road  
Boonville, IN 47601  
Attn: John Lewellyn  
Ph: 812-897-2260  
Fax: 812-897-2277  
Email: johnl@bngas.com

Wide Open West (WOW)  
102 Brownsville Avenue  
Liberty, IN 47353  
Attn: James Fambrough  
Email: james.fambrough@wowinc.com

Insight Communications  
1900 N. Fares Avenue  
Evansville, IN 47711  
Attn: Scott Dotson  
Ph: 812-253-2736  
Fax: 812-909-0293  
Email: Dotson.s@insightcom.com

Vectren Energy Delivery  
16000 Allisonville Rd.  
Noblesville, IN 46061  
Attn: Public Project  
Ph: 317-718-3639  
Email: publicproject@vectren.com

INDIANA UNDERGROUND PLANT PROTECTION SERVICE, INC.



**811** Know what's below.  
Call before you dig.

Per Indiana State Law IC-8-1-26-16, It is against the law to excavate without notifying the underground location service two (2) full working days before commencing work.

INDIANA UNDERGROUND  
1-800-382-5544 OR CALL 811  
24 HOURS A DAY 7 DAYS A WEEK

Note: Utility Locations are shown based upon information (maps and paint marks) supplied by others, and there is no guarantee of the accuracy or completeness of said locations.

### GENERAL NOTES

\*\* All unpaved disturbed areas shall be sodded.

\*\* REPRESENTS GENERAL NOTES REQUIRED

### INDEX

| SHEET NO. | DRAWINGS INDEX          |
|-----------|-------------------------|
| 1         | TITLE SHEET             |
| 2         | INDEX SHEET             |
| 3-4       | TYPICAL CROSS SECTIONS  |
| 5         | DETOUR ROUTE            |
| 6-19      | PLAN AND PROFILE SHEETS |
| 20-94     | CROSS SECTIONS          |

### REVISIONS

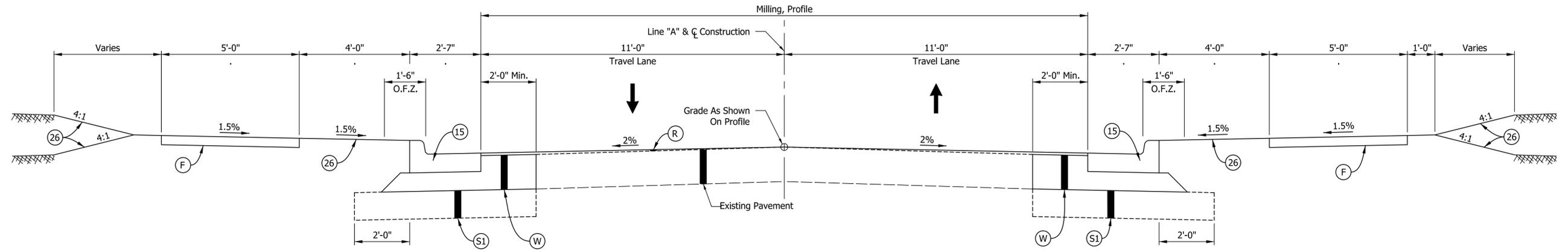
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| DESIGNED: PBW _____            | DRAWN: MAB/JJP _____  |            |
| CHECKED: MSM _____             | CHECKED: PBW _____    |            |

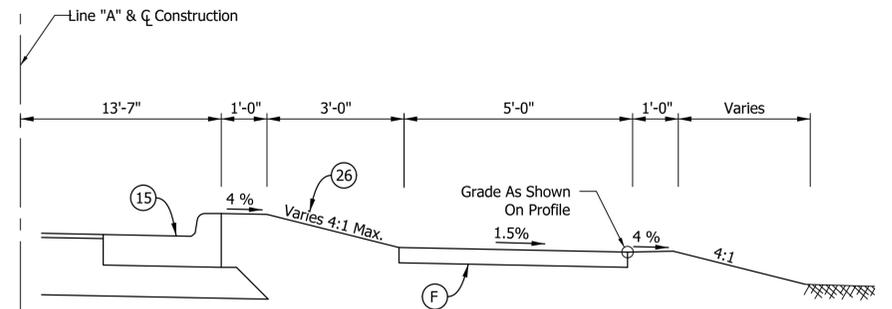
INDIANA  
DEPARTMENT OF TRANSPORTATION

3RD STREET  
INDEX

|                  |                  |
|------------------|------------------|
| HORIZONTAL SCALE | BRIDGE FILE      |
| N.A.             | \$BRIDGE_FILES\$ |
| VERTICAL SCALE   | DESIGNATION      |
| N.A.             | 1600891          |
| SURVEY BOOK      | SHEETS           |
| \$SRV_BK\$       | 2 of 94          |
| CONTRACT         | PROJECT          |
| R-39840          | 1600891          |



**TYPICAL CROSS SECTION**  
 Scale: 1/2" = 1'-0"  
 From Sta. 5+60.36 to Sta. 39+86.00 Line "A"



**ALTERNATE SIDEWALK ELEVATION DETAIL**  
 Scale: 1/2" = 1'-0"  
 From Sta. x+xx to Sta. x+xx

OFZ = Obstruction Free Zone

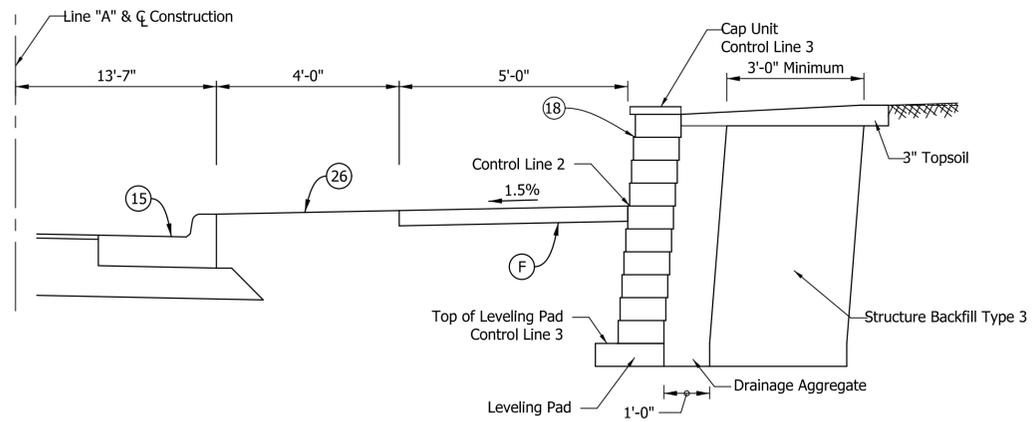
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| DESIGNED: PBW _____            | DRAWN: MAB/JJP _____  |            |
| CHECKED: MSM _____             | CHECKED: PBW _____    |            |

INDIANA  
DEPARTMENT OF TRANSPORTATION

3RD STREET  
TYPICAL CROSS SECTION

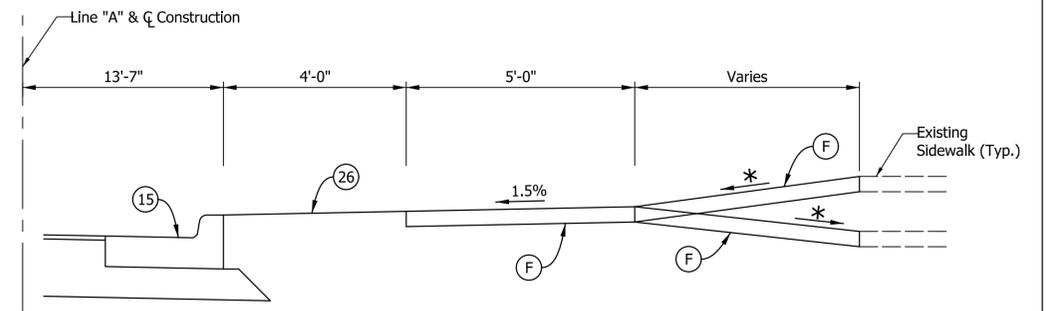
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| AS NOTED         | \$BRIDGE_FILES\$ |
| VERTICAL SCALE   | DESIGNATION      |
| AS NOTED         | 1600891          |
| SURVEY BOOK      | SHEETS           |
| \$SRV_BK\$       | 3 of 94          |
| CONTRACT         | PROJECT          |
| R-39840          | 1600891          |



**MODULAR BLOCK WALL DETAIL**

Scale: 1/2" = 1'-0"

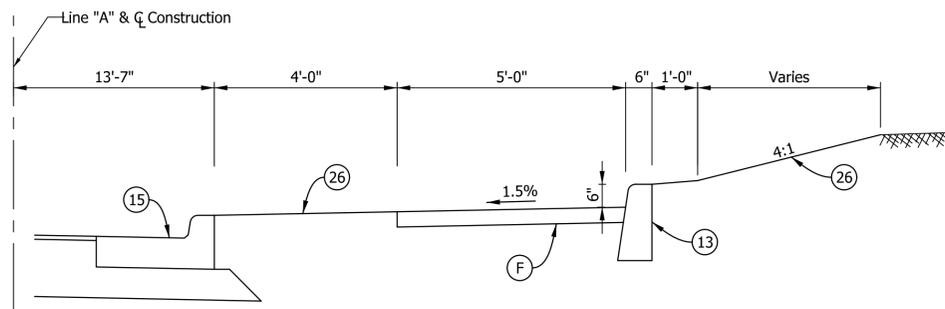
From Sta. 24+50 to Sta. 25+50 Rt.  
 From Sta. 26+50 to Sta. 27+00 Rt.  
 From Sta. 31+69 to Sta. 33+00 Rt.



**PRIVATE SIDEWALK CONNECTION DETAIL**

Scale: 1/2" = 1'-0"

\* 5.00 % Maximum



**CURB DETAIL**

Scale: 1/2" = 1'-0"

From Sta. 24+25 to Sta. 24+45 Rt.  
 From Sta. 27+00 to Sta. 27+90 Rt.  
 From Sta. 30+70 to Sta. 31+50 Rt.

- Sta. 7+35 Rt.
- Sta. 7+38 Lt.
- Sta. 7+65 Lt.
- Sta. 7+75 Rt.
- Sta. 8+06 Lt.
- Sta. 8+26 Lt.
- Sta. 8+89 Lt.
- Sta. 9+19 Rt.
- Sta. 9+29 Lt.
- Sta. 9+69 Lt.
- Sta. 9+96 Lt.
- Sta. 10+32 Lt.
- Sta. 10+83 Rt.
- Sta. 10+89 Lt.
- Sta. 11+27 Rt.
- Sta. 11+40 Lt.
- Sta. 11+66 Lt.
- Sta. 11+81 Rt.
- Sta. 11+85 Lt.
- Sta. 12+32 Rt.
- Sta. 12+79 Rt.
- Sta. 12+88 Lt.
- Sta. 13+35 Rt.
- Sta. 13+61 Lt.
- Sta. 13+86 Lt.
- Sta. 14+26 Rt.
- Sta. 14+92 Lt.
- Sta. 15+24 Rt.
- Sta. 15+61 Lt.
- Sta. 16+55 Rt.
- Sta. 17+13 Rt.
- Sta. 17+33 Lt.
- Sta. 17+50 Rt.
- Sta. 17+67 Lt.
- Sta. 18+70 Rt.
- Sta. 19+04 Lt.
- Sta. 19+22 Rt.
- Sta. 19+71 Rt.
- Sta. 21+50 Lt.
- Sta. 21+50 Rt.
- Sta. 21+97 Lt.
- Sta. 24+48 Rt.
- Sta. 26+35 Lt.
- Sta. 26+80 Lt.
- Sta. 27+41 Lt.
- Sta. 28+63 Lt.
- Sta. 33+58 Lt.
- Sta. 33+75 Lt.
- Sta. 34+72 Lt.
- Sta. 37+10 Lt.
- Sta. 37+50 Lt.
- Sta. 37+57 Rt.
- Sta. 38+10 Rt.
- Sta. 38+58 Lt.
- Sta. 39+22 Lt.
- Sta. 39+50 Lt.

OFZ = Obstruction Free Zone

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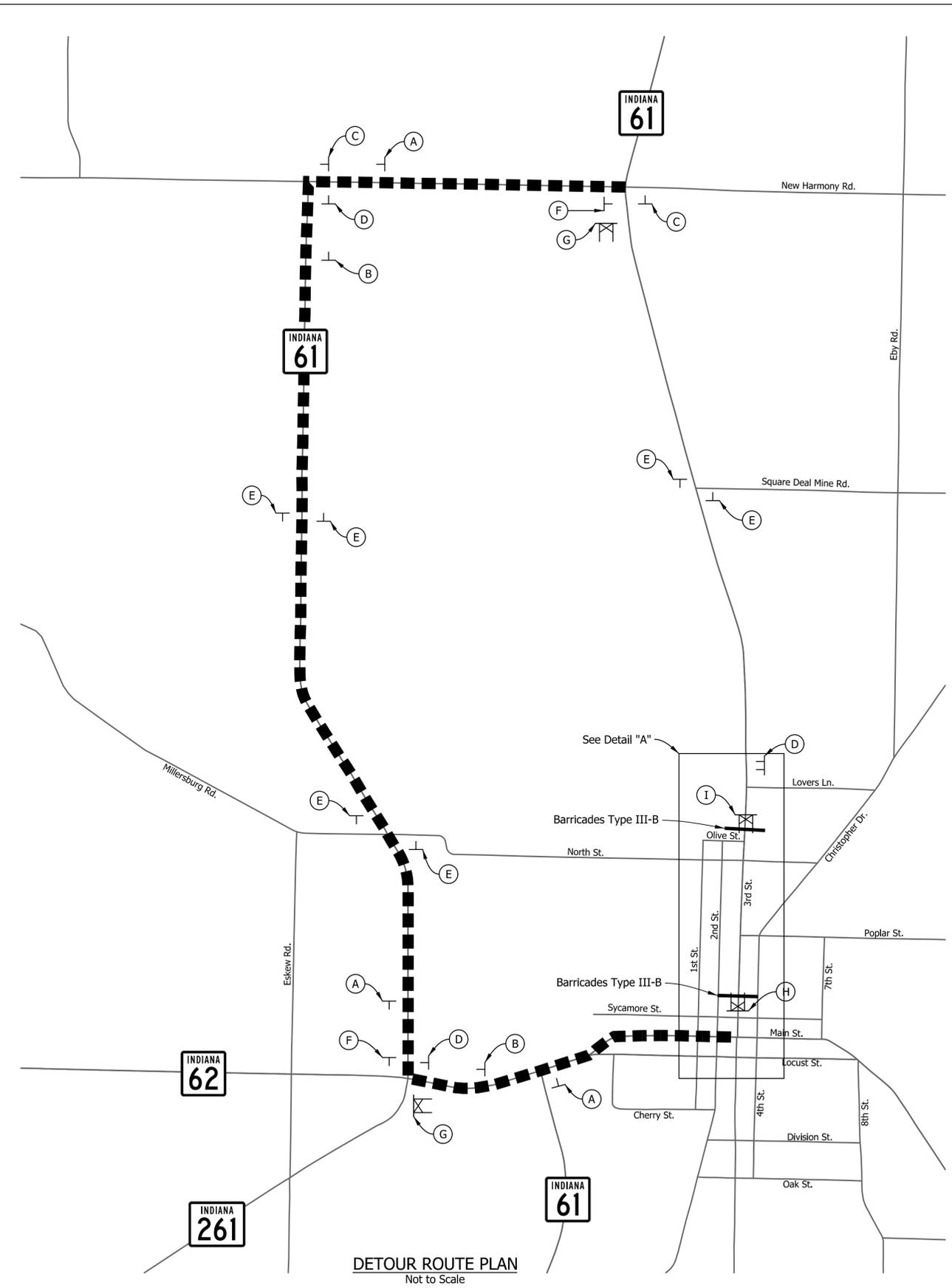
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| DESIGNED: PBW _____            | DRAWN: MAB/JJP _____  |            |
| CHECKED: MSM _____             | CHECKED: PBW _____    |            |

INDIANA  
DEPARTMENT OF TRANSPORTATION

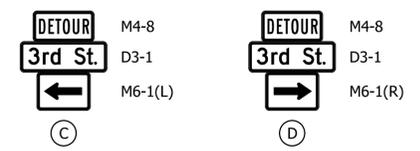
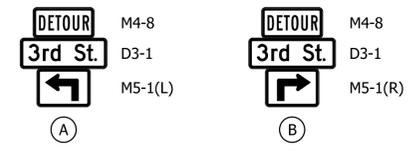
3RD STREET  
CROSS SECTION DETAILS

|                  |                 |
|------------------|-----------------|
| HORIZONTAL SCALE | BRIDGE FILE     |
| AS NOTED         | \$BRIDGE_FILE\$ |
| VERTICAL SCALE   | DESIGNATION     |
| AS NOTED         | 1600891         |
| SURVEY BOOK      | SHEETS          |
| \$SRV_BK\$       | 4 of 94         |
| CONTRACT         | PROJECT         |
| R-39840          | 1600891         |

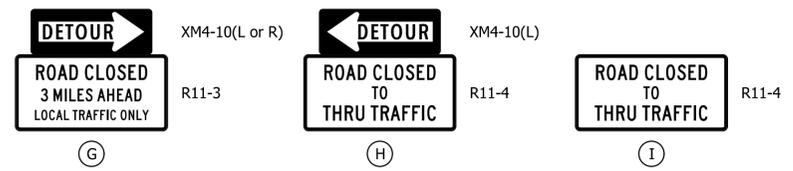
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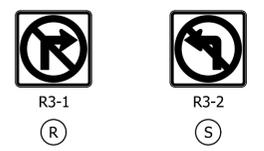
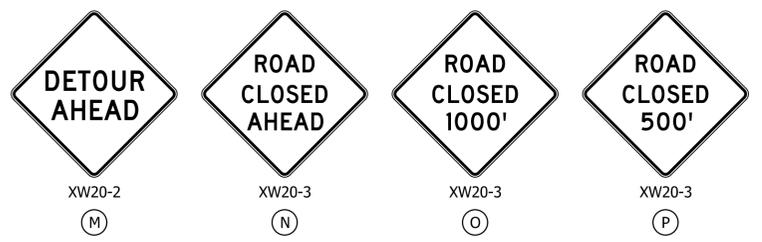
**DETOUR ROUTE PLAN**  
Not to Scale



**DETOUR ROUTE MARKERS**

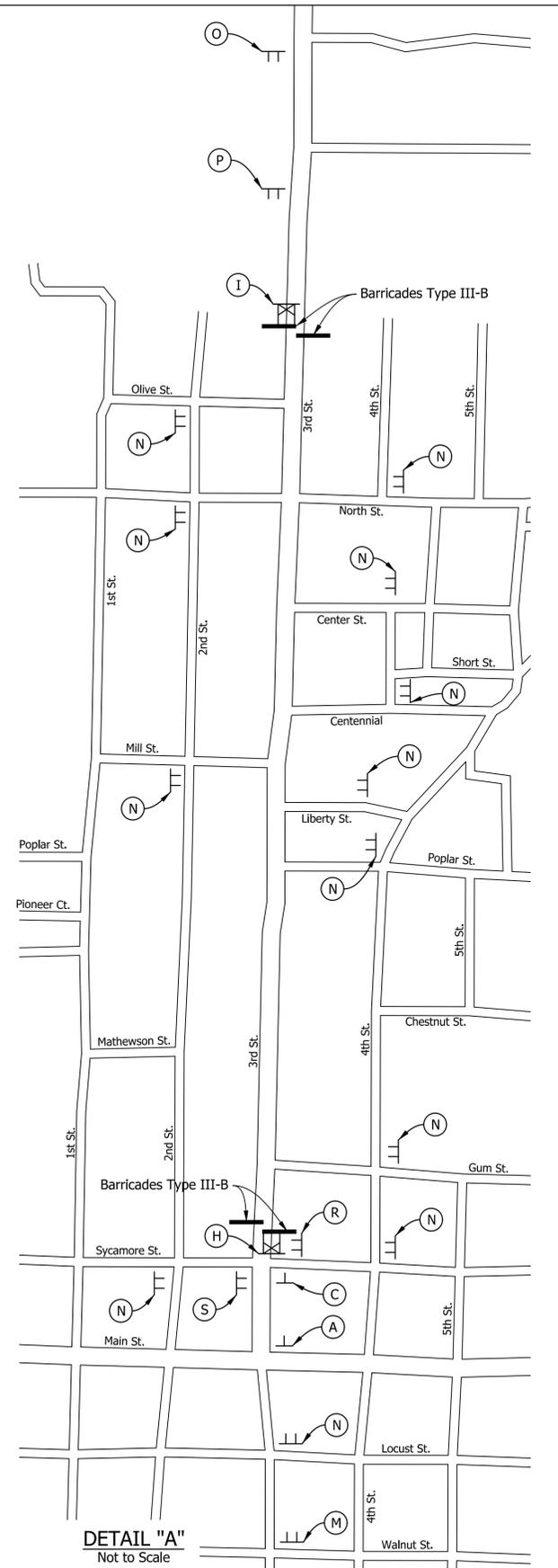


**ROAD CLOSURE SIGN ASSEMBLIES**



**CONSTRUCTION SIGNS**

- LEGEND**
- ■ ■ ■ Detour Route
  - Barricades, Type III-B
  - T Detour Route Marker Assembly
  - TT Construction Sign
  - ⊠ Road Closure Sign Assembly



**DETAIL "A"**  
Not to Scale

|                                |                                  |                                             |  |                  |                  |
|--------------------------------|----------------------------------|---------------------------------------------|--|------------------|------------------|
| RECOMMENDED FOR APPROVAL _____ | DESIGN ENGINEER _____ DATE _____ | INDIANA DEPARTMENT OF TRANSPORTATION        |  | HORIZONTAL SCALE | BRIDGE FILE      |
|                                |                                  |                                             |  | N.A.             | \$BRIDGE_FILES\$ |
| DESIGNED: PBW                  | DRAWN: MAB/JJP                   | MAINTENANCE OF TRAFFIC OFFICAL DETOUR ROUTE |  | VERTICAL SCALE   | DESIGNATION      |
|                                |                                  |                                             |  | N.A.             | 1600891          |
| CHECKED: MSM                   | CHECKED: PBW                     |                                             |  | SURVEY BOOK      | SHEETS           |
|                                |                                  |                                             |  | \$SRV_BKS\$      | 5 of 94          |
|                                |                                  |                                             |  | CONTRACT         | PROJECT          |
|                                |                                  |                                             |  | R-39840          | 1600891          |

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2+00

3+00

4+00

5+00

6+00

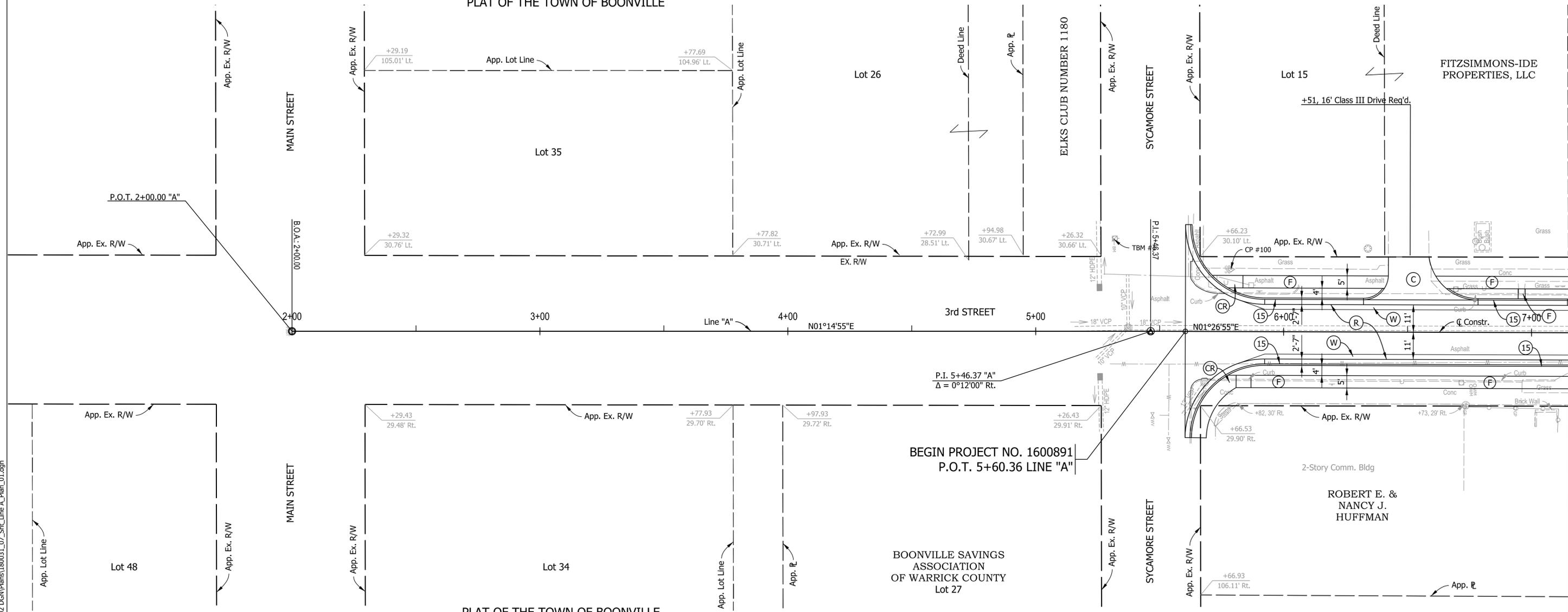
7+00

Sec. 26, T-5-S, R-8-W  
Boon Township  
Warrick County

Sec. 26, T-5-S, R-8-W  
Boon Township  
Warrick County

PLAT OF THE TOWN OF BOONVILLE

PLAT OF THE TOWN OF BOONVILLE



Reference Points Forthcoming Upon Completion  
Of Location Control Route Survey Plat

Notes:  
All R/W described from Line "A" unless otherwise noted.  
All R/W to be as shown.  
All stations/offsets taken from Line "A" unless otherwise noted.

| LEGEND |                                                                                                                                           |      |                                                                                                                                       |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------|
| (C)    | PCCP For Approaches, 6"                                                                                                                   | (F)  | Concrete Sidewalk, 4"                                                                                                                 |
| (CR)   | Curb Ramp, Concrete                                                                                                                       | (R)  | QC/QA-HMA Resurface<br>165#/Syd. QC/QA-HMA Surface, 2, 64, 9.5mm on<br>Variable depth HMA, Intermediate, Type B on<br>Profile Milling |
| (D)    | HMA For Approaches, Type B                                                                                                                | (S1) | Subgrade Treatment Type IC, Modified                                                                                                  |
| (W)    | Widening With HMA, Type "B"<br>440#/Syd. HMA Intermediate, Type B on<br>Variable depth HMA Base, Type B on<br>Subgrade Treatment, Type IC | (13) | Concrete Curb                                                                                                                         |
| (18)   | Modular Block Wall                                                                                                                        | (15) | Concrete Curb & Gutter                                                                                                                |
| (26)   | Nursery Sodding                                                                                                                           |      |                                                                                                                                       |

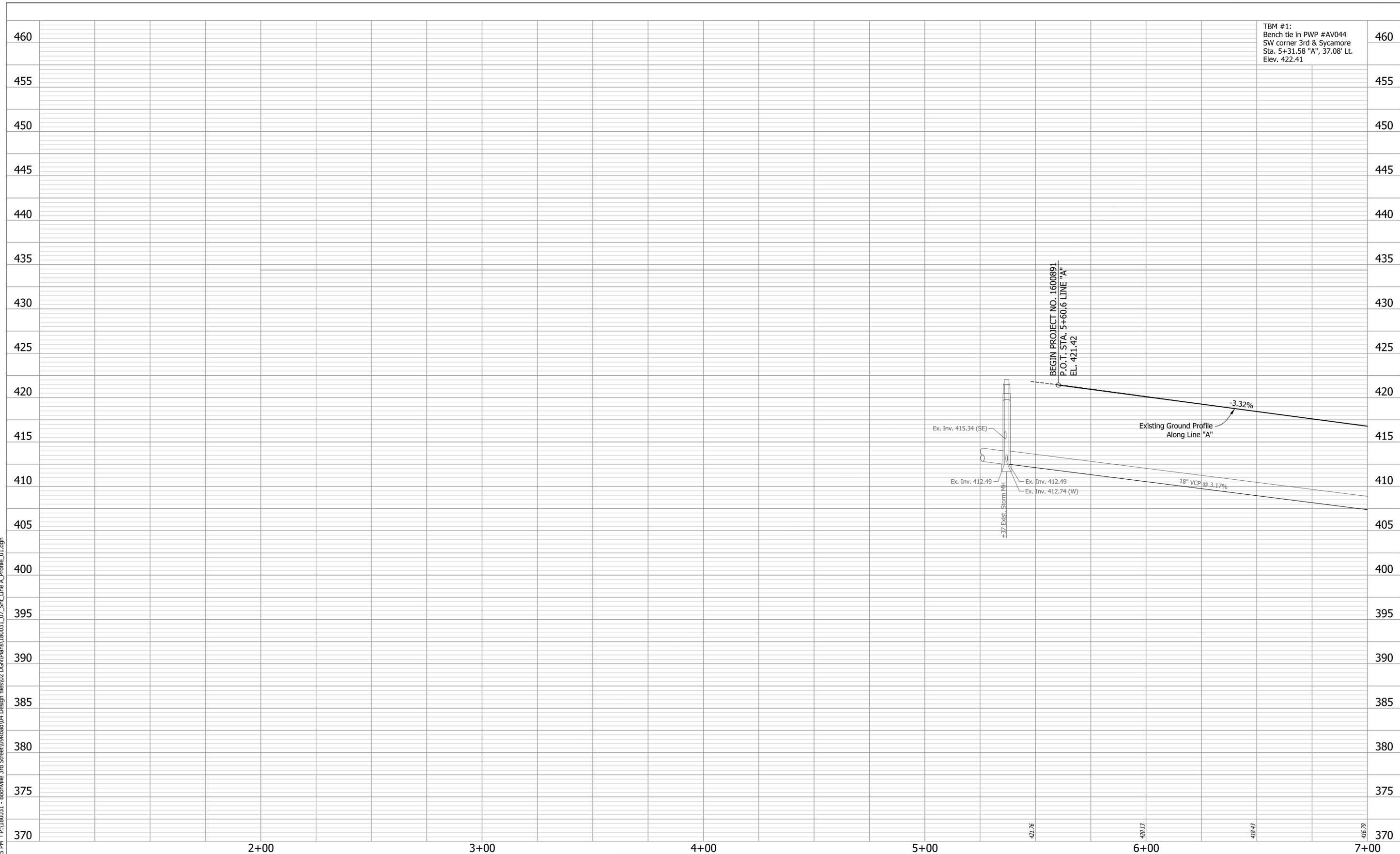
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|--------------------------|-----------------|------|
| RECOMMENDED FOR APPROVAL | DESIGN ENGINEER | DATE |
| DESIGNED: PBW            | DRAWN: MAB/JJP  |      |
| CHECKED: MSM             | CHECKED: PBW    |      |

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**PLAN**  
**STA. 2+00 "A" TO STA. 7+00 "A"**

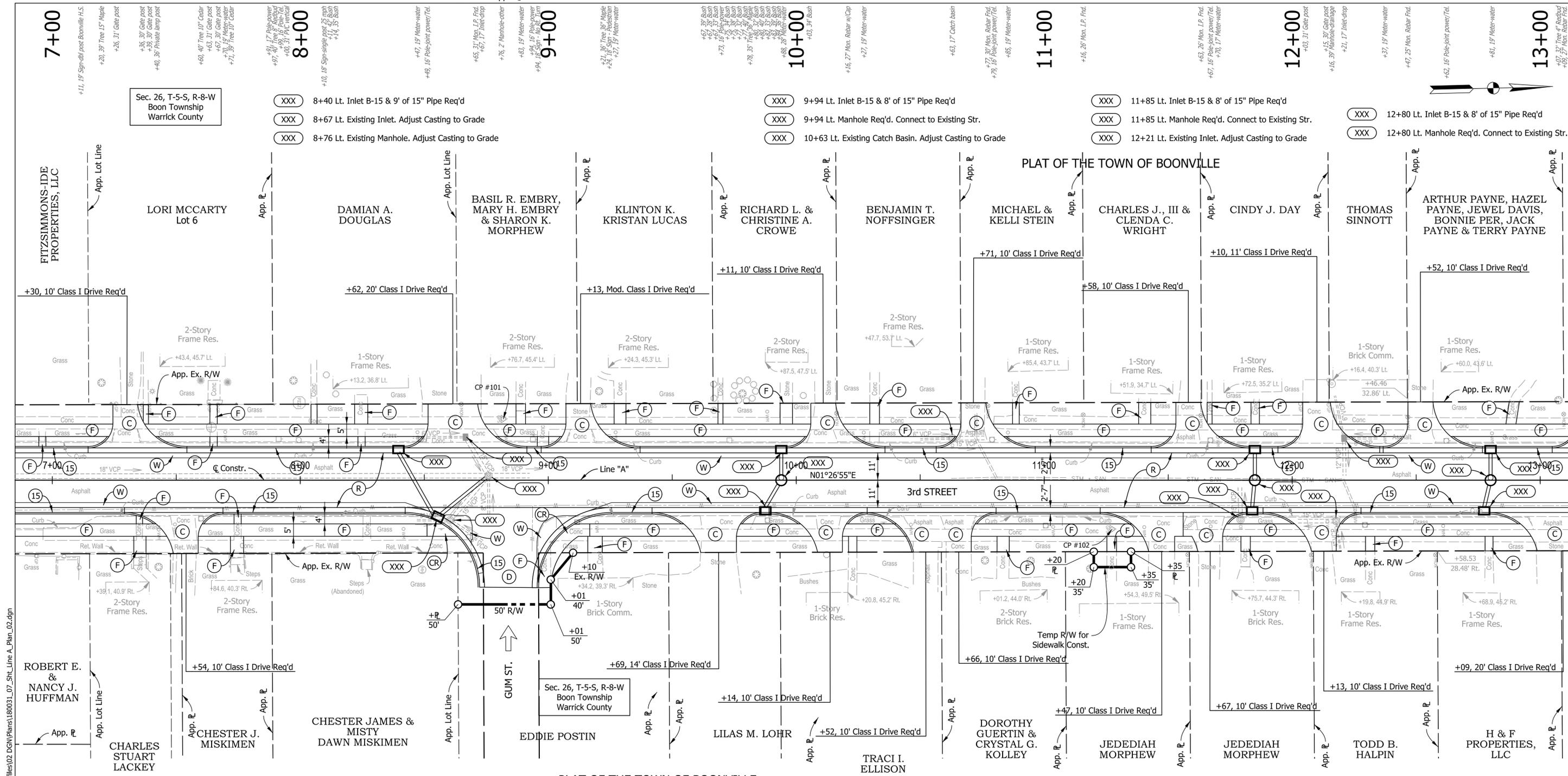
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|------------------|------------------|
| HORIZONTAL SCALE | BRIDGE FILE      |
| 1" = 20'         | \$BRIDGE_FILES\$ |
| VERTICAL SCALE   | DESIGNATION      |
| N.A.             | 1600891          |
| SURVEY BOOK      | SHEETS           |
| \$SRV_BKS\$      | 6 of 94          |
| CONTRACT         | PROJECT          |
| R-39840          | 1600891          |

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TBM #1:  
Bench tie in PWP #AV044  
SW corner 3rd & Sycamore  
Sta. 5+31.58 "A", 37.08' Lt.  
Elev. 422.41

|                                                                                                                                                                                                                                                                                                                                   |                                  |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------|------|--------------------------------|----------------------------------|---------------|----------------|--------------|--------------|------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------|-------------|----------|-----------------|----------------|-------------|---------|---------|-------------|--------|------------|---------|----------|---------|---------|---------|
|                                                                                                                                                                                                                                                                                                                                   | 2+00                             | 3+00 | 4+00 | 5+00                           | 6+00                             | 7+00          |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">RECOMMENDED FOR APPROVAL _____</td> <td style="width: 50%;">DESIGN ENGINEER _____ DATE _____</td> </tr> <tr> <td>DESIGNED: PBW</td> <td>DRAWN: MAB/JJP</td> </tr> <tr> <td>CHECKED: MSM</td> <td>CHECKED: PBW</td> </tr> </table> |                                  |      |      | RECOMMENDED FOR APPROVAL _____ | DESIGN ENGINEER _____ DATE _____ | DESIGNED: PBW | DRAWN: MAB/JJP | CHECKED: MSM | CHECKED: PBW | <b>INDIANA DEPARTMENT OF TRANSPORTATION</b><br><br><b>PROFILE</b><br><b>STA. 2+00 "A" TO STA. 7+00 "A"</b> |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>HORIZONTAL SCALE</td> <td>BRIDGE FILE</td> </tr> <tr> <td>1" = 20'</td> <td>\$BRIDGE_FILE\$</td> </tr> <tr> <td>VERTICAL SCALE</td> <td>DESIGNATION</td> </tr> <tr> <td>1" = 5'</td> <td>1600891</td> </tr> <tr> <td>SURVEY BOOK</td> <td>SHEETS</td> </tr> <tr> <td>\$SRV_BK\$</td> <td>7 of 94</td> </tr> <tr> <td>CONTRACT</td> <td>PROJECT</td> </tr> <tr> <td>R-39840</td> <td>1600891</td> </tr> </table> |  | HORIZONTAL SCALE | BRIDGE FILE | 1" = 20' | \$BRIDGE_FILE\$ | VERTICAL SCALE | DESIGNATION | 1" = 5' | 1600891 | SURVEY BOOK | SHEETS | \$SRV_BK\$ | 7 of 94 | CONTRACT | PROJECT | R-39840 | 1600891 |
| RECOMMENDED FOR APPROVAL _____                                                                                                                                                                                                                                                                                                    | DESIGN ENGINEER _____ DATE _____ |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| DESIGNED: PBW                                                                                                                                                                                                                                                                                                                     | DRAWN: MAB/JJP                   |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| CHECKED: MSM                                                                                                                                                                                                                                                                                                                      | CHECKED: PBW                     |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| HORIZONTAL SCALE                                                                                                                                                                                                                                                                                                                  | BRIDGE FILE                      |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| 1" = 20'                                                                                                                                                                                                                                                                                                                          | \$BRIDGE_FILE\$                  |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| VERTICAL SCALE                                                                                                                                                                                                                                                                                                                    | DESIGNATION                      |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| 1" = 5'                                                                                                                                                                                                                                                                                                                           | 1600891                          |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| SURVEY BOOK                                                                                                                                                                                                                                                                                                                       | SHEETS                           |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| \$SRV_BK\$                                                                                                                                                                                                                                                                                                                        | 7 of 94                          |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| CONTRACT                                                                                                                                                                                                                                                                                                                          | PROJECT                          |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |
| R-39840                                                                                                                                                                                                                                                                                                                           | 1600891                          |      |      |                                |                                  |               |                |              |              |                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                  |             |          |                 |                |             |         |         |             |        |            |         |          |         |         |         |



Sec. 26, T-5-S, R-8-W  
Boon Township  
Warrick County

- XXX 8+40 Lt. Inlet B-15 & 9' of 15" Pipe Req'd
- XXX 8+67 Lt. Existing Inlet. Adjust Casting to Grade
- XXX 8+76 Lt. Existing Manhole. Adjust Casting to Grade

- XXX 9+94 Lt. Inlet B-15 & 8' of 15" Pipe Req'd
- XXX 9+94 Lt. Manhole Req'd. Connect to Existing Str.
- XXX 10+63 Lt. Existing Catch Basin. Adjust Casting to Grade

- XXX 11+85 Lt. Inlet B-15 & 8' of 15" Pipe Req'd
- XXX 11+85 Lt. Manhole Req'd. Connect to Existing Str.
- XXX 12+21 Lt. Existing Inlet. Adjust Casting to Grade

- XXX 12+80 Lt. Inlet B-15 & 8' of 15" Pipe Req'd
- XXX 12+80 Lt. Manhole Req'd. Connect to Existing Str.

- XXX 8+55 Rt. Inlet B-15 & 23' of 15" Pipe Req'd
- XXX 8+60 Rt. Existing Catch Basin. Adjust Casting to Grade

- XXX 9+95 Rt. Inlet B-15 & 8' of 15" Pipe Req'd

- XXX 11+79 Rt. Existing Catch Basin. Adjust Casting to Grade
- XXX 11+83 Rt. Inlet B-15 & 9' of 15" Pipe Req'd

- XXX 12+18 Rt. Existing Catch Basin. Adjust Casting to Grade
- XXX 12+77 Rt. Inlet B-15 & 8' of 15" Pipe Req'd

Reference Points Forthcoming Upon Completion  
Of Location Control Route Survey Plat

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- LEGEND**
- (C) PCCP For Approaches, 6"
  - (CR) Curb Ramp, Concrete
  - (D) HMA For Approaches, Type B

- (F) Concrete Sidewalk, 4"
- (R) QC/QA-HMA Resurface 165#/Syd. QC/QA-HMA Surface, 2, 64, 9.5mm on Variable depth HMA, Intermediate, Type B on Profile Milling
- (S1) Subgrade Treatment Type IC, Modified

- (W) Widening With HMA, Type "B" 440#/Syd. HMA Intermediate, Type B on Variable depth HMA Base, Type B on Subgrade Treatment, Type IC
- (13) Concrete Curb
- (15) Concrete Curb & Gutter

- (18) Modular Block Wall
- (26) Nursery Sodding

**Notes:**  
All R/W described from Line "A" unless otherwise noted.  
All R/W to be as shown.  
All stations/offsets taken from Line "A" unless otherwise noted.

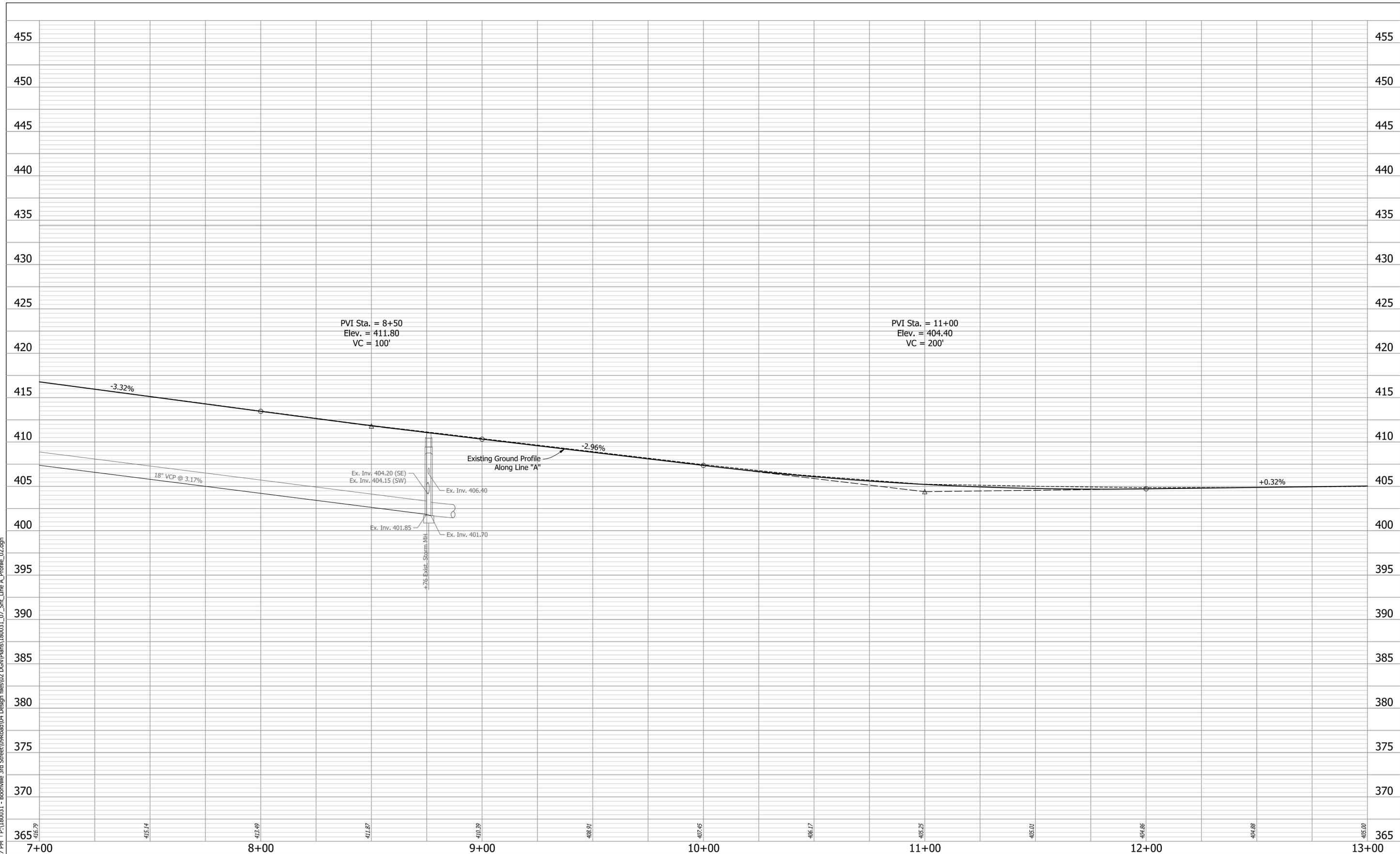
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|--------------------------|-----------------|------|
| RECOMMENDED FOR APPROVAL | DESIGN ENGINEER | DATE |
| DESIGNED: PBW            | DRAWN: MAB/JJP  |      |
| CHECKED: MSM             | CHECKED: PBW    |      |

**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**PLAN  
STA. 7+00 "A" TO STA. 13+00 "A"**

|                  |                 |
|------------------|-----------------|
| HORIZONTAL SCALE | BRIDGE FILE     |
| 1" = 20'         | \$BRIDGE_FILE\$ |
| VERTICAL SCALE   | DESIGNATION     |
| N.A.             | 1600891         |
| SURVEY BOOK      | SHEETS          |
| \$SRV_BKS        | 8 of 94         |
| CONTRACT         | PROJECT         |
| R-39840          | 1600891         |

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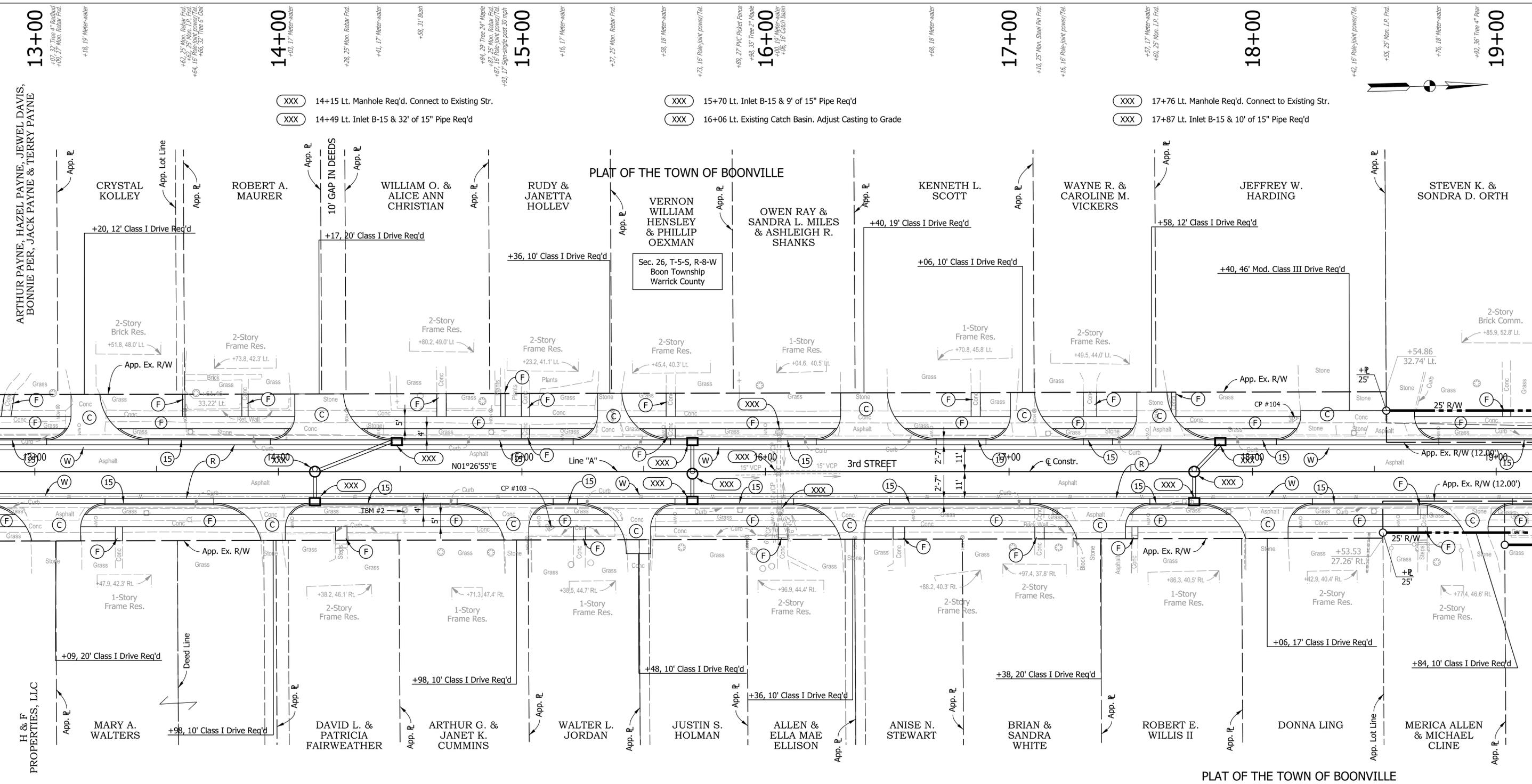
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|--------------------------------|-----------------------|------------|
| RECOMMENDED FOR APPROVAL _____ | DESIGN ENGINEER _____ | DATE _____ |
| DESIGNED: PBW _____            | DRAWN: MAB/JJP _____  |            |
| CHECKED: MSM _____             | CHECKED: PBW _____    |            |

**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**PROFILE  
STA. 7+00 "A" TO STA. 13+00 "A"**

|                              |                                |
|------------------------------|--------------------------------|
| HORIZONTAL SCALE<br>1" = 20' | BRIDGE FILE<br>\$BRIDGE_FILE\$ |
| VERTICAL SCALE<br>1" = 5'    | DESIGNATION<br>1600891         |
| SURVEY BOOK<br>\$SRV_BK\$    | SHEETS<br>9 of 94              |
| CONTRACT<br>R-39840          | PROJECT<br>1600891             |

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13+00  
+02, 30' Tree 4" Redbud  
+09, 27' Mon. Meter Fnd.  
+18, 19' Meter-water

14+00  
+02, 17' Meter-water  
+28, 25' Mon. Meter Fnd.  
+41, 17' Meter-water  
+58, 31' Bush

15+00  
+64, 29' Tree 2" Maple  
+67, 16' Pole-joint power/Tel.  
+67, 16' Pole-joint power/Tel.  
+83, 17' Sign-single post 30 mph

16+00  
+09, 27' PVC Pole-joint Fence  
+98, 35' Tree 2" Maple  
+16, 16' Pole-joint power/Tel.  
+16, 16' Catch basin

17+00  
+10, 25' Mon. Steel Pin Fnd.  
+16, 16' Pole-joint power/Tel.  
+68, 18' Meter-water

18+00  
+57, 17' Meter-water  
+60, 25' Mon. I.P. Fnd.  
+42, 16' Pole-joint power/Tel.

19+00  
+55, 25' Mon. I.P. Fnd.  
+76, 18' Meter-water  
+92, 36' Tree 4" Pear

- XXX 14+15 Lt. Manhole Req'd. Connect to Existing Str.
- XXX 14+49 Lt. Inlet B-15 & 32' of 15" Pipe Req'd
- XXX 15+70 Lt. Inlet B-15 & 9' of 15" Pipe Req'd
- XXX 16+06 Lt. Existing Catch Basin. Adjust Casting to Grade
- XXX 17+76 Lt. Manhole Req'd. Connect to Existing Str.
- XXX 17+87 Lt. Inlet B-15 & 10' of 15" Pipe Req'd



- XXX 15+70 Rt. Inlet B-15 & 7' of 15" Pipe Req'd
- XXX 15+70 Rt. Manhole Req'd. Connect to Existing Str.
- XXX 16+05 Rt. Existing Manhole. Adjust Casting to Grade
- XXX 16+06 Rt. Existing Catch Basin. Adjust Casting to Grade
- XXX 17+76 Rt. Inlet B-15 & 8' of 15" Pipe Req'd

Reference Points Forthcoming Upon Completion  
Of Location Control Route Survey Plat

Notes:  
All R/W described from Line "A"  
unless otherwise noted.  
All R/W to be as shown.  
All stations/offsets taken from Line "A"  
unless otherwise noted.

| LEGEND |                                                                                                                                           |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------|
| (C)    | PCCP For Approaches, 6"                                                                                                                   |
| (CR)   | Curb Ramp, Concrete                                                                                                                       |
| (D)    | HMA For Approaches, Type B                                                                                                                |
| (F)    | Concrete Sidewalk, 4"                                                                                                                     |
| (R)    | QC/QA-HMA Resurface<br>165#/Syd. QC/QA-HMA Surface, 2, 64, 9.5mm on<br>Variable depth HMA, Intermediate, Type B on<br>Profile Milling     |
| (S1)   | Subgrade Treatment Type IC, Modified                                                                                                      |
| (W)    | Widening With HMA, Type "B"<br>440#/Syd. HMA Intermediate, Type B on<br>Variable depth HMA Base, Type B on<br>Subgrade Treatment, Type IC |
| (13)   | Concrete Curb                                                                                                                             |
| (15)   | Concrete Curb & Gutter                                                                                                                    |
| (18)   | Modular Block Wall                                                                                                                        |
| (26)   | Nursery Sodding                                                                                                                           |

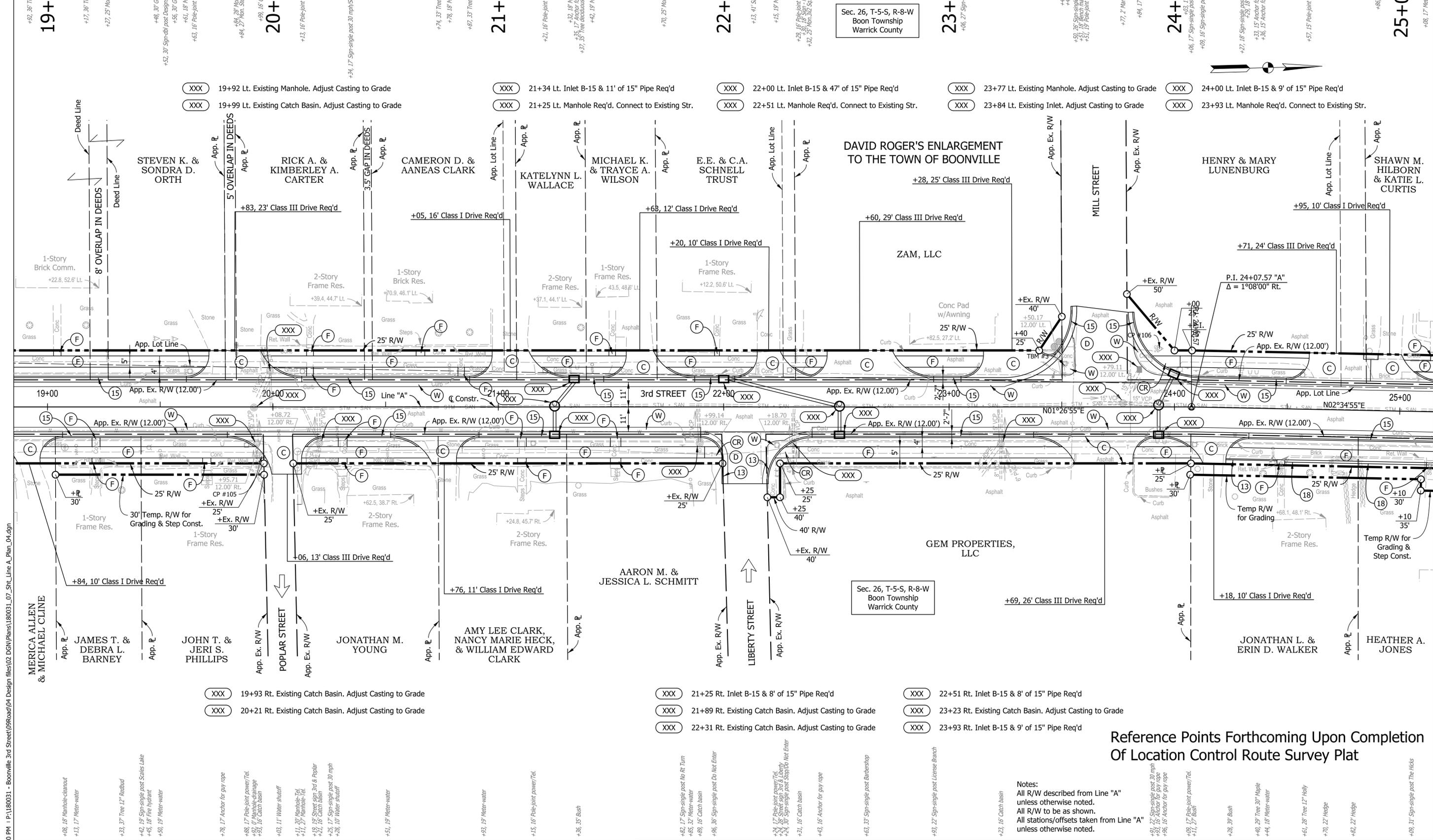
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|--------------------------|-----------------|------|
| RECOMMENDED FOR APPROVAL | DESIGN ENGINEER | DATE |
| DESIGNED: PBW            | DRAWN: MAB/JJP  |      |
| CHECKED: MSM             | CHECKED: PBW    |      |

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**PLAN**  
**STA. 13+00 "A" TO STA. 19+00 "A"**

|                  |                 |
|------------------|-----------------|
| HORIZONTAL SCALE | BRIDGE FILE     |
| 1" = 20'         | \$BRIDGE_FILE\$ |
| VERTICAL SCALE   | DESIGNATION     |
| N.A.             | 1600891         |
| SURVEY BOOK      | SHEETS          |
| \$SRV_BKS        | 10 of 94        |
| CONTRACT         | PROJECT         |
| R-39840          | 1600891         |

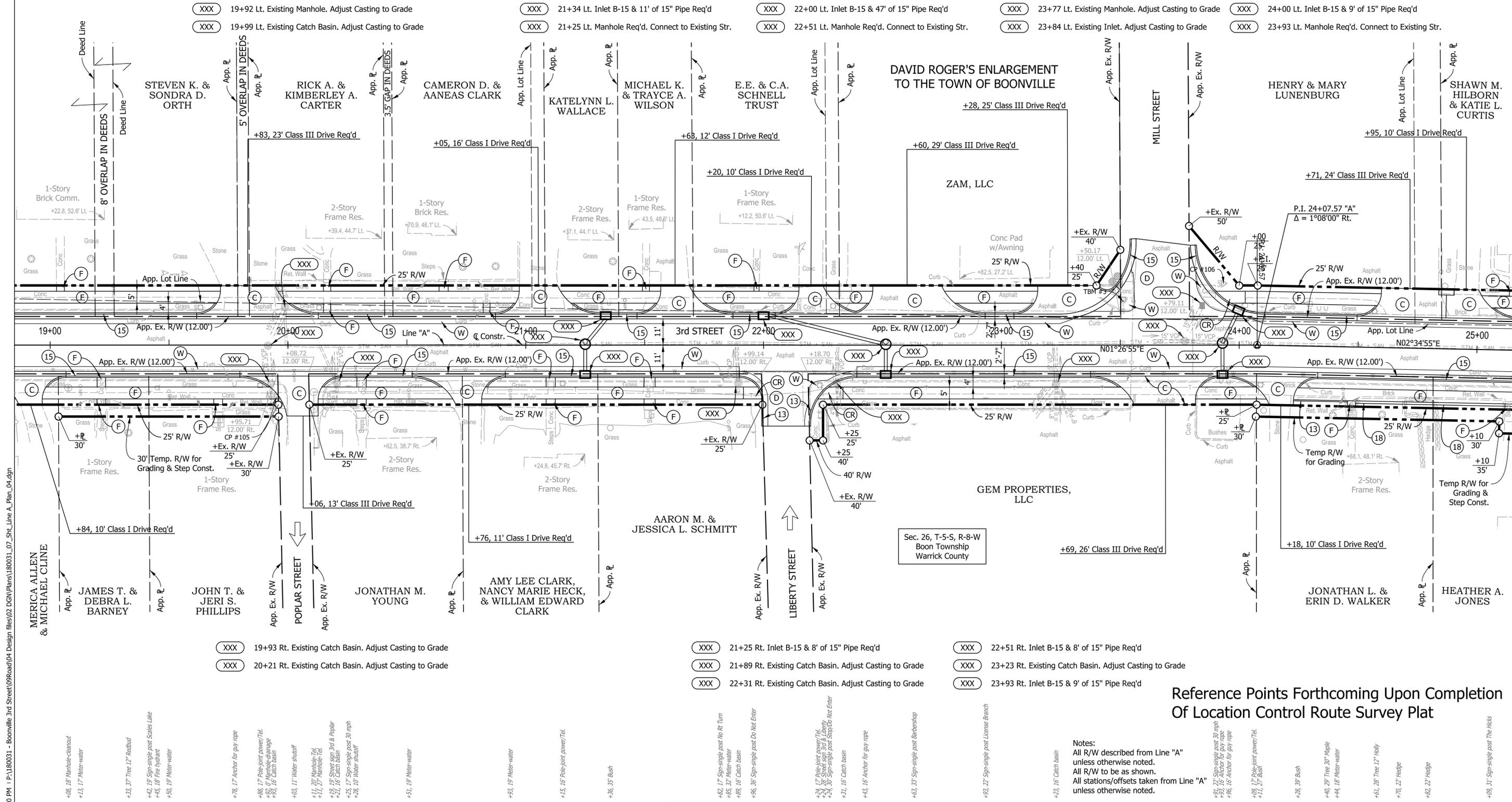




16' Street Appr. @ 22+10 Rt. 22' Street Appr. @ 23+68 Lt.

19+00 19+20 20+00 21+00 22+00 23+00 24+00 25+00

19+92 Lt. Existing Manhole. Adjust Casting to Grade  
 19+99 Lt. Existing Catch Basin. Adjust Casting to Grade  
 21+34 Lt. Inlet B-15 & 11' of 15" Pipe Req'd  
 21+25 Lt. Manhole Req'd. Connect to Existing Str.  
 22+00 Lt. Inlet B-15 & 47' of 15" Pipe Req'd  
 22+51 Lt. Manhole Req'd. Connect to Existing Str.  
 23+77 Lt. Existing Manhole. Adjust Casting to Grade  
 23+84 Lt. Existing Inlet. Adjust Casting to Grade  
 24+00 Lt. Inlet B-15 & 9' of 15" Pipe Req'd  
 23+93 Lt. Manhole Req'd. Connect to Existing Str.

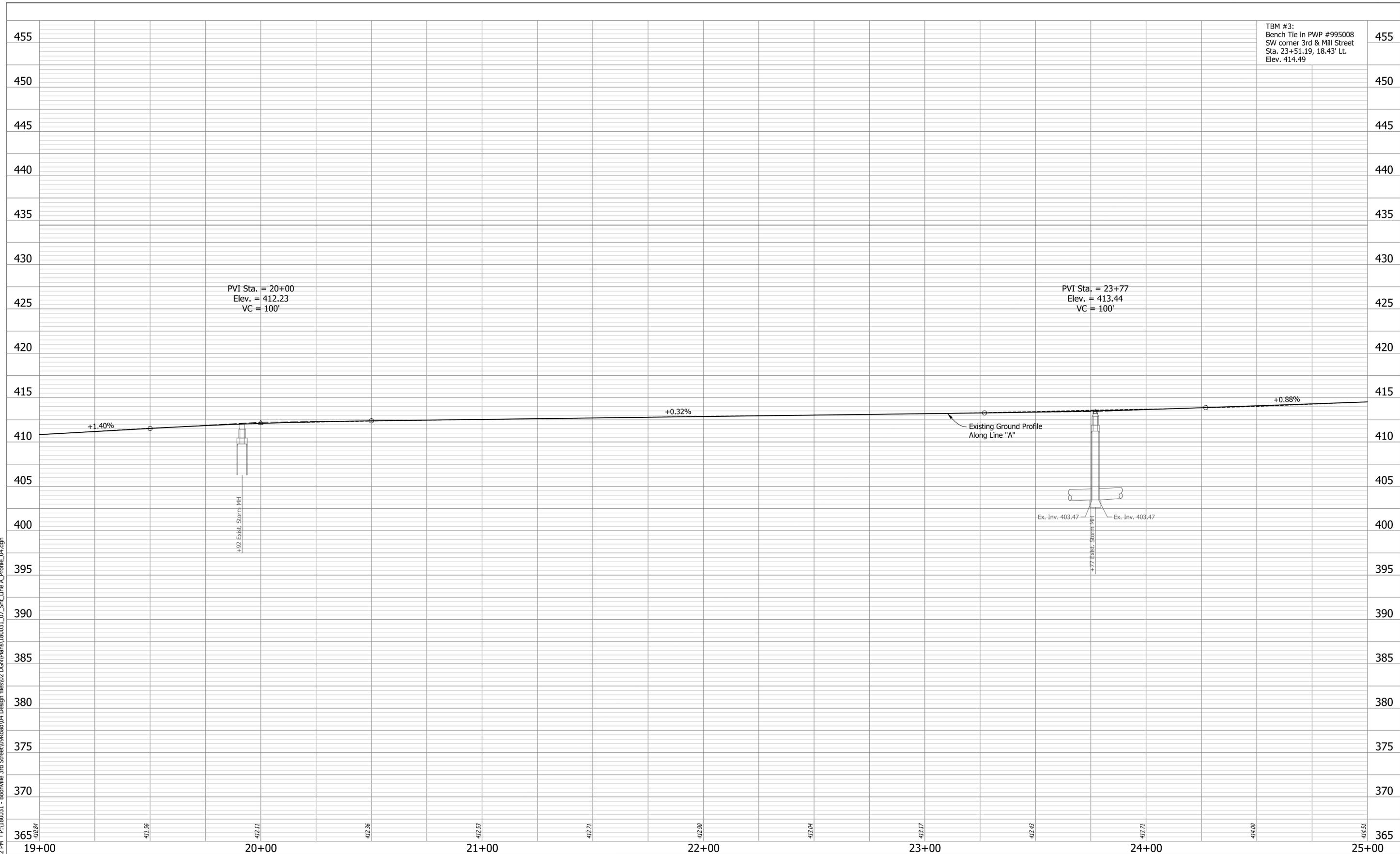


|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                             |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------|--|
| <p>7/24/2019 1:40:20 PM I:\180031 - Boonville 3rd Street\09Road\04 Design Files\02 DGN\Plans\180031_07_Sht_Line_A_Plan_04.dgn</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | <p>INDIANA DEPARTMENT OF TRANSPORTATION</p>                                                                 |  |
| <p>LEGEND</p> <p>(C) PCCP For Approaches, 6"</p> <p>(CR) Curb Ramp, Concrete</p> <p>(D) HMA For Approaches, Type B</p> <p>(F) Concrete Sidewalk, 4"</p> <p>(R) QC/QA-HMA Resurface 165#/Syd. QC/QA-HMA Surface, 2, 64, 9.5mm on Variable depth HMA, Intermediate, Type B on Profile Milling</p> <p>(S1) Subgrade Treatment Type IC, Modified</p> <p>(W) Widening With HMA, Type "B" 440#/Syd. HMA Intermediate, Type B on Variable depth HMA Base, Type B on Subgrade Treatment, Type IC</p> <p>(13) Concrete Curb</p> <p>(15) Concrete Curb &amp; Gutter</p> <p>(18) Modular Block Wall</p> <p>(26) Nursery Sodding</p> |  | <p>RECOMMENDED FOR APPROVAL _____</p> <p>DESIGNED: PBW DRAWN: MAB/JJP</p> <p>CHECKED: MSM CHECKED: PBW</p>  |  |
| <p>PLAN STA. 19+00 "A" TO STA. 25+00 "A"</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | <p>BRIDGE FILE \$BRIDGE_FILE\$</p> <p>DESIGNATION 1600891</p> <p>SHEETS 12 of 94</p> <p>PROJECT 1600891</p> |  |

Reference Points Forthcoming Upon Completion Of Location Control Route Survey Plat

Notes:  
 All R/W described from Line "A" unless otherwise noted.  
 All R/W to be as shown.  
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TBM #3:  
Bench Tie in PWP #995008  
SW corner 3rd & Mill Street  
Sta. 23+51.19, 18.43' Lt.  
Elev. 414.49

|                                |                       |            |
|--------------------------------|-----------------------|------------|
| RECOMMENDED FOR APPROVAL _____ | DESIGN ENGINEER _____ | DATE _____ |
| DESIGNED: PBW _____            | DRAWN: MAB/JJP _____  |            |
| CHECKED: MSM _____             | CHECKED: PBW _____    |            |

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**PROFILE**  
**STA. 19+00 "A" TO STA. 25+00 "A"**

|                              |                                |
|------------------------------|--------------------------------|
| HORIZONTAL SCALE<br>1" = 20' | BRIDGE FILE<br>\$BRIDGE_FILE\$ |
| VERTICAL SCALE<br>1" = 5'    | DESIGNATION<br>1600891         |
| SURVEY BOOK<br>\$SRV_BK\$    | SHEETS<br>13 of 94             |
| CONTRACT<br>R-39840          | PROJECT<br>1600891             |

25+00

26+00

27+00

28+00

29+00

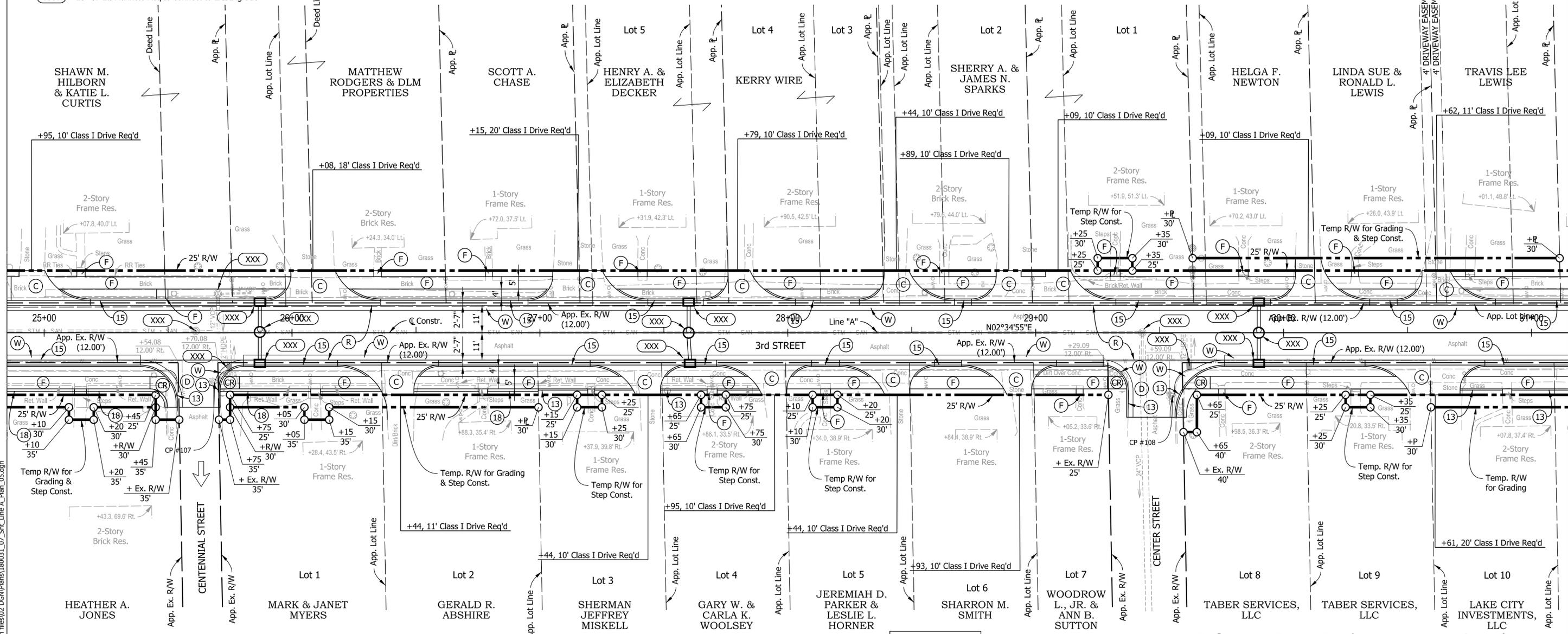
30+00

31+00

- (XXX) 25+61 Lt. Existing Manhole. Adjust Casting to Grade
- (XXX) 25+70 Lt. Existing Catch Basin. Adjust Casting to Grade
- (XXX) 25+87 Lt. Inlet B-15 & 8' of 15" Pipe Req'd
- (XXX) 25+87 Lt. Manhole Req'd. Connect to Existing Str.

- (XXX) 27+60 Lt. Inlet B-15 & xx' of 15" Pipe Req'd
- (XXX) 27+60 Lt. Manhole Req'd. Connect to Existing Str.

- (XXX) 29+43 Lt. Existing Manhole. Adjust Casting to Grade
- (XXX) 29+90 Lt. Inlet B-15 & 8' of 15" Pipe Req'd
- (XXX) 29+90 Lt. Manhole Req'd. Connect to Existing Str.



Sec. 26, T-5-S, R-8-W Boon Township Warrick County

Sec. 26, T-5-S, R-8-W Boon Township Warrick County

Reference Points Forthcoming Upon Completion Of Location Control Route Survey Plat

- (XXX) 25+75 Rt. Existing Inlet. Adjust Casting to Grade
- (XXX) 25+87 Rt. Inlet B-15 & 8' of 15" Pipe Req'd

- (XXX) 27+61 Rt. Inlet B-15 & 8' of 15" Pipe Req'd

- (XXX) 29+62 Rt. Existing Inlet. Adjust Casting to Grade
- (XXX) 29+90 Rt. Inlet B-15 & xx' of 15" Pipe Req'd

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LEGEND

- (C) PCCP For Approaches, 6"
- (CR) Curb Ramp, Concrete
- (D) HMA For Approaches, Type B
- (F) Concrete Sidewalk, 4"
- (R) QC/QA-HMA Resurface 165#/Syd. QC/QA-HMA Surface, 2, 64, 9.5mm on Variable depth HMA, Intermediate, Type B on Profile Milling
- (S1) Subgrade Treatment Type IC, Modified
- (W) Widening With HMA, Type "B" 440#/Syd. HMA Intermediate, Type B on Variable depth HMA Base, Type B on Subgrade Treatment, Type IC
- (13) Concrete Curb
- (15) Concrete Curb & Gutter
- (18) Modular Block Wall
- (26) Nursery Sodding

|                          |                 |      |
|--------------------------|-----------------|------|
| RECOMMENDED FOR APPROVAL | DESIGN ENGINEER | DATE |
| DESIGNED: PBW            | DRAWN: MAB/JJP  |      |
| CHECKED: MSM             | CHECKED: PBW    |      |

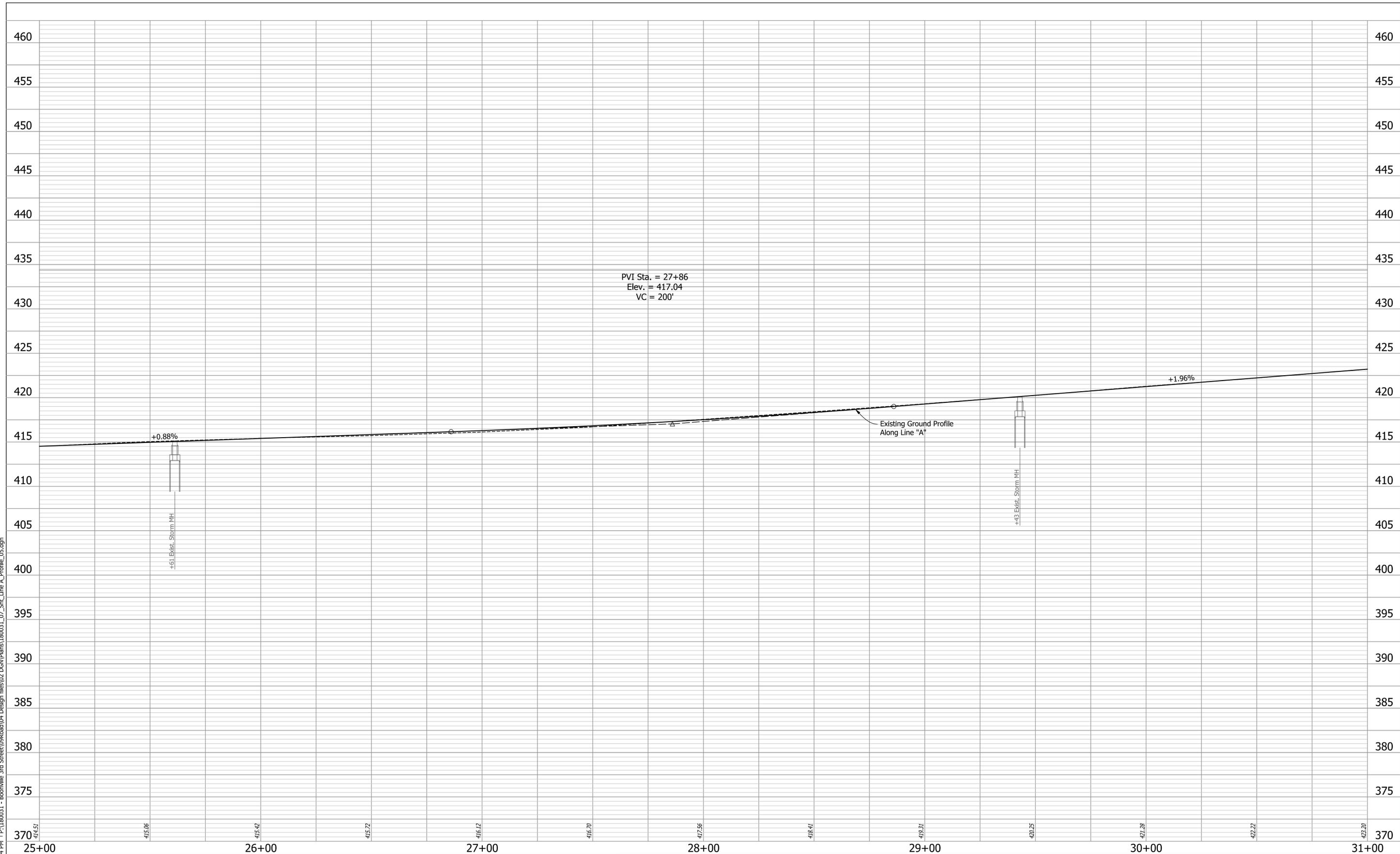
INDIANA DEPARTMENT OF TRANSPORTATION

PLAN STA. 25+00 "A" TO STA. 31+00 "A"

|                  |                 |
|------------------|-----------------|
| HORIZONTAL SCALE | BRIDGE FILE     |
| 1" = 20'         | \$BRIDGE_FILE\$ |
| VERTICAL SCALE   | DESIGNATION     |
| N.A.             | 1600891         |
| SURVEY BOOK      | SHEETS          |
| \$SRV_BKS        | 14 of 94        |
| CONTRACT         | PROJECT         |
| R-39840          | 1600891         |

Notes:  
 All R/W described from Line "A" unless otherwise noted.  
 All R/W to be as shown.  
 All stations/offsets taken from Line "A" unless otherwise noted.

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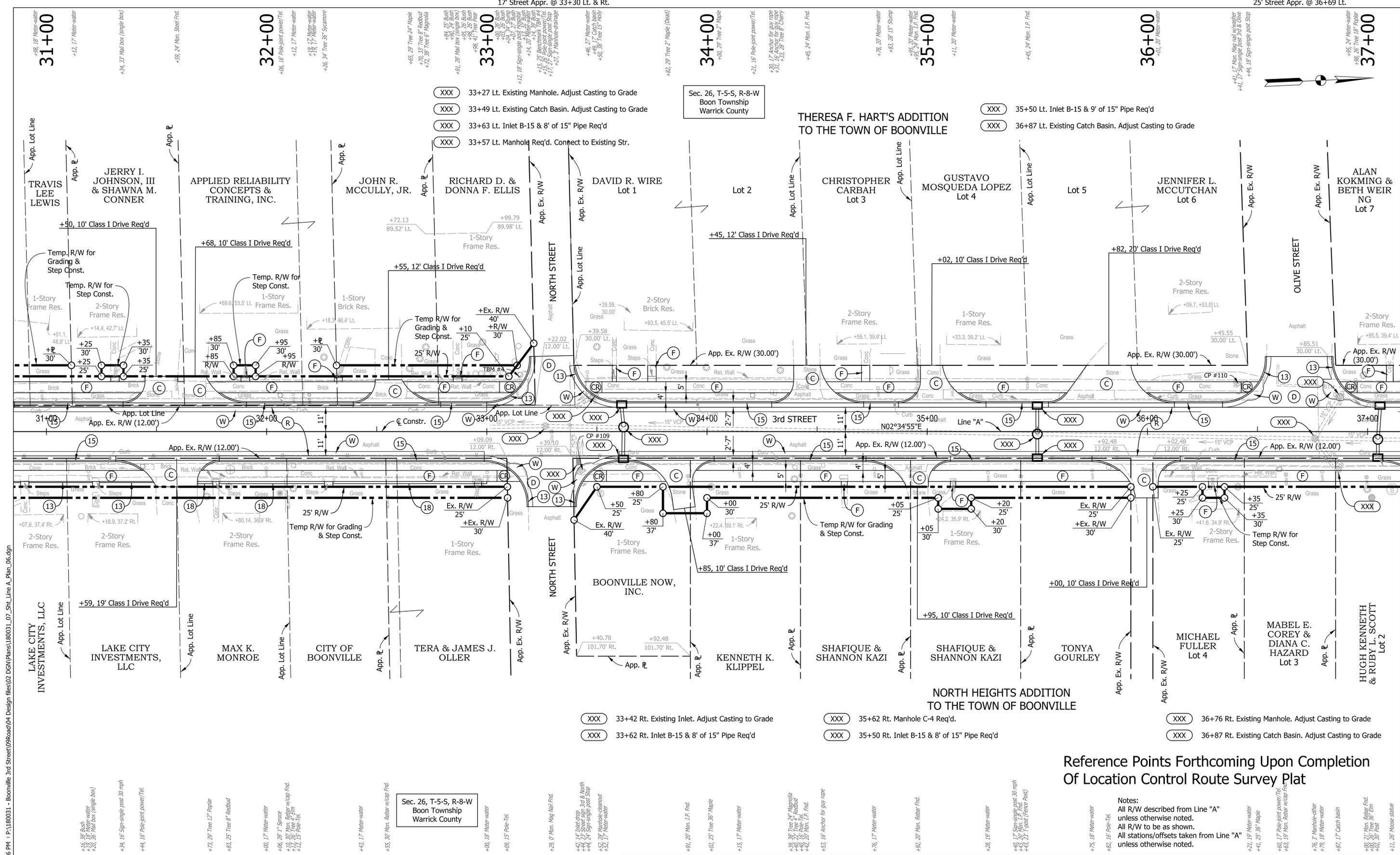
|                                |                       |            |
|--------------------------------|-----------------------|------------|
| RECOMMENDED FOR APPROVAL _____ | DESIGN ENGINEER _____ | DATE _____ |
| DESIGNED: PBW _____            | DRAWN: MAB/JJP _____  |            |
| CHECKED: MSM _____             | CHECKED: PBW _____    |            |

**INDIANA**  
DEPARTMENT OF TRANSPORTATION

**PROFILE**  
STA. 25+00 "A" TO STA. 31+00 "A"

|                              |                                |
|------------------------------|--------------------------------|
| HORIZONTAL SCALE<br>1" = 20' | BRIDGE FILE<br>\$BRIDGE_FILE\$ |
| VERTICAL SCALE<br>1" = 5'    | DESIGNATION<br>1600891         |
| SURVEY BOOK<br>\$SRV_BK\$    | SHEETS<br>15 of 94             |
| CONTRACT<br>R-39840          | PROJECT<br>1600891             |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                      |                                                                                          |                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>LEGEND</b></p> <p>(C) PCCP For Approaches, 6"</p> <p>(CR) Curb Ramp, Concrete</p> <p>(D) HMA For Approaches, Type B</p> <p>(F) Concrete Sidewalk, 4"</p> <p>(R) QC/QA-HMA Resurface 165#/Syd. QC/QA-HMA Surface, 2, 64, 9.5mm on Variable depth HMA, Intermediate, Type B on Profile Milling</p> <p>(S1) Subgrade Treatment Type IC, Modified</p> <p>(W) Widening With HMA, Type "B" 440#/Syd. HMA Intermediate, Type B on Variable depth HMA Base, Type B on Subgrade Treatment, Type IC</p> <p>(13) Concrete Curb</p> <p>(15) Concrete Curb &amp; Gutter</p> <p>(18) Modular Block Wall</p> <p>(26) Nursery Sodding</p> |  | <p>RECOMMENDED FOR APPROVAL _____</p> <p>DESIGNED: PBW      DRAWN: MAB/JJP</p> <p>CHECKED: MSM      CHECKED: PBW</p> | <p>INDIANA DEPARTMENT OF TRANSPORTATION</p> <p>PLAN STA. 31+00 "A" TO STA. 37+00 "A"</p> | <p>HORIZONTAL SCALE 1" = 20'</p> <p>VERTICAL SCALE N.A.</p> <p>SURVEY BOOK \$SRV_BKS 16 of 94</p> <p>CONTRACT R-39840 PROJECT 1600891</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

**Reference Points Forthcoming Upon Completion Of Location Control Route Survey Plat**

Notes:  
 All R/W described from Line "A" unless otherwise noted.  
 All R/W to be as shown.  
 All stations/offsets taken from Line "A" unless otherwise noted.

Sec. 26, T-5-S, R-8-W  
 Boon Township  
 Warrick County

Sec. 26, T-5-S, R-8-W  
 Boon Township  
 Warrick County

**THERESA F. HART'S ADDITION TO THE TOWN OF BOONVILLE**

**NORTH HEIGHTS ADDITION TO THE TOWN OF BOONVILLE**

- (XXX) 33+27 Lt. Existing Manhole. Adjust Casting to Grade
- (XXX) 33+49 Lt. Existing Catch Basin. Adjust Casting to Grade
- (XXX) 33+63 Lt. Inlet B-15 & 8' of 15" Pipe Req'd
- (XXX) 33+57 Lt. Manhole Req'd. Connect to Existing Str.

- (XXX) 35+50 Lt. Inlet B-15 & 9' of 15" Pipe Req'd
- (XXX) 36+87 Lt. Existing Catch Basin. Adjust Casting to Grade

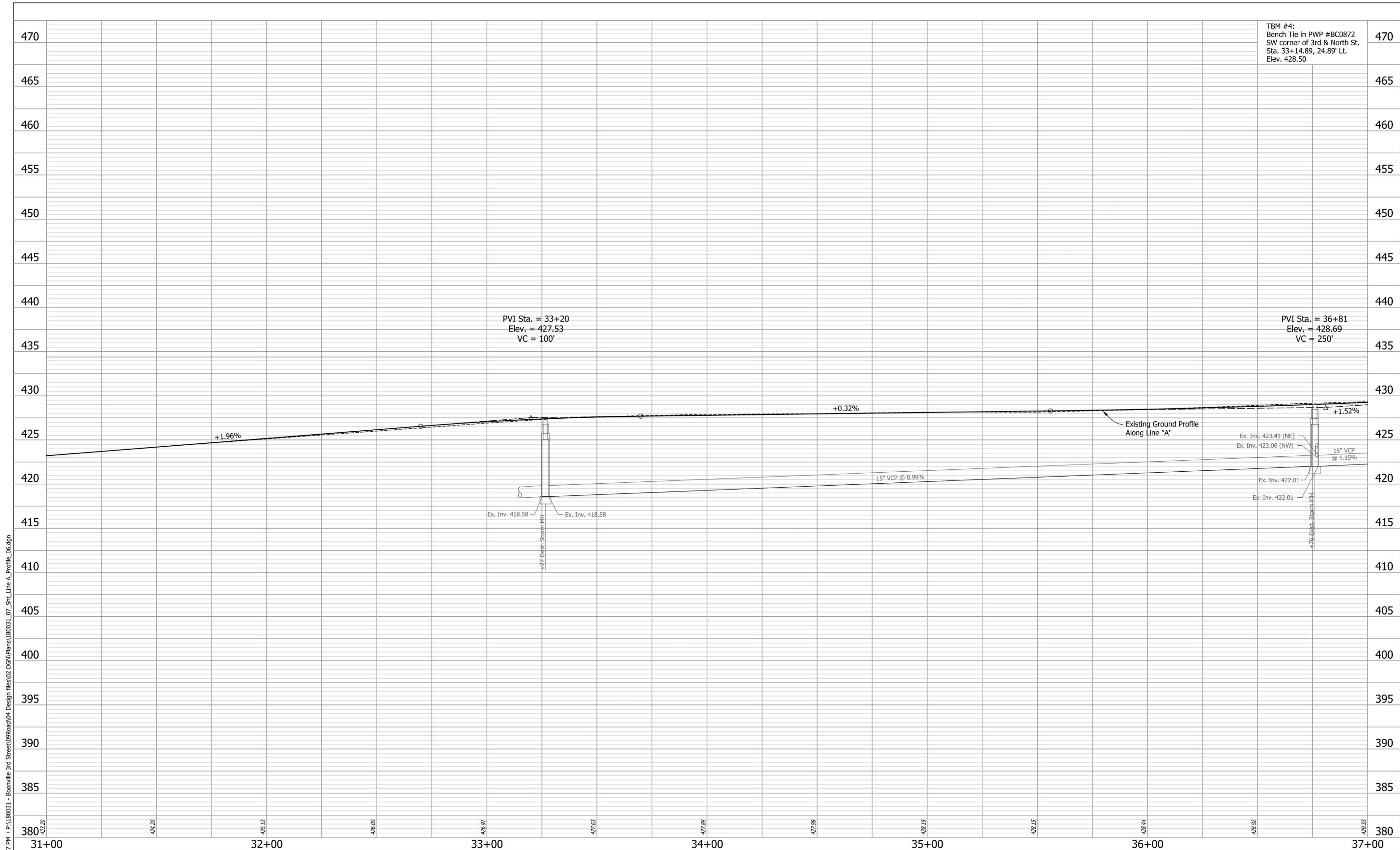
- (XXX) 33+42 Rt. Existing Inlet. Adjust Casting to Grade
- (XXX) 33+62 Rt. Inlet B-15 & 8' of 15" Pipe Req'd

- (XXX) 35+62 Rt. Manhole C-4 Req'd
- (XXX) 35+50 Rt. Inlet B-15 & 8' of 15" Pipe Req'd

- (XXX) 36+76 Rt. Existing Manhole. Adjust Casting to Grade
- (XXX) 36+87 Rt. Existing Catch Basin. Adjust Casting to Grade

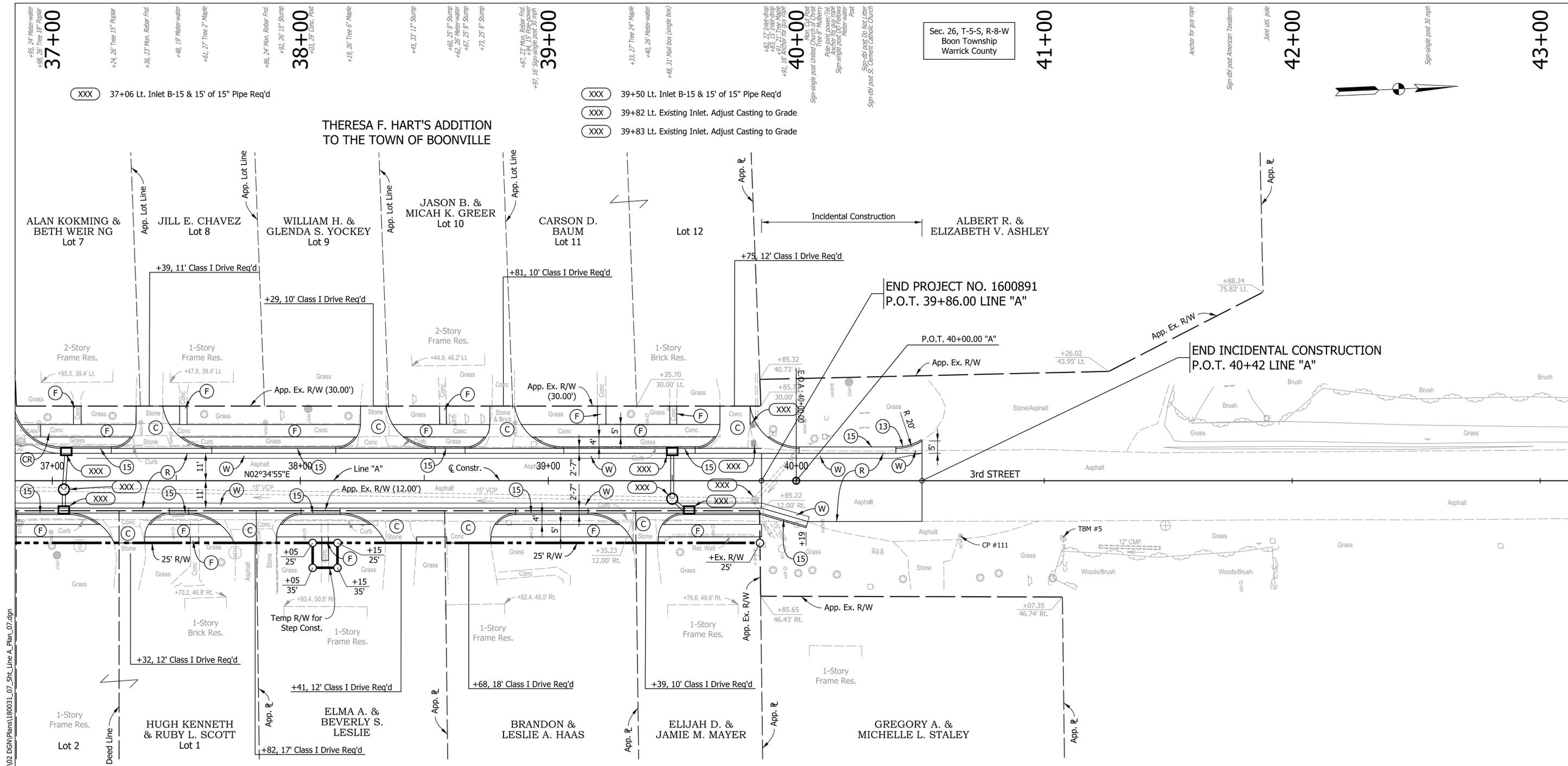


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|                                                                                                                                                                                                                                                                                                                                   |                                  |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|---------------|----------------|--------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------|---------------------------|------------------------|---------------------------|--------------------|---------------------|--------------------|
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">RECOMMENDED FOR APPROVAL _____</td> <td style="width: 50%;">DESIGN ENGINEER _____ DATE _____</td> </tr> <tr> <td>DESIGNED: PBW</td> <td>DRAWN: MAB/JJP</td> </tr> <tr> <td>CHECKED: MSM</td> <td>CHECKED: PBW</td> </tr> </table> | RECOMMENDED FOR APPROVAL _____   | DESIGN ENGINEER _____ DATE _____ | DESIGNED: PBW | DRAWN: MAB/JJP | CHECKED: MSM | CHECKED: PBW | <p><b>INDIANA</b><br/><b>DEPARTMENT OF TRANSPORTATION</b></p> <p><b>PROFILE</b><br/><b>STA. 31+00 "A" TO STA. 37+00 "A"</b></p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>HORIZONTAL SCALE<br/>1" = 20'</td> <td>BRIDGE FILE<br/>\$BRIDGE_FILE\$</td> </tr> <tr> <td>VERTICAL SCALE<br/>1" = 5'</td> <td>DESIGNATION<br/>1600891</td> </tr> <tr> <td>SURVEY BOOK<br/>\$SRV_BK\$</td> <td>SHEETS<br/>17 of 94</td> </tr> <tr> <td>CONTRACT<br/>R-39840</td> <td>PROJECT<br/>1600891</td> </tr> </table> | HORIZONTAL SCALE<br>1" = 20' | BRIDGE FILE<br>\$BRIDGE_FILE\$ | VERTICAL SCALE<br>1" = 5' | DESIGNATION<br>1600891 | SURVEY BOOK<br>\$SRV_BK\$ | SHEETS<br>17 of 94 | CONTRACT<br>R-39840 | PROJECT<br>1600891 |
| RECOMMENDED FOR APPROVAL _____                                                                                                                                                                                                                                                                                                    | DESIGN ENGINEER _____ DATE _____ |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |
| DESIGNED: PBW                                                                                                                                                                                                                                                                                                                     | DRAWN: MAB/JJP                   |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |
| CHECKED: MSM                                                                                                                                                                                                                                                                                                                      | CHECKED: PBW                     |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |
| HORIZONTAL SCALE<br>1" = 20'                                                                                                                                                                                                                                                                                                      | BRIDGE FILE<br>\$BRIDGE_FILE\$   |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |
| VERTICAL SCALE<br>1" = 5'                                                                                                                                                                                                                                                                                                         | DESIGNATION<br>1600891           |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |
| SURVEY BOOK<br>\$SRV_BK\$                                                                                                                                                                                                                                                                                                         | SHEETS<br>17 of 94               |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |
| CONTRACT<br>R-39840                                                                                                                                                                                                                                                                                                               | PROJECT<br>1600891               |                                  |               |                |              |              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                |                           |                        |                           |                    |                     |                    |

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Sec. 26, T-5-S, R-8-W  
Boon Township  
Warrick County



XXX 37+06 Lt. Inlet B-15 & 15' of 15" Pipe Req'd

XXX 39+50 Lt. Inlet B-15 & 15' of 15" Pipe Req'd  
 XXX 39+82 Lt. Existing Inlet. Adjust Casting to Grade  
 XXX 39+83 Lt. Existing Inlet. Adjust Casting to Grade

XXX 37+05 Rt. Manhole C-4 Req'd.  
 XXX 37+05 Rt. Inlet B-15 & 10' of 15" Pipe Req'd

XXX 39+50 Rt. Manhole C-4 Req'd.  
 XXX 39+57 Rt. Inlet B-15 & 4' of 15" Pipe Req'd  
 XXX 39+83 Rt. Existing Manhole. Adjust Casting to Grade

Reference Points Forthcoming Upon Completion  
Of Location Control Route Survey Plat

**LEGEND**

- (C) PCCP For Approaches, 6"
- (CR) Curb Ramp, Concrete
- (D) HMA For Approaches, Type B
- (F) Concrete Sidewalk, 4"
- (R) QC/QA-HMA Resurface 165#/Syd. QC/QA-HMA Surface, 2, 64, 9.5mm on Variable depth HMA, Intermediate, Type B on Profile Milling
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|                          |                 |      |
|--------------------------|-----------------|------|
| RECOMMENDED FOR APPROVAL | DESIGN ENGINEER | DATE |
| DESIGNED: PBW            | DRAWN: MAB/JJP  |      |
| CHECKED: MSM             | CHECKED: PBW    |      |

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**PLAN**  
**STA. 37+00 "A" TO STA. 40+00 "A"**

|                  |                 |
|------------------|-----------------|
| HORIZONTAL SCALE | BRIDGE FILE     |
| 1" = 20'         | \$BRIDGE_FILE\$ |
| VERTICAL SCALE   | DESIGNATION     |
| N.A.             | 1600891         |
| SURVEY BOOK      | SHEETS          |
| \$SRV_BK\$       | 18 of 94        |
| CONTRACT         | PROJECT         |
| R-39840          | 1600891         |

Notes:  
All R/W described from Line "A" unless otherwise noted.  
All R/W to be as shown.  
All stations/offsets taken from Line "A" unless otherwise noted.



# **Appendix C:**

## **Early Coordination**

February 13, 2019

## SAMPLE EARLY COORDINATION LETTER AND AGENCY LISTING

Re: Des. No. 1600891  
Third Street Roadway Improvement and Non -  
Motorized Facility Project  
Sycamore Street to North of Olive Street  
Boonville, Warrick County, Indiana

Dear Agency

Beam Longest Neff has been selected by the City of Boonville, Indiana (City) to prepare the environmental documentation and design plans for the improvement of Third Street and the repair of the existing sidewalks adjacent to the corridor using federal aid funds. This letter is written to describe the referenced project and to solicit your comments for resources under your jurisdiction.

### Project Location

The project is on the near northwest side of the City of Boonville in Boon Township, Warrick County, Indiana. Specifically, the project is located in Section 26, Township 5 South, Range 8 West, as shown on the *Boonville, Indiana* 7.5-minute USGS quadrangle map. The proposed improvements will extend from Sycamore Street to 460 feet north of Olive Street; the total project length is approximately 0.68 mile (3,600 feet). Project location maps, an aerial photograph and ground level photographs are attached to this correspondence.

### Purpose and Need

The purpose of this project is to increase serviceability while improving safety for both motoring and non-- motoring traffic. The need is based on the poor condition of the existing pavement and drainage. The roadway was originally constructed of concrete with two 15-foot wide travel lanes bordered by an integral concrete curb. Resurfacing of the pavement over the years has reduced the exposure of the curb face and the effectiveness of that curbing to direct stormwater to the curb inlets.

### Existing Roadway

Third Street is a two-lane, north/south roadway that is approximately 30ft. wide (two travel lanes at 15ft. each) bordered by concrete curbs and/or asphalt shoulders. The existing right-of-way varies from 24ft. to 60ft. in width. Third Street is classified as a Principal Arterial and is also known as State Road 61. Third Street is not an element of the National Highway System or the National Truck Route. Third Street serves as the primary gateway for access into the City of Boonville from Interstate 64 to the north, and rural Warrick County. The horizontal alignment of the roadway is tangent, and the vertical alignment is at grade. The posted speed limit is 30 mph. Overhead utility lines run parallel to both sides of Third Street, and a six inch natural gas lines pass under the roadway near Centennial Street. Drainage along Third Street is handled via curb inlets, which are connected to an existing combined sanitary/storm sewer trunk line.

North Street and Sycamore Street extend east to west across Third Street, and Olive Street and Mill Street traverse west from Third Street. Center Street, Centennial Street, Liberty Street, Poplar Street and Gum Street extend eastbound of Third Street. Centennial Street is a one-way eastbound only, and Liberty Street and Gum Street are one-way westbound roadways.

SR 61 (the Boonville Bypass) is currently under construction to the west of Booneville. Upon completion, the existing SR 61 between Main Street (one city block to the south) and New Harmony Road/Shelton Road (2.5 miles to the north) will be relinquished to the City and Warrick County (the Third Street project falls within this area of relinquishment). Completion of the Boonville Bypass will divert existing SR 61 through traffic to the new route, reducing the number of vehicles currently using Third Street for access to Interstate 64.

**Existing Land Use**

The predominant land use along the corridor is single family residential as the project falls within the urban area boundary of the City of Boonville. Four surface mines and Scales Lake, a state managed recreational facility, are located adjacent to the project area. Commercial development along Third Street is clustered in the vicinity of Mill Street, between Gum Street and Poplar Street and at the south terminus. Within one city block south of Sycamore Street, commercial use dominates around the Warrick County Court House Square and in the downtown Boonville business district. Beginning at Sycamore Street and extending for three city blocks to the south and one to two city blocks to the east and west, is the Boonville Public Square Historic District (HD). This HD was listed on the National Register of Historic Places in 1987 and there are fifty buildings that contribute to the HD boundaries.

The US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) map was reviewed and no mapped wetlands are illustrated to exist along or adjacent to Third Street. It is not anticipated that a Waters of the US Report (WOUSR) will be prepared in an effort to identify potential jurisdictional water resources that could be present in the project area.

The Federal Emergency Management Agency (FEMA) flood map was also reviewed to determine the presence of designated floodways or floodplains. No floodways or floodplains are mapped within the project corridor. The NWI and FEMA flood map are provided as attachments to this correspondence.

**Proposed Improvements**

It is proposed to provide 11-foot wide travel lanes bordered by concrete curb and gutter. New curb inlets will be installed to channel stormwater to outlet to the existing trunk line. This line will be inspected, cleaned, extended (as necessary) and repaired as needed. Patching of the existing pavement at defined locations will be completed before the roadway is milled and resurfaced to improve mobility and useful life. The proposed design speed of 30 mph will match the current posted speed limit along the corridor. The existing horizontal alignment and vertical profile for the proposed roadway will essentially remain the same to reduce additional right-of-way and impacts to utilities. The existing sidewalks and access ramps will be evaluated for Americans with Disabilities Act (ADA) compliance and repaired or replaced as necessary. Any gaps or damaged sidewalks will be coordinated with the City to determine if additional sidewalks are needed or if changes to existing locations are required. New street lighting will be installed to provide safer travel for all users of the corridor.

Reducing the pavement width has the benefit of increasing green space along the corridor and reducing the amount of stormwater runoff. The additional greenspace will allow trees to be planted between the sidewalks and the curbs. Separation between the sidewalks and travel lanes will also improve safety for pedestrians using the sidewalks. Completion of the Boonville Bypass will reduce the number of trucks using Third Street and the need for wider travel lanes. It is anticipated that a maximum of 1.5 acres of additional permanent right-of-way may be required with temporary right-of-way as needed for construction. The estimated construction cost is \$1,611,000.00 (2019 dollars). \*

A maintenance of traffic plan will be developed in coordination with the City and the Indiana Department of Transportation (INDOT). All options investigated will allow access to be maintained for all properties for the duration of construction. The existing network of city streets provides various alternative routes to the traveling public. Phase construction would be used to minimize disruptions to traffic and complete the construction as quickly possible. Breaking the project into segments will allow for construction to be localized and completed in stages to minimize impacts to the traveling public, businesses, and the locally affected residents.

\*0.25 acres of temporary right of way and \$3,100,000 (2022 dollars)



**Early Coordination**

As part of our early coordination effort for the referenced project, you are asked to study this enclosed information and provide a written evaluation of potential project impacts upon those resources under your jurisdiction. Please return a reply within thirty (30) days of receipt of this letter. If no reply has been received by this date, it will be indicated in the environmental documentation that your agency had no comment. Your cooperation in expediting the development of the referenced project is appreciated.

If you have any questions, or if we can be of any further assistance, please contact either Ms. Sara Howard, City of Boonville at [sara.hurt.boonvillecity@gmail.com](mailto:sara.hurt.boonvillecity@gmail.com) or this office at [jvlach@b-l-n.com](mailto:jvlach@b-l-n.com) and telephone 317-849-5832, ext. 3031. Thank you for your cooperation.

Very truly yours,

**BEAM LONGEST NEFF**

A handwritten signature in black ink that reads 'Jeffrey A. Vlach'. The signature is written in a cursive style with a large, prominent 'J' and 'V'.

Jeffrey A. Vlach  
Chief Environmental Analyst

BLN File #180031

**GRAPHICS PROVIDED IN ECL ARE SHOWN IN IN APPENDIX B**

## EARLY COORDINATION MAILING LIST

|                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Federal Highway Administration<br/> Federal Office Building, Room 254<br/> 575 North Pennsylvania Street<br/> Indianapolis, Indiana 46204<br/> Sent electronically - <a href="mailto:michelle.allen@dot.gov">michelle.allen@dot.gov</a><br/> Cc: <a href="mailto:erica.tait@dot.gov">erica.tait@dot.gov</a></p> | <p>Ryan Falls<br/> Environmental Section Manager<br/> Seymour District<br/> Indiana Department of Transportation<br/> Sent electronically – <a href="mailto:rfalls@indot.in.gov">rfalls@indot.in.gov</a></p>                     |
| <p>Indiana Geological Survey<br/> 611 North Walnut Grove<br/> Bloomington, IN 47405<br/> Sent electronically - <a href="https://igs.indiana.edu/eAssesment/">https://igs.indiana.edu/eAssesment/</a></p>                                                                                                           | <p>Indiana Department of Transportation<br/> Office of Aviation<br/> 100 N. Senate Avenue, Rm. 955<br/> Indianapolis, IN 46204<br/> Sent electronically – <a href="mailto:jcourtade@indot.in.gov">jcourtade@indot.in.gov</a></p> |
| <p>Chief, Groundwater Section<br/> Indiana Department of Environmental Management<br/> 100 N. Senate Avenue<br/> Indianapolis, IN 46204<br/> Sent electronically – <a href="mailto:aturnbow@idem.IN.gov">aturnbow@idem.IN.gov</a></p>                                                                              | <p>City of Boonville<br/> 135 South Second Street<br/> Boonville, IN 47601</p>                                                                                                                                                   |
| <p>Environmental Coordinator<br/> Indiana Department of Natural Resources<br/> Division of Fish and Wildlife<br/> 402 West Washington Street, Rm. W273<br/> Indianapolis, IN 46204<br/> Sent electronically – <a href="mailto:environmentalreview@dnr.in.gov">environmentalreview@dnr.in.gov</a></p>               | <p>Evansville Metropolitan Planning Organization<br/> 1 NW Martin Luther King Jr. Blvd.<br/> Evansville, IN 47708</p>                                                                                                            |
| <p>Indiana Department of Environmental Management<br/> Sent electronically – <a href="https://www.in.gov/idem/5284.htm">https://www.in.gov/idem/5284.htm</a></p>                                                                                                                                                   |                                                                                                                                                                                                                                  |
| <p>Manager, Public Hearings<br/> Indiana Department of Transportation<br/> 100 N. Senate Avenue, Rm. 642<br/> Indianapolis, IN 46204</p>                                                                                                                                                                           |                                                                                                                                                                                                                                  |
| <p>Regional Environmental Coordinator<br/> Midwest Regional Office<br/> National Park Service<br/> 601 Riverfront Drive<br/> Omaha, Nebraska 68102</p>                                                                                                                                                             |                                                                                                                                                                                                                                  |
| <p>State Conservationist<br/> Natural Resources Conservation Service<br/> 6013 Lakeside Boulevard<br/> Indianapolis, Indiana 46278<br/> Sent electronically – <a href="mailto:rick.neilson@in.usda.gov">rick.neilson@in.usda.gov</a></p>                                                                           |                                                                                                                                                                                                                                  |



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 North Senate Avenue - Indianapolis, IN 46204  
(800) 451-8027 - (317) 232-8803 - [www.idem.in.gov](http://www.idem.in.gov)

City of Boonville  
Sara Howard  
P.O. Box 585  
Boonville, IN 47601  
Date

Beam Longest Neff  
Jeff Viach  
8320 Craig Street  
Indianapolis, IN 46250

## To Engineers and Consultants Proposing Roadway Construction Projects:

**RE:** It is proposed to provide two 11-foot wide lanes bordered by curbs and gutters. New curb inlets will be installed to outlet to an existing trunk line. Patching of the existing pavement at defined locations will be completed before the roadway is milled and resurfaced. The existing horizontal alignment and vertical profile will remain. Existing sidewalks and access ramps will be evaluated for ADA compliance and repaired/replaced as necessary. New street lighting and trees will be placed between the sidewalks and curbs. Approximately 1.5 acres of permanent ROW may be required with temporary ROW as needed for construction.

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

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

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

## WATER AND BIOTIC QUALITY

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

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

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and DeKalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-8812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-8733).

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

- In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality Wetlands Program. To learn more about the Wetlands Program, visit: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>).
- If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.
- If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>) for the appropriate staff contact to further discuss your project.
- Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the following statutes:
  - IC 14-26-2 Lakes Preservation Act 312 IAC 11
  - IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
  - IC 14-28-1 Flood Control Act 310 IAC 8-1
  - IC 14-28-1 Navigable Waterways Act 312 IAC 6
  - IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
  - IC 14-29-4 Construction of Channels Act No related code

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

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

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

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/Idem/4917.htm#constreq>) (<http://www.in.gov/Idem/4917.htm#constreq>), and as described in 327 IAC 15-5-8.5 (<http://www.in.gov/legislative/iac/T03270/A00150>) (<http://www.in.gov/legislative/iac/T03270/A00150.PDF>), pages 18 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/sda/soil/contacts/map.html>) (<http://www.in.gov/sda/soil/contacts/map.html>)).

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

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

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

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

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

## AIR QUALITY

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

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

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

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

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

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

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit:

[http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon\\_testers\\_mitigators\\_list.pdf](http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf) ([http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon\\_testers\\_mitigators\\_list.pdf](http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf).) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

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

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

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

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

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

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,800 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. All notification remitters will be billed on a quarterly basis.

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

4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: <http://www.in.gov/isdh/19131.htm> (<http://www.in.gov/isdh/19131.htm>).
5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule (<http://www.legislativeservices.in.gov/legislativeservices/legislativeservices/T03260/A00080.PDF>) (<http://www.legislativeservices.in.gov/legislativeservices/legislativeservices/T03260/A00080.PDF>).
6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: [www.legislativeservices.in.gov/legislativeservices/legislativeservices/T03260/A00020.pdf](http://www.legislativeservices.in.gov/legislativeservices/legislativeservices/T03260/A00020.pdf)) (<http://www.legislativeservices.in.gov/legislativeservices/legislativeservices/T03260/A00020.pdf>.) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm> (<http://www.in.gov/idem/4223.htm>), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or [OAMPROD@idem.state.in.us](mailto:OAMPROD@idem.state.in.us).

## LAND QUALITY

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

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

## FINAL REMARKS

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

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

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

### Signature(s) of the Applicant

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

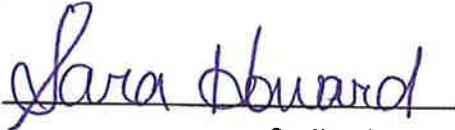
### Project Description

It is proposed to provide two 11-foot wide lanes bordered by curbs and gutters. New curb inlets will be installed to outlet to an existing trunk line. Patching of the existing pavement at defined locations will be completed before the roadway is milled and resurfaced. The existing horizontal alignment and vertical profile will remain. Existing sidewalks and access ramps will be evaluated for ADA compliance and repaired/replaced as necessary. New street lighting and trees will be placed between the sidewalks and curbs. Approximately 1.5 acres of permanent ROW may be required with temporary ROW as needed for construction.

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

Date: 2-19-19

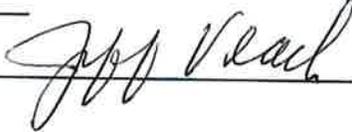
Signature of the INDOT  
Project Engineer or Other Responsible Agent



Sara Howard

Date: 2/19/19

Signature of the  
For Hire Consultant



Jeff Vlach



# Indiana Department of Environmental Management

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**Eric J. Holcomb**  
Governor

**Bruno Pigott**  
Commissioner

February 22, 2019

66-33

Beam Longest Neff  
Attention: Jeffrey A. Vlach  
8320 Craig Street  
Indianapolis, Indiana 46250

RE: Wellhead Protection Area  
Proximity Determination  
Des No 1600891  
Third Street Roadway Improvement  
and Non-Motorized Facility Project  
Sycamore Street to North of Olive  
Street, Boonville, Warrick County,  
Indiana

Dear Jeffrey A. Vlach,

Upon review of the above referenced project site, it has been determined that the proposed project area **is not located within** a Wellhead Protection Area. The information is accurate to the best of our knowledge; however, there are in some cases a few factors that could impact the accuracy of this determination. Some Wellhead Protection Area Delineations have not been submitted, and many have not been approved by this office. In these cases we use a 3,000 foot fixed radius buffer to make the proximity determination. To find the status of a Public Water Supply System's (PWSS's) Wellhead Protection Area Delineation please visit our tracking database at <http://www.in.gov/idem/cleanwater/2456.htm> and scroll to the bottom of the page.

The project area **is located within** a Source Water Assessment Area for a PWSS's surface water intake. The Source Water Assessment Area relates to the surface water drainage area that water could potentially flow and influence water quality for a PWSS's source of drinking water. The PWSS that could be impacted by the project is Evansville Water Utility. A contact person for Evansville Water Utility is Richard L. Glover and could be reached via e-mail and/or phone at: [rglover@ewsu.com](mailto:rglover@ewsu.com) and (812) 428-0568. The contact information is provided as a courtesy and reference for you if any issues arise that could potentially impact the water quality for the PWSS during the course of the project. It is not a requirement of IDEM that you contact the system regarding the project.

Note: the Drinking Water Branch has launched a new self service feature which allows one to determine wellhead proximity without submitting the application form. Use the following instructions:

1. Go to <http://idemmaps.idem.in.gov/whpa2/>
2. Use the search tool located in the upper left hand corner of the application to zoom to your site of interest by way of city, county, or address; or use the mouse to click on the site of interest displayed on the map.
3. Once the site of interest has been located and selected, use the print tool to create a .pdf of a wellhead protection area proximity determination response.

In the future please consider using this self service feature if it suits your needs.



Please Reduce, Reuse, Recycle

If you have any additional questions please feel free to contact me at the address above or at (317) 233-9158 and [aturnbow@idem.in.gov](mailto:aturnbow@idem.in.gov).

Sincerely,

A handwritten signature in black ink that reads "Alisha Turnbow". The signature is written in a cursive style with a large initial 'A'.

Alisha Turnbow,  
Environmental Manager  
Ground Water Section  
Drinking Water Branch  
Office of Water Quality

e-cc: Evansville Water Utility

**From:** [McWilliams, Robin](#)  
**To:** [Jeff Vlach](#)  
**Subject:** Re: [EXTERNAL] Des. No. 1600891- Third Street Project, Boonville, Warrick County, Indiana  
**Date:** Monday, March 4, 2019 12:00:39 PM

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Dear Mr. Vlach,

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

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

The project is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and should follow the new Indiana bat/northern long-eared bat programmatic consultation process, if applicable (*i.e.* a federal transportation nexus is established). We will review that information once it is received.

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

We appreciate the opportunity to comment at this early stage of project planning. If project plans change such that fish and wildlife habitat may be affected, please re-coordinate with our office as soon as possible. If you have any questions about our recommendations, please call (812) 334-4261 x. 207.

Sincerely,  
Robin McWilliams Munson

**Standard Recommendations:**

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.)**
2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.  
  
Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottomed culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If rip rap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.

6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams.

7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing.

Robin McWilliams Munson

U.S. Fish and Wildlife Service  
620 South Walker Street  
Bloomington, Indiana 46403  
812-334-4261 x. 207 Fax: 812-334-4273

Monday, Tuesday - 7:30a-3:00p  
Wednesday, Thursday - telework 8:30a-3:00p

On Mon, Feb 18, 2019 at 1:39 PM Jeff Vlach <[JVlach@b-l-n.com](mailto:JVlach@b-l-n.com)> wrote:

Ms. McWilliams - Please see the attached early coordination letter, which has been prepared for the referenced project. This is sent for your review and comment. Please forward your response to my attention. Thank you for your cooperation.

**JEFF VLACH**

**Chief Environmental Analyst**

o: 317.849.5832, ext. 3031

c: 317.696.3617

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**THIS IS NOT A PERMIT**

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

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**DNR #:** ER-21266

**Request Received:** February 13, 2019

**Requestor:** Beam, Longest and Neff, LLC  
Jeffrey A Vlach  
8320 Craig Street  
Indianapolis, IN 46250

**Project:** Third Street roadway and non-motorized facility improvements, between Lovers Lane and Sycamore Street, City of Boonville; Des #1600891

**County/Site info:** Warrick

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

1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; low endophyte tall fescue may be used in the ditch bottom and side slopes only.
2. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
3. 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.
4. Plant five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height.

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



**Date:** March 15, 2019

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

## Organization and Project Information

**Project ID:** Third Street, Boonville  
**Des. ID:** Des. No. 1600891  
**Project Title:** Third Street Roadway Improvements  
**Name of Organization:** Beam Longest Neff  
**Requested by:** Jeff Vlach

## Environmental Assessment Report

### 1. Geological Hazards:

- Potential Mine Subsidence ([CMIS](#))
- Moderate liquefaction potential
- 1% Annual Chance Flood Hazard

### 2. Mineral Resources:

- Bedrock Resource: High Potential
- Sand and Gravel Resource: None documented in the area

### 3. Active or abandoned mineral resources extraction sites:

- Underground Coal Mines
- Surface Coal Mines

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

## **DISCLAIMER:**

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

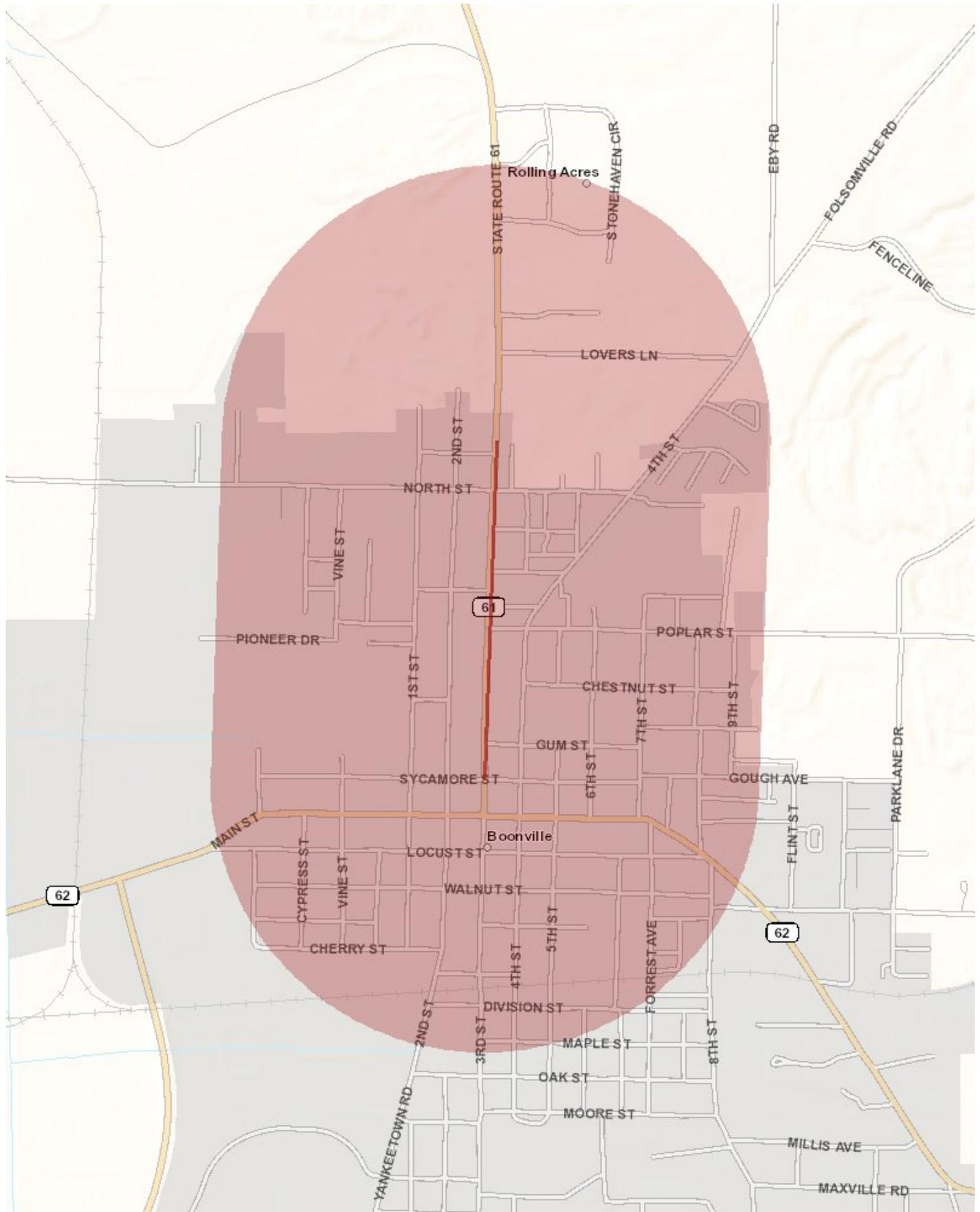
This information was furnished by Indiana Geological Survey

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

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

Phone: 812 855-7428

Date: February 19, 2019



# Metadata:

- [https://maps.indiana.edu/metadata/Geology/Coal\\_Mines\\_Entries.html](https://maps.indiana.edu/metadata/Geology/Coal_Mines_Entries.html)
- [https://maps.indiana.edu/metadata/Geology/Coal\\_Mines\\_Underground.html](https://maps.indiana.edu/metadata/Geology/Coal_Mines_Underground.html)
- [https://maps.indiana.edu/metadata/Geology/Coal\\_Mines\\_Surface.html](https://maps.indiana.edu/metadata/Geology/Coal_Mines_Surface.html)
- [https://maps.indiana.edu/metadata/Geology/Seismic\\_Earthquake\\_Liquefaction\\_Potential.html](https://maps.indiana.edu/metadata/Geology/Seismic_Earthquake_Liquefaction_Potential.html)
- [https://maps.indiana.edu/metadata/Hydrology/Floodplains\\_FIRM.html](https://maps.indiana.edu/metadata/Hydrology/Floodplains_FIRM.html)
- [https://maps.indiana.edu/metadata/Geology/Bedrock\\_Geology.html](https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html)

**From:** [Jeff Vlach](#)  
**To:** [Stoops, Ernie](#)  
**Subject:** Des. No. 1600891- Third Street Project, Boonville, Warrick County, Indiana  
**Date:** Monday, February 18, 2019 10:14:00 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.png](#)

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Mr. Stoops – Thank you for your response on the ECL for the referenced project. To address your comments, we will include project funding sources in the CE. We will initiate the range-wide consultation with your office and follow the iPac process. We will include Ryan and you in the IPac consultation, as requested, and will send an ECL to the USFWS today. We are working to complete and have employed a QP to assist with Section 106 compliance. We completed an RFI for the corridor late last year, which was approved by SAM on January 15, 2019. It will be a part of the CE. Lastly, your reference to the ECL template will be followed on future projects.

If you have any questions, please do not hesitate to contact our office. Thank you for your cooperation.

#### **JEFF VLACH**

##### **Chief Environmental Analyst**

o: 317.849.5832, ext. 3031

c: 317.696.3617

B-L-N.com

#### **BEAM LONGEST NEFF**

*A Tradition of Excellence Since 1945*

---

**From:** Stoops, Ernie <ESTOOPS@indot.IN.gov>  
**Sent:** Friday, February 15, 2019 11:36 AM  
**To:** Jeff Vlach <JVlach@b-l-n.com>  
**Cc:** Brett Walls <bwalls@b-l-n.com>; Brian Shaw <bshaw@b-l-n.com>  
**Subject:** RE: Des. No. 1600891- Third Street Project, Boonville, Warrick County, Indiana

Mr. Vlach:

Thank you for the early coordination letter. All sources of funding for the project need to be mentioned in the NEPA document, Federal, Local, and/or State.

This project qualifies for the application of the USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat and USFWS project information form will be provided to USFWS for review separately. This process needs to start with our office. Once

you have started the IPaC process, please add Ryan Falls and myself as members, as we are the reviewers. Please follow the process outlined on the environmental policies website for submission. This needs to be mentioned in future letters. You should probably send an early coordination letter to USFWS.

With this project being in the City, there is the possibility of hazardous materials being encountered. Please follow up with your RFI submission to the Site Assessment and Management(SAM) group in central office.

Please follow the section 106 processes as outlined on the Cultural Resources website. This needed to be mentioned in the letter.

On the Environmental Policies website there is a sample early coordination letter that has format and content. Please look at this for future letters.

Again thank you for the letter.

**Ernest A. Stoops PE**

***Capital Program Management-Design and Environmental Manager***

Indiana Department of Transportation

3650 South U.S. Highway 41

Vincennes, IN 47591

**Office:** 812-895-7390

**Fax:** 812-895-7474

**Email:** [estoops@indot.IN.gov](mailto:estoops@indot.IN.gov)



**[Click Here To Sign Up for INDOT Project Email and Text Alerts!](#)**

---

**From:** Jeff Vlach [<mailto:JVlach@b-l-n.com>]

**Sent:** Wednesday, February 13, 2019 3:54 PM

**To:** [rick.neilson@in.usda.gov](mailto:rick.neilson@in.usda.gov); DNR Environmental Review <[environmentalreview@dnr.IN.gov](mailto:environmentalreview@dnr.IN.gov)>; SULLIVAN, JAMES <[JSULLIVA@idem.IN.gov](mailto:JSULLIVA@idem.IN.gov)>; Clark, Rickie <[RCLARK@indot.IN.gov](mailto:RCLARK@indot.IN.gov)>; Kinder, James <[jkinder@indot.IN.gov](mailto:jkinder@indot.IN.gov)>; [Antonio.Johnson@dot.gov](mailto:Antonio.Johnson@dot.gov); Stoops, Ernie <[ESTOOPS@indot.IN.gov](mailto:ESTOOPS@indot.IN.gov)>; [sara.hurt.boonvillecity@gmail.com](mailto:sara.hurt.boonvillecity@gmail.com); [seyed@evansvillempo.com](mailto:seyed@evansvillempo.com)

**Cc:** Brett Walls <[bwalls@b-l-n.com](mailto:bwalls@b-l-n.com)>; Brian Shaw <[bshaw@b-l-n.com](mailto:bshaw@b-l-n.com)>

**Subject:** Des. No. 1600891- Third Street Project, Boonville, Warrick County, Indiana

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

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Ladies and Gentlemen - Please see the attached early coordination letter, which has been prepared for the referenced project. This is sent for your review and comment. Please forward your response to my attention. Thank you for your cooperation.

**JEFF VLACH**

**Chief Environmental Analyst**

o: 317.849.5832, ext. 3031

c: 317.696.3617

B-L-N.com

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# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

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

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

In Reply Refer To:

June 10, 2019

Consultation Code: 03E12000-2019-SLI-1097

Event Code: 03E12000-2019-E-04960

Project Name: BLN 180031 Boonville 3rd St INDOT Des.1600891 Road Rehabilitation

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

# Official Species List

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

This species list is provided by:

**Indiana Ecological Services Field Office**

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

## Project Summary

Consultation Code: 03E12000-2019-SLI-1097

Event Code: 03E12000-2019-E-04960

Project Name: BLN 180031 Boonville 3rd St INDOT Des.1600891 Road Rehabilitation

Project Type: TRANSPORTATION

**Project Description:** This project consists of the rehabilitation of the existing pavement along with streetscape, drainage and sidewalk improvements along 3rd Street from Sycamore Street to just north of Olive Street a total distance of approximately 3200 feet. The existing roadway utilizes one 15-foot lane in each direction bounded by concrete curb and gutter and utilizes a closed drainage system. The proposed roadway will incorporate a road diet and narrow the lanes to one 11-foot lane in each direction bounded by new concrete curb and gutter with the proposed inlets feeding into the existing storm sewer system. The project will utilize a mill and overlay pavement rehabilitation along with patching as needed throughout the project limits.

Decorative lighting is proposed to be installed along 3rd Street and will follow all applicable INDOT and FHWA guidelines for roadway lighting. Permanent lighting will be installed. No temporary lighting is necessary. Maintenance of traffic will be developed utilizing phased construction and the posting of alternate/detour routes. Concrete sidewalks along with new curb ramps will be installed along both sides of 3rd Street and will be compliant with PROWAG Criteria and will include detectable warnings and proper crosswalk striping.

This project falls within the range of the Indiana Bat and the Northern Long Eared Bat. On June 5, 2019 a review of the USFWS database did not indicate the presence of endangered bat species in or within the 0.5 mile search radius of the project area. The range-wide programmatic consultation for the Indiana bat and the Northern Long-eared bat will be completed according to “Using the USFWS IPaC System for Listed Bat Consultation, for INDOT Projects, dated May 10, 2018”.

No bridges or culverts will be involved in this project. Therefore, no bat inspections for bridges and culverts will be included in this project.

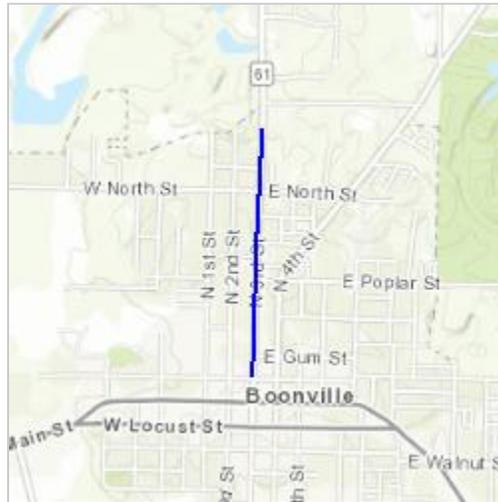
Sutiabale summer habitat is located within the project action area. It is proposed that five (5) trees will be removed and zero (0) trees will be trimmed for this project to occur. The proposed trees that will be removed

are characterized with diameters at breast height (DBH) and species as follows: a 4" Maple, a 4" Redbud, a 12" Poplar, a 36" Maple, and a 4" Redbud. Proposed trees will be removed during the inactive season

The anticipated start date of construction is in the summer of 2022.

**Project Location:**

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.05604720369085N87.27410255075576W>



Counties: Warrick, IN

## Endangered Species Act Species

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

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

## Mammals

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

## Critical habitats

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



## United States Department of the Interior



### FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

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

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

In Reply Refer To:

June 13, 2019

Consultation Code: 03E12000-2019-I-1097

Event Code: 03E12000-2019-E-05083

Project Name: BLN 180031 Boonville 3rd St INDOT Des.1600891 Road Rehabilitation

Subject: Concurrence verification letter for the 'BLN 180031 Boonville 3rd St INDOT Des. 1600891 Road Rehabilitation' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated to verify that the **BLN 180031 Boonville 3rd St INDOT Des.1600891 Road Rehabilitation** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

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

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

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

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

## **Project Description**

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

### **Name**

BLN 180031 Boonville 3rd St INDOT Des.1600891 Road Rehabilitation

### **Description**

This project consists of the rehabilitation of the existing pavement along with streetscape, drainage and sidewalk improvements along 3rd Street from Sycamore Street to just north of Olive Street a total distance of approximately 3200 feet. The existing roadway utilizes one 15-foot lane in each direction bounded by concrete curb and gutter and utilizes a closed drainage system. The proposed roadway will incorporate a road diet and narrow the lanes to one 11-foot lane in each direction bounded by new concrete curb and gutter with the proposed inlets feeding into the existing storm sewer system. The project will utilize a mill and overlay pavement rehabilitation along with patching as needed throughout the project limits.

Decorative lighting is proposed to be installed along 3rd Street and will follow all applicable INDOT and FHWA guidelines for roadway lighting. Permanent lighting will be installed. No temporary lighting is necessary. Maintenance of traffic will be developed utilizing phased construction and the posting of alternate/detour routes. Concrete sidewalks along with new curb ramps will be installed along both sides of 3rd Street and will be compliant with PROWAG Criteria and will include detectable warnings and proper crosswalk striping.

This project falls within the range of the Indiana Bat and the Northern Long Eared Bat. On June 5, 2019 a review of the USFWS database did not indicate the presence of endangered bat species in or within the 0.5 mile search radius of the project area. The range-wide programmatic consultation for the Indiana bat and the Northern Long-eared bat will be completed according to “Using the USFWS IPaC System for Listed Bat Consultation, for INDOT Projects, dated May 10, 2018”.

No bridges or culverts will be involved in this project. Therefore, no bat inspections for bridges and culverts will be included in this project.

Sutiabale summer habitat is located within the project action area. It is proposed that five (5) trees will be removed and zero (0) trees will be trimmed for this project to occur. The proposed trees that will be removed are characterized with diameters at breast height (DBH) and species as follows: a 4" Maple, a 4" Redbud, a 12" Poplar, a 36" Maple, and a 4" Redbud. Proposed trees will be removed during the inactive season

The anticipated start date of construction is in the summer of 2022.

# Determination Key Result

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

## Qualification Interview

1. Is the project within the range of the Indiana bat<sup>[1]</sup>?

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

**Automatically answered**

*Yes*

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

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

**Automatically answered**

*Yes*

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

*A) Federal Highway Administration (FHWA)*

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

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

*No*

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

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

*No*

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

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

*No*

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

*No*

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

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

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

*Yes*

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

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

*Yes*

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

*No*

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

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

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

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

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

*No*

12. Does the project include activities **within documented Indiana bat habitat**<sup>[1][2]</sup>?

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

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

*No*

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

*Yes*

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

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

*B) During the inactive season*

15. Does the project include activities **within documented NLEB habitat**<sup>[1][2]</sup>?

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

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

*No*

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

*Yes*

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

*B) During the inactive season*

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

*Yes*

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

*No*

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

*No*

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

*Yes*

22. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?  
*Yes*
23. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?  
*No*
24. Does the project include slash pile burning?  
*No*
25. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?  
*No*
26. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)  
*No*
27. Will the project involve the use of **temporary** lighting *during* the active season?  
*No*
28. Will the project install *any* new or replace any existing **permanent** lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities?  
*Yes*
29. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting (other than the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities) will be installed or replaced?  
*Yes*
30. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?  
*No*

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

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

*Yes*

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

*No*

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

**Automatically answered**

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

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

**Automatically answered**

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

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

**Automatically answered**

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

36. **General AMM 1**

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

*Yes*

37. **Tree Removal AMM 1**

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

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

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

*Yes*

38. **Tree Removal AMM 2**

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

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

**Automatically answered**

*Yes*

39. **Tree Removal AMM 2**

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

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

**Automatically answered**

*Yes*

40. **Tree Removal AMM 3**

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

*Yes*

41. **Tree Removal AMM 4**

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

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

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

*Yes*

42. **Lighting AMM 1**

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

*Yes*

43. **Lighting AMM 2**

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society<sup>[1][2]</sup> to rate the amount of light emitted in unwanted directions?

[1] Refer to [Fundamentals of Lighting - BUG Ratings](#)

[2] Refer to [The BUG System—A New Way To Control Stray Light](#)

*No*

44. **Lighting AMM 2**

Will *all* **permanent** lighting used during removal of suitable habitat and/or the removal/trimming of trees within suitable habitat use downward-facing, full cut-off<sup>[1]</sup> lens lights (with same intensity or less for replacement lighting)?

[1] Refer to [Luminaire classification for controlling stray light](#)

*Yes*

45. **Lighting AMM 2**

Will *all* **permanent** lighting used during removal of suitable habitat and/or the removal/trimming of trees within suitable habitat be directed away from *all* areas with suitable habitat?

*Yes*

46. **Lighting AMM 2**

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society<sup>[1][2]</sup> to rate the amount of light emitted in unwanted directions?

[1] Refer to [Fundamentals of Lighting - BUG Ratings](#)

[2] Refer to [The BUG System—A New Way To Control Stray Light](#)

*No*

47. **Lighting AMM 2**

Will *all* **permanent** lighting (other than any lighting already indicated for tree clearing or bridge/structure removal, replacement or maintenance activities) use downward-facing, full cut-off<sup>[1]</sup> lens lights (with same intensity or less for replacement lighting)?

[1] Refer to [Luminaire classification for controlling stray light](#)

*Yes*

48. **Lighting AMM 2**

Will the **permanent** lighting (other than any lighting already indicated for tree clearing or bridge/structure removal, replacement or maintenance activities) be directed away from *all* areas with suitable habitat?

*Yes*

## Project Questionnaire

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

*N/A*

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

*N/A*

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

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

.45

## Avoidance And Minimization Measures (AMMs)

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

### GENERAL AMM 1

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

### LIGHTING AMM 1

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

### LIGHTING AMM 2

When installing new 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 BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

### TREE REMOVAL AMM 1

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

#### TREE REMOVAL AMM 2

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

#### TREE REMOVAL AMM 3

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

#### TREE REMOVAL AMM 4

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

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

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

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

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

# **Appendix D:**

## **Section 106 of the NHPA**

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

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**Date:** 4/4/2019

**Project Designation Number:** 1600891

**Route Number:** N/A

**Project Description:** 3<sup>rd</sup> Street Road Improvements

The primary purpose of this project is to increase serviceability and safety for both motorized and non-motorized traffic. The quality of the roadway will be improved by patching, milling, and resurfacing of the existing roadway. The existing roadway consists of two 15-foot travel lanes. The roadway will be narrowed to two 11-foot travel lanes and new curb and gutters will be installed to improve stormwater drainage. New sidewalks will be built along the alignment and will be separated from the roadway by a 4-foot wide utility strip. Existing curb ramps will be reviewed for ADA compliance and repaired or replaced as necessary. Right-of-way will be acquired and driveways will be reconstructed. Decorative street lighting will be installed throughout the corridor.

**Feature crossed (if applicable):** N/A

**Township:** Boon

**City/County:** Boonville, Warrick County

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

General project location map  USGS map  Aerial photograph

Written description of project area  General project area photos

Previously completed archaeology reports  Interim Report

Previously completed historic property reports

Soil survey data  Bridge inspection information

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

Jackson, Christopher

2019 A Phase Ia Archaeological Records Review and Field Reconnaissance for the Proposed Rehabilitation of 3rd Street from Sycamore Street to Olive Street in the City of Boonville, Boon Township, Warrick County, Indiana. Green 3. Submitted to Beam, Longest and Neff. Report on file at the IDNR, DHPA

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

With regard to above-ground resources, an INDOT Cultural Resources historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Warrick County. The project area is not located within or adjacent to any listed resources.

The *Gibson County/Warrick County Interim Report* (1984; Boonville Scattered Sites) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD and IHBBCM information was checked against the Interim Report hard copy maps. It should be noted that Warrick County was re-surveyed in 2010. The information from the 2010 survey was uploaded to SHAARD, but a new interim report was not published. The 2010 survey data was utilized for the purposes of this MPPA determination.

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.

The following IHSSI properties are located adjacent to the project area:

IHSSI # 173-058-33185, Boonville Elks Lodge, rated "contributing"  
IHSSI # 173-058-33131, house, rated "contributing"  
IHSSI # 173-058-33188, duplex, rated "contributing"  
IHSSI # 173-058-33136, house, demolished  
IHSSI # 173-058-33132, house, rated "contributing"  
IHSSI # 173-058-33051, house, rated "contributing"  
IHSSI # 173-058-33050, house, rated "contributing"  
IHSSI # 173-058-33052, house, rated "contributing"  
IHSSI # 173-058-33130, house, rated "contributing"  
IHSSI # 173-058-33148, commercial building, rated "contributing"  
IHSSI # 173-058-33138, house, rated "contributing"  
IHSSI # 173-058-33137, house, rated "contributing"  
IHSSI # 173-058-33133, house, rated "contributing"  
IHSSI # 173-058-33053, house, rated "contributing"  
IHSSI # 173-058-33139, house, demolished  
IHSSI # 173-058-33193, house, rated "contributing"  
IHSSI # 173-058-33081, house, rated "contributing"  
IHSSI # 173-058-33094, house, rated "contributing"  
IHSSI # 173-058-33189, house, rated "contributing"  
IHSSI # 173-058-33100, house, rated "contributing"  
IHSSI # 173-058-33107, house, rated "contributing"  
IHSSI # 173-058-33101, house, rated "contributing"  
IHSSI # 173-058-33082, duplex, rated "contributing"  
IHSSI # 173-058-33192, house, rated "contributing"  
IHSSI # 173-058-33195, house, rated "contributing"  
IHSSI # 173-058-33105, house, rated "contributing"  
IHSSI # 173-058-33106, house, rated "contributing"

Though there are a significant number of surveyed IHSSI properties along the project route, none rise above a rating of "contributing." In addition, the IHSSI survey did not identify a historic

district in the area. The “contributing” properties listed above are spread over approximately 0.66 mile. During the desktop review, the INDOT historian saw no evidence for the presence of a historic district.

Aboveground resources adjacent to the project area largely consist of common types of early twentieth-century houses, including American Foursquare houses and bungalows, and vernacular late twentieth-century houses. Many have been heavily altered. Other resources adjacent to the project area include mid-twentieth century ranch houses, mid- to late twentieth-century commercial buildings, and a late nineteenth-century commercial building (heavily altered). None of the aboveground resources adjacent to the project area possess the significance and integrity necessary to be considered potentially eligible for the National Register, either individually or as part of a historic district.

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

**Archaeology Report Author/Date:**

Christopher Jackson/March 19, 2019

**Summary of Archaeology Investigation Results:**

With regard to archaeological resources, a qualified professional archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61 performed an archaeological records check and Phase Ia reconnaissance of the proposed project area. The records check indicated that one professional archaeological investigation had been conducted within the proposed project area; and many investigations have been conducted within one mile. No archaeological sites were recorded within or adjacent to the project area. Fifty-five sites have been recorded within the one mile investigation area.

The field reconnaissance found no cultural materials and no additional archaeological investigation was recommended. An INDOT Cultural Resources archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61 reviewed and approved the archaeological report for this project.

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

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

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

**Condition A (Archaeological Resources)**

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

- i. Work occurs in previously disturbed soils; *OR*
- ii. **Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National**

Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the Division of Historic Preservation and Archaeology (DHPA) and any archaeological site form information will be entered directly into the State Historic Architectural and Archaeological Database (SHAARD) by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

**Condition B (Above-Ground Resources)**

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

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

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

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

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

**If no, please explain:**

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

**INDOT Cultural Resources staff reviewer(s):** Anthony Ross and David Moffatt

*\*\*\*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 and Hazardous Materials**

Date: October 17, 2018

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

Project was updated as shown below after approval. No further edits are necessary.

From: Christian Radcliff  
Beam, Longest and Neff, LLC  
8320 Craig Street  
Indianapolis, Indiana 46250  
[cradcliff@b-l-n.com](mailto:cradcliff@b-l-n.com)

Re: RED FLAG INVESTIGATION  
DES # 1600891, Local Project  
Roadway Improvements  
3<sup>rd</sup> Street from North of Sycamore Street to North of Olive Street  
Warrick County, Indiana

460 feet north of Olive Street

**PROJECT DESCRIPTION**

Brief Description of Project: The City of Boonville proposes to improve 3<sup>rd</sup> Street from 160 feet north of Sycamore Street to 460 feet north of Olive Street (0.65 mile). The project is proposed to be completed with local and federal funds. The proposed improvements include milling and resurfacing the existing pavement, updating the existing ramps to be ADA compliant, and improving pedestrian access and safety. The existing roadway width will be reduced to allow for additional greenspace and larger sidewalks. New lighting will be installed along the corridor for improved visibility. New curb inlets will be installed along the corridor to help control drainage.

Bridge and/or Culvert Project: Yes  No  Structure # \_\_\_\_\_

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

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

Proposed right of way: Temporary  # Acres 1.0 Permanent  # Acres 1.0

1.5 perm, 0.25 temp

Type of excavation: Excavation for new storm sewers and light poles will be necessary. Excavation for sewers could extend up to six (6) feet and excavation for light poles could extend up to eight (8) feet. The location of the new storm sewers and light poles will be determined later in the design process.

Maintenance of traffic: Traffic will be maintained with one lane of traffic in either direction, with occasional closures for the roadway resurfacing. Roadside flaggers will be used to direct traffic during the lane closures.

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

State Project:  LPA:

Any other factors influencing recommendations: Recommendations are based on preliminary estimates or right of way, maintenance of traffic, and excavation, and are subject to change as design progresses.

**INFRASTRUCTURE TABLE AND SUMMARY**

| <b>Infrastructure</b>                                                                                                        |            |                         |            |
|------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|------------|
| Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A: |            |                         |            |
| Religious Facilities                                                                                                         | <b>11</b>  | Recreational Facilities | <b>5</b>   |
| Airports <sup>1</sup>                                                                                                        | <b>1*</b>  | Pipelines               | <b>3</b>   |
| Cemeteries                                                                                                                   | <b>2</b>   | Railroads               | <b>1</b>   |
| Hospitals                                                                                                                    | <b>N/A</b> | Trails                  | <b>N/A</b> |
| Schools                                                                                                                      | <b>4*</b>  | Managed Lands           | <b>1</b>   |

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

\*Items marked with an asterisk are not shown on the attached graphics.

**Explanation:**

**Religious Facilities:** Eleven (11) religious facilities are within the 0.5 mile search radius. The nearest facility, Hemenway Memorial Presbyterian Church, is approximately 0.06 mile east of the project area. No impact is expected.

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

**Cemeteries:** Two (2) cemeteries are located within the 0.5 mile search radius. The nearest cemetery, The Old Boonville Cemetery, is located approximately 0.13 mile west of the project area. No impact is expected.

**Schools:** Four (4) schools are within the 0.5 mile search radius. The nearest school, is approximately 0.09 mile west of the project area. No impact is expected.

**Recreational Facilities:** Five (5) recreational facilities are within the 0.5 mile search radius. The nearest facility, the athletic fields associated with Boonville High School, are approximately 0.09 mile west of the project area. No impact is expected.

**Pipelines:** Three (3) pipeline segments are within the 0.5 mile search radius. The nearest segment is a natural gas pipeline owned by Texas Gas Transmission Group and is within the project area. Coordination with Texas Gas Transmission Group should occur.

**Railroads:** One (1) railroad segment is within the 0.5 mile search radius. Norfolk Southern manages a railroad that is approximately 0.43 mile south of the project area. No impact is expected.

**Managed Lands:** One (1) managed land is within the 0.5 mile search radius. Scales Lake Park is approximately 0.5 mile east of the project area. No impact is expected.

**WATER RESOURCES TABLE AND SUMMARY**

|                                                                                                                              |            |                         |            |
|------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|------------|
| <b>Water Resources</b>                                                                                                       |            |                         |            |
| Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A: |            |                         |            |
| NWI - Points                                                                                                                 | <b>N/A</b> | Canal Routes - Historic | <b>N/A</b> |
| Karst Springs                                                                                                                | <b>N/A</b> | NWI - Wetlands          | <b>29</b>  |
| Canal Structures – Historic                                                                                                  | <b>N/A</b> | Lakes                   | <b>20</b>  |
| NPS NRI Listed                                                                                                               | <b>N/A</b> | Floodplain - DFIRM      | <b>2</b>   |
| NWI-Lines                                                                                                                    | <b>N/A</b> | Cave Entrance Density   | <b>N/A</b> |
| IDEM 303d Listed Streams and Lakes (Impaired)                                                                                | <b>N/A</b> | Sinkhole Areas          | <b>N/A</b> |
| Rivers and Streams                                                                                                           | <b>1</b>   | Sinking-Stream Basins   | <b>N/A</b> |

Explanation:

Rivers and Streams: One (1) river and stream segment is within the 0.5 mile search radius. The nearest stream segment is approximately 0.41 mile west of the project area. No impact is expected.

NWI Wetlands: Twenty-nine (29) wetlands are within the 0.5 mile search radius. The nearest wetland is approximately 0.08 mile north of the project area. No impact is expected.

Lakes: Twenty (20) lakes are within the 0.5 mile search radius. The nearest lake is approximately 0.02 mile north of the project area. No impact is expected.

Floodplain – DFIRM: Two (2) floodplain polygons are within the 0.5 mile search radius. The nearest floodplain polygon is approximately 0.25 mile west of the project area. No impact is expected.

**URBANIZED AREA BOUNDARY SUMMARY**

Explanation: This project lies within the Boonville UAB; however, a Rule 13 Permit from IDEM has not been issued. No further coordination is necessary at this time.

**MINING AND MINERAL EXPLORATION TABLE AND SUMMARY**

|                                                                                                                              |          |                     |            |
|------------------------------------------------------------------------------------------------------------------------------|----------|---------------------|------------|
| <b>Mining/Mineral Exploration</b>                                                                                            |          |                     |            |
| Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A: |          |                     |            |
| Petroleum Wells                                                                                                              | <b>1</b> | Mineral Resources   | <b>N/A</b> |
| Mines – Surface                                                                                                              | <b>4</b> | Mines – Underground | <b>3</b>   |

Explanation:

Petroleum Wells: One (1) petroleum well is located within the 0.5 mile radius. The nearest petroleum well is an unknown petroleum well that is located approximately 0.5 mile west of the project area. No impact is expected.

Mines – Surface: Four (4) surface mines are located immediately adjacent to the northern termini of the project area. Coordination with the IDNR Reclamation Division will occur.

Mines – Underground: Three (3) underground surface mines are within the 0.5 mile search radius. The nearest underground mine is approximately 0.19 mile north of the project area. No impact is expected.

**HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY**

| <b>Hazardous Material Concerns</b>                                                                                           |     |                                   |     |
|------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------|-----|
| Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A: |     |                                   |     |
| Superfund                                                                                                                    | 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            | 1   |
| State Cleanup Sites                                                                                                          | 1   | Waste Transfer Stations           | N/A |
| Septage Waste Sites                                                                                                          | N/A | Tire Waste Sites                  | N/A |
| Underground Storage Tank (UST) Sites                                                                                         | 7   | Confined Feeding Operations (CFO) | N/A |
| Voluntary Remediation Program                                                                                                | N/A | Brownfields                       | 5   |
| Construction Demolition Waste                                                                                                | N/A | Institutional Controls            | N/A |
| Solid Waste Landfill                                                                                                         | N/A | NPDES Facilities                  | N/A |
| Infectious/Medical Waste Sites                                                                                               | N/A | NPDES Pipe Locations              | N/A |
| Leaking Underground Storage (LUST) Sites                                                                                     | 6   | Notice of Contamination Sites     | N/A |

**Explanation:**

State Cleanup Sites: One (1) state cleanup site is within the 0.5 mile search radius. Boonville Mining Services Incorporated (Agency Interest 58550, 110 West Division Street) is approximately 0.46 mile south of the project area. The site was closed unconditionally on December 6, 2002. No impact is expected.

Underground Storage Tank (UST) Sites: Seven (7) UST sites are within the 0.5 mile search radius. The nearest UST is immediately adjacent on the west side of the project area. This UST is associated with Circle K 2413 (Agency Interest 59866, 720 North 3<sup>rd</sup> Street) The most recent Indiana Department of Environmental Management (IDEM) inspection report dated December 2, 2016 indicated that the site was in compliance with equipment, operating, and maintenance requirements set forth in Indiana’s UST rule 329 IAC 9. No impact is expected.

Leaking Underground Storage (LUST) Sites: Six (6) LUST sites are within the 0.5 mile search radius. The nearest LUST site is associated with BP Food Mart #25, which is the site of the former United Oil #6007 facility (Agency Interest 58648, 221 N Main Street) and located approximately 0.15 mile southeast. The site received a No Further Action determination by IDEM on June 10, 1999 due to the removal of all contaminated soil and groundwater at the site. No impact is expected.

Restricted Waste Sites: One (1) restricted waste site is within the 0.5 mile radius around the project area. According to an IDEM Solid Waste Compliance Inspection dated July 11, 2014, Warrick County Collection Container System (Agency Interest 60571, 109 West Main Street) was closed at this location on September 4, 2013. Access to the site is restricted and the facility has been transitioned to a mobile recycling program at a different location. No impact is expected.

Brownfields: There are five (5) Brownfields sites located within the 0.5 mile search radius. The nearest site, Hendrickson's Property (Agency ID No. 61462, 207 West Main Street), is located approximately 0.11 southwest of the project area. The site operated as a former car parts store and housed records for the county. The site has been demolished. No impact is expected.

### **ECOLOGICAL INFORMATION SUMMARY**

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

Due to the nature of project activities, this project will fall under the guidelines set forth under USFWS Interim Policy for the Review of Highway Transportation Projects in Indiana dated May 29, 2013. No further coordination is necessary.

A review of the USFWS database did not indicated the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

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

### **RECOMMENDATIONS SECTION**

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

#### **INFRASTRUCTURE:**

Airports: Boonville Airport is located within 3.8 miles of the project area; therefore, early coordination with INDOT Aviation will occur.

Pipelines: One (1) pipeline segment is in the immediate project area. Coordination with Texas Gas Transmission Group should occur.

WATER RESOURCES: N/A

URBANIZED AREA BOUNDARY: N/A

#### **MINING/MINERAL EXPLORATION:**

Surface Mines: Four (4) surface mines are located immediately adjacent to the northern termini of the project area. Coordination with the IDNR Reclamation Division will occur.

HAZMAT CONCERNS: N/A

#### **ECOLOGICAL INFORMATION:**

A review of the USFWS database did not indicated the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".



Nicole Fohey-Breting

Digitally signed by Nicole Fohey-Breting  
DN: cn=Nicole Fohey-Breting, o=INDOT,  
ou=Environmental Services, HazMat,  
email=NfoheyBreting@indot.in.gov,  
c=US  
Date: 2019.01.15 13:49:47 -05'00'

(Signature)

INDOT Environmental Services concurrence:

Prepared by:  
Christian Radcliff  
Environmental Analyst  
Beam, Longest and Neff, LLC

**Graphics:**

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

SITE LOCATION: YES

INFRASTRUCTURE: YES

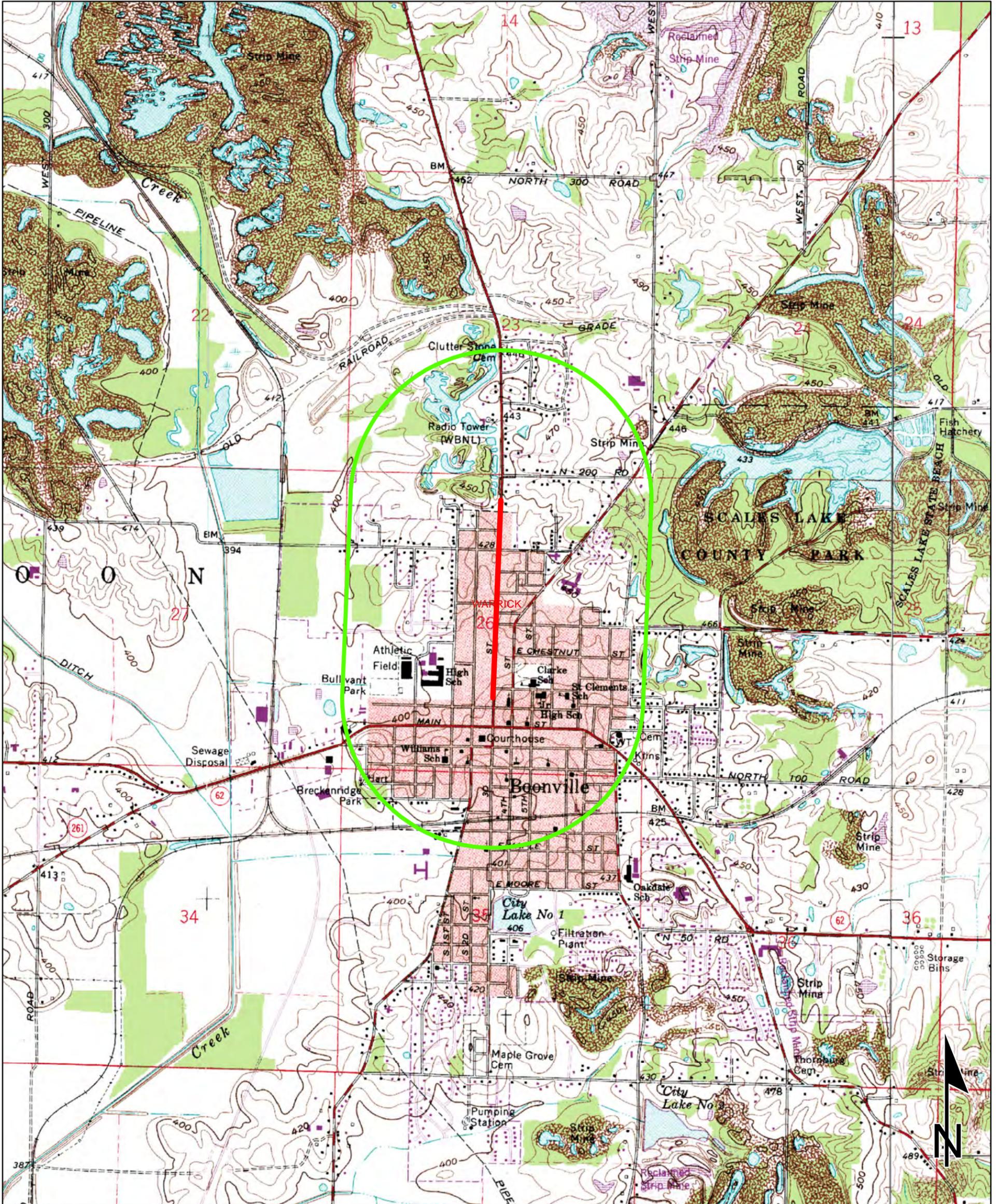
WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: YES

MINING/MINERAL EXPLORATION: YES

HAZMAT CONCERNS: YES

Red Flag Investigation - Site Location  
 3rd Street from North of Sycamore Street to North of Olive Street  
 Des. No. 1600891, Roadway Improvement Project  
 Warrick County, Indiana



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

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

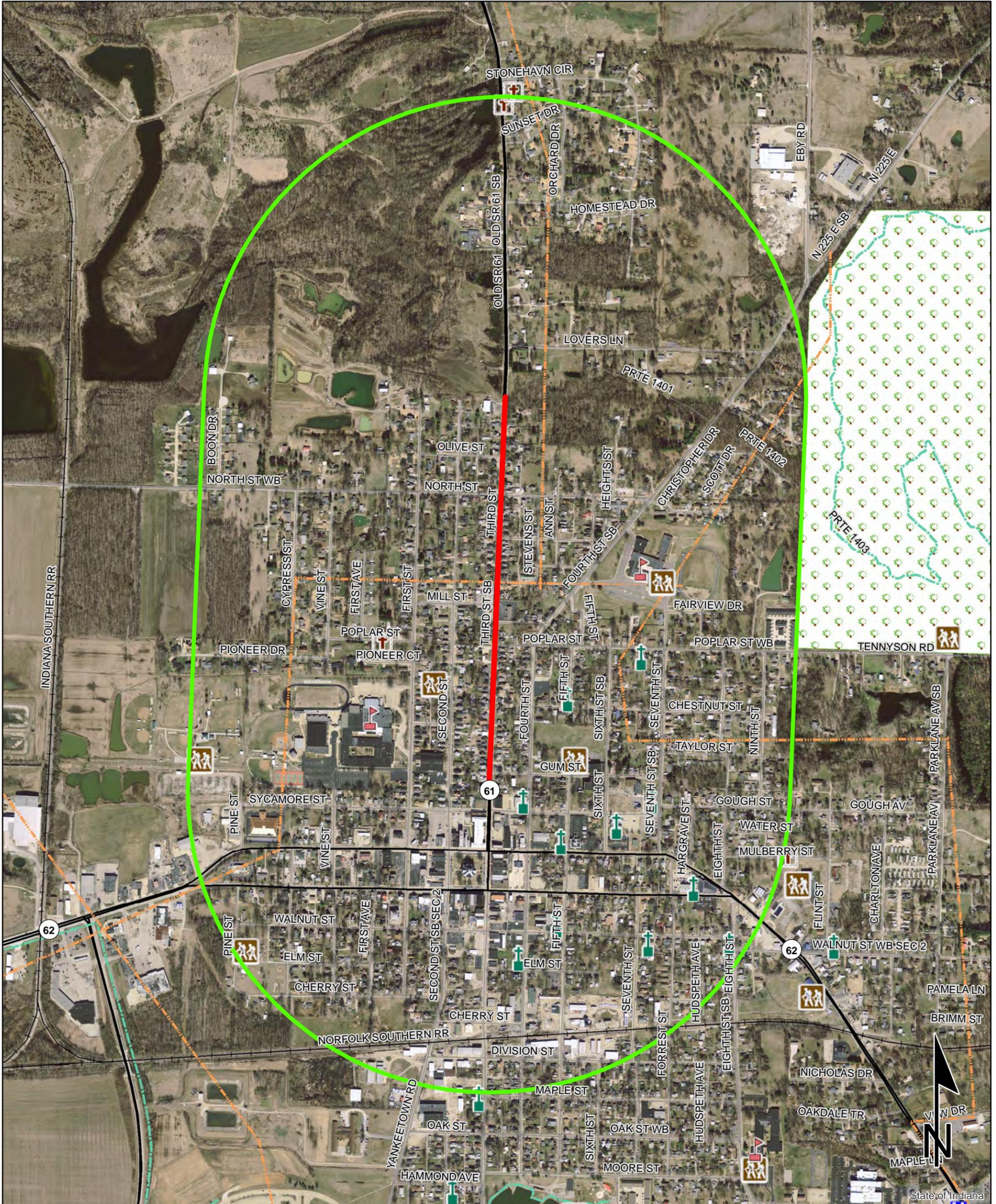
**BOONVILLE QUADRANGLE**  
**INDIANA**  
**7.5 MINUTE SERIES**  
**(TOPOGRAPHIC)**

# Red Flag Investigation - Infrastructure

## 3rd Street from North of Sycamore Street to North of Olive Street

### Des. No. 1600891, Roadway Improvement Project

#### Warrick County, Indiana



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

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

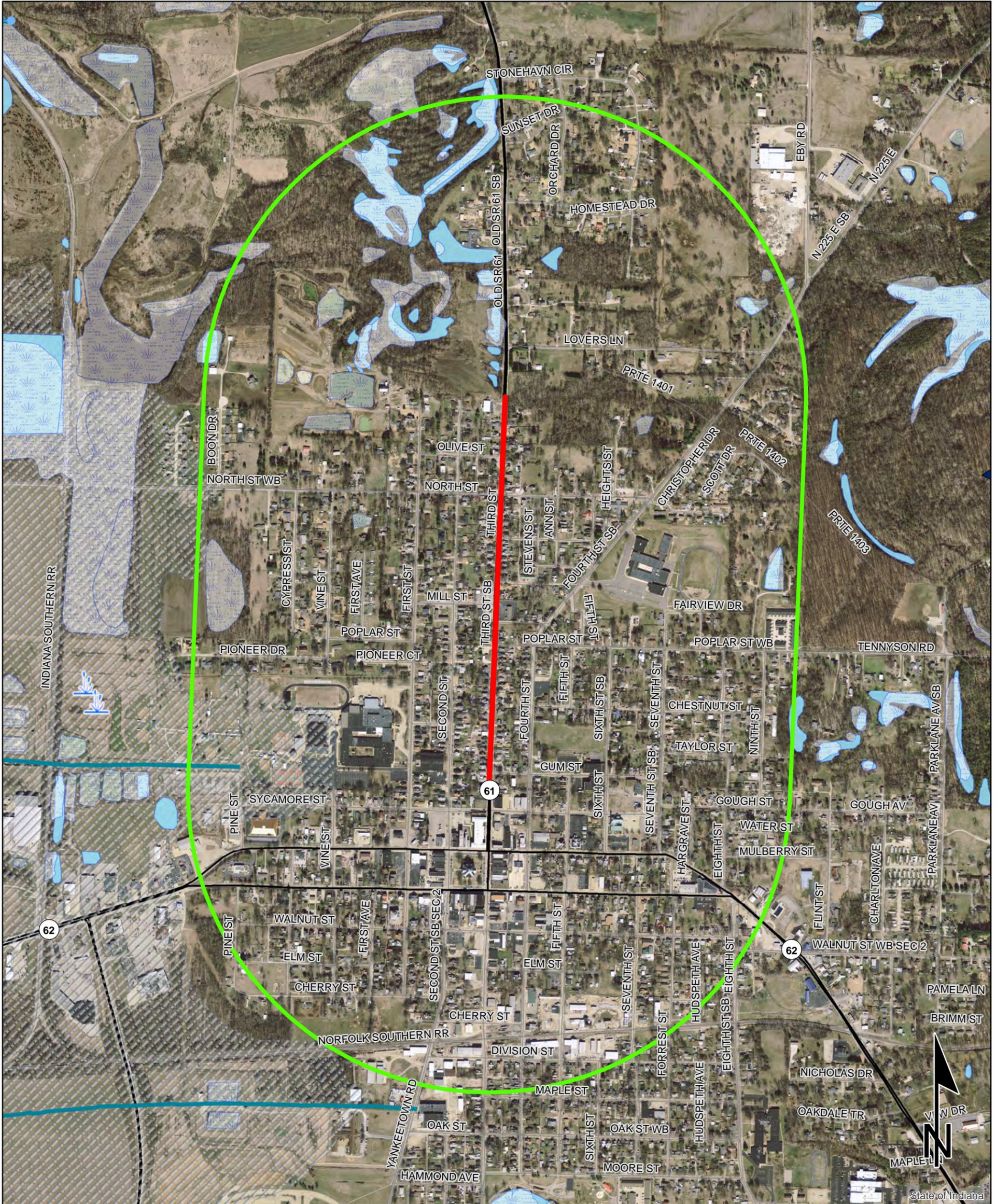
|  |                    |  |                     |  |                  |
|--|--------------------|--|---------------------|--|------------------|
|  | Religious Facility |  | Recreation Facility |  | Project Area     |
|  | Airport            |  | Pipeline            |  | Half Mile Radius |
|  | Cemeteries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

# Red Flag Investigation - Water Resources

## 3rd Street from North of Sycamore Street to North of Olive Street

### Des. No. 1600891, Roadway Improvement Project

#### Warrick County, Indiana

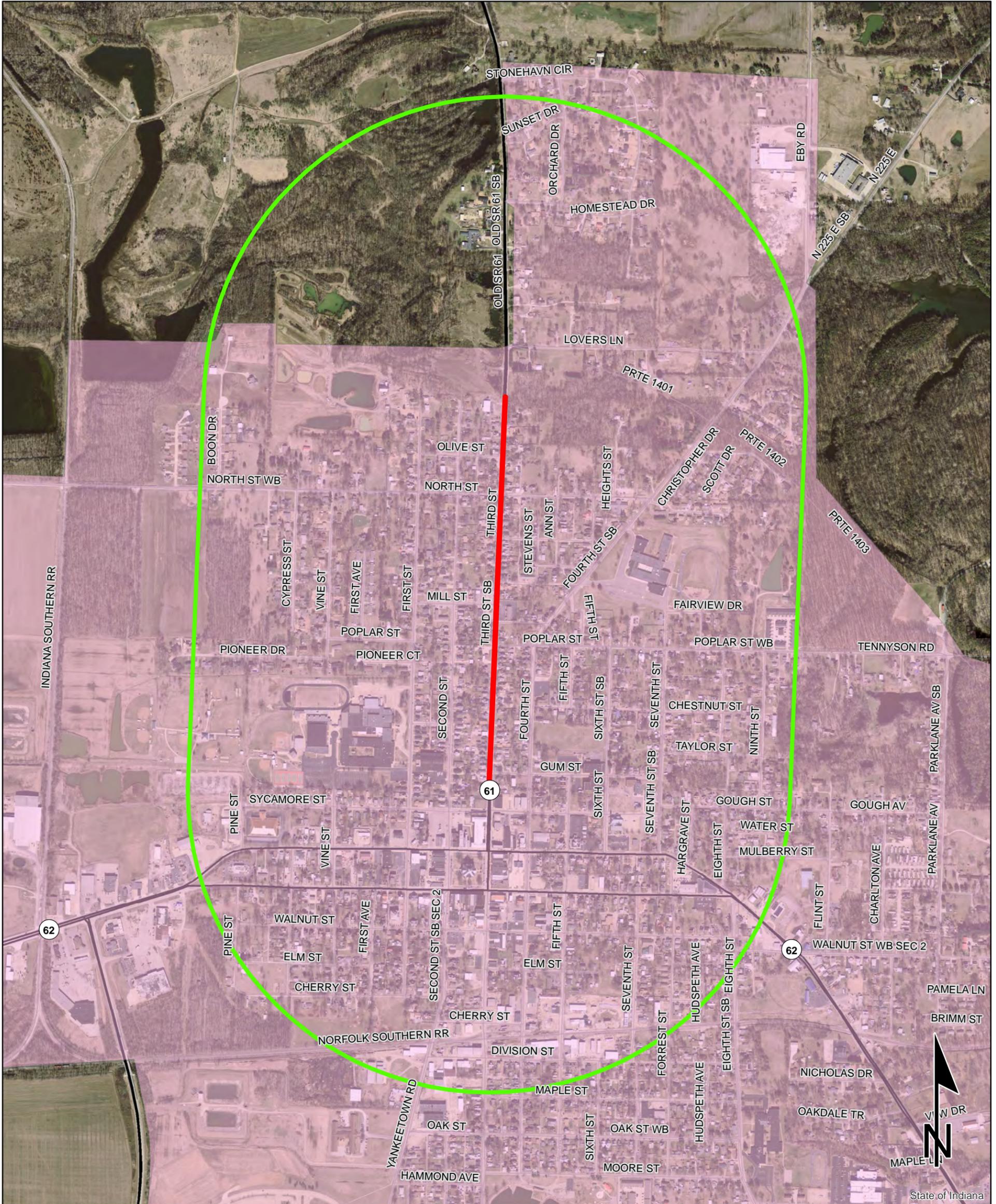


**Sources:**  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

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

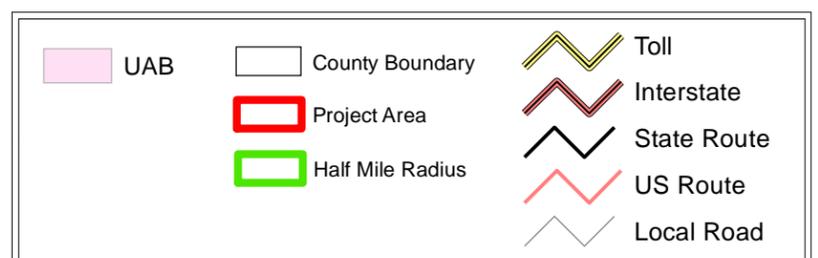
# Red Flag Investigation - Urbanized Area Boundary 3rd Street from North of Sycamore Street to North of Olive Street Des. No. 1600891, Roadway Improvement Project Warrick County, Indiana



**Sources:** 0 0.1 0.2 0.4 Miles  
**Non Orthophotography Data** - Obtained from the State of Indiana Geographical Information Office Library

**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

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

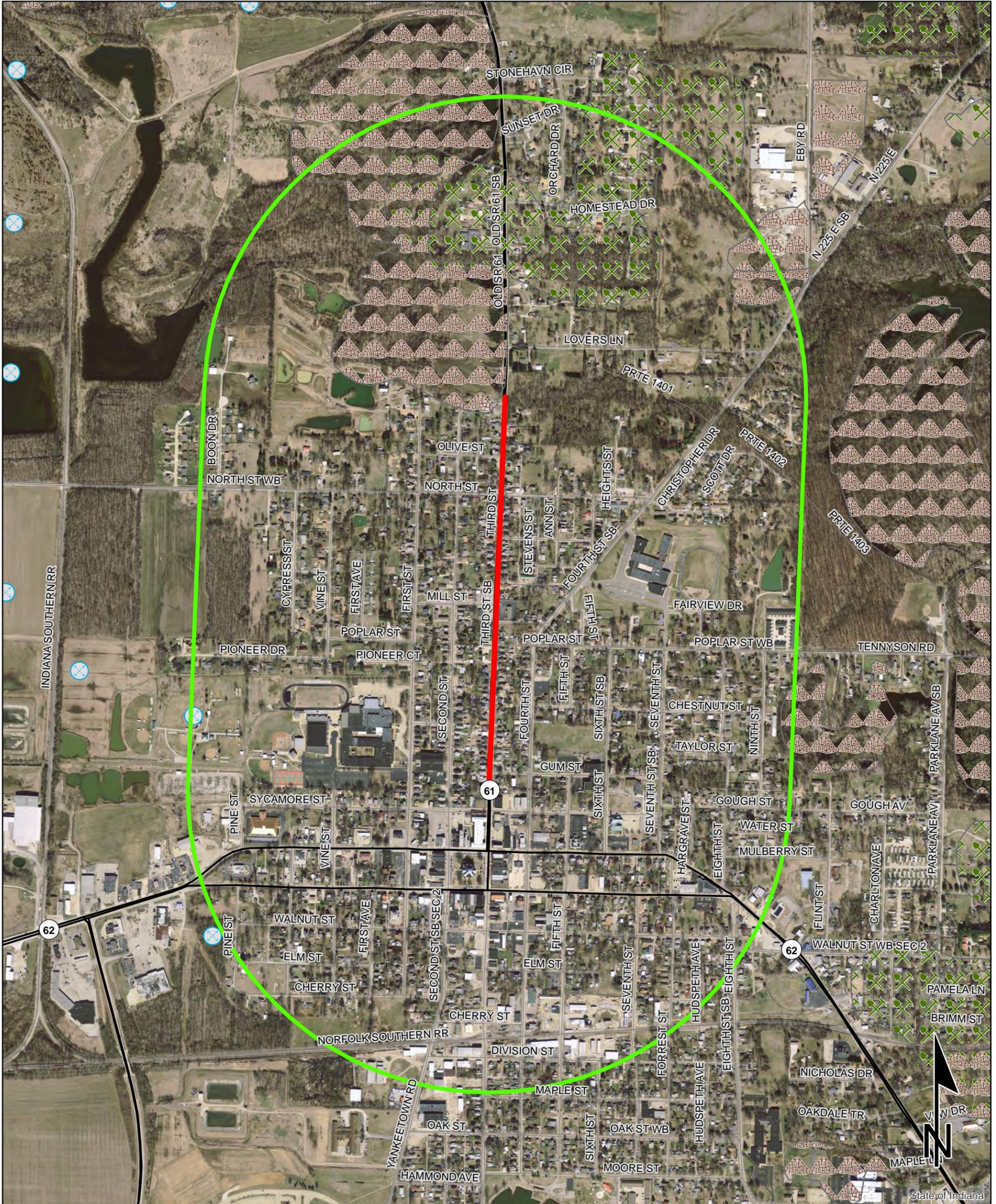


# Red Flag Investigation - Mining/Mineral Exploration

## 3rd Street from North of Sycamore Street to North of Olive Street

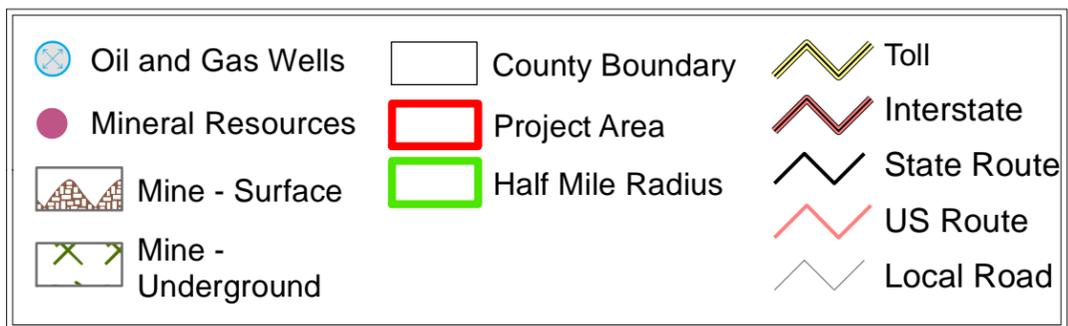
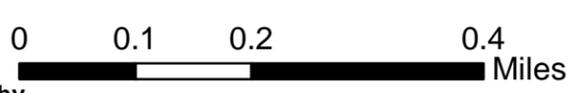
### Des. No. 1600891, Roadway Improvement Project

#### Warrick County, Indiana



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

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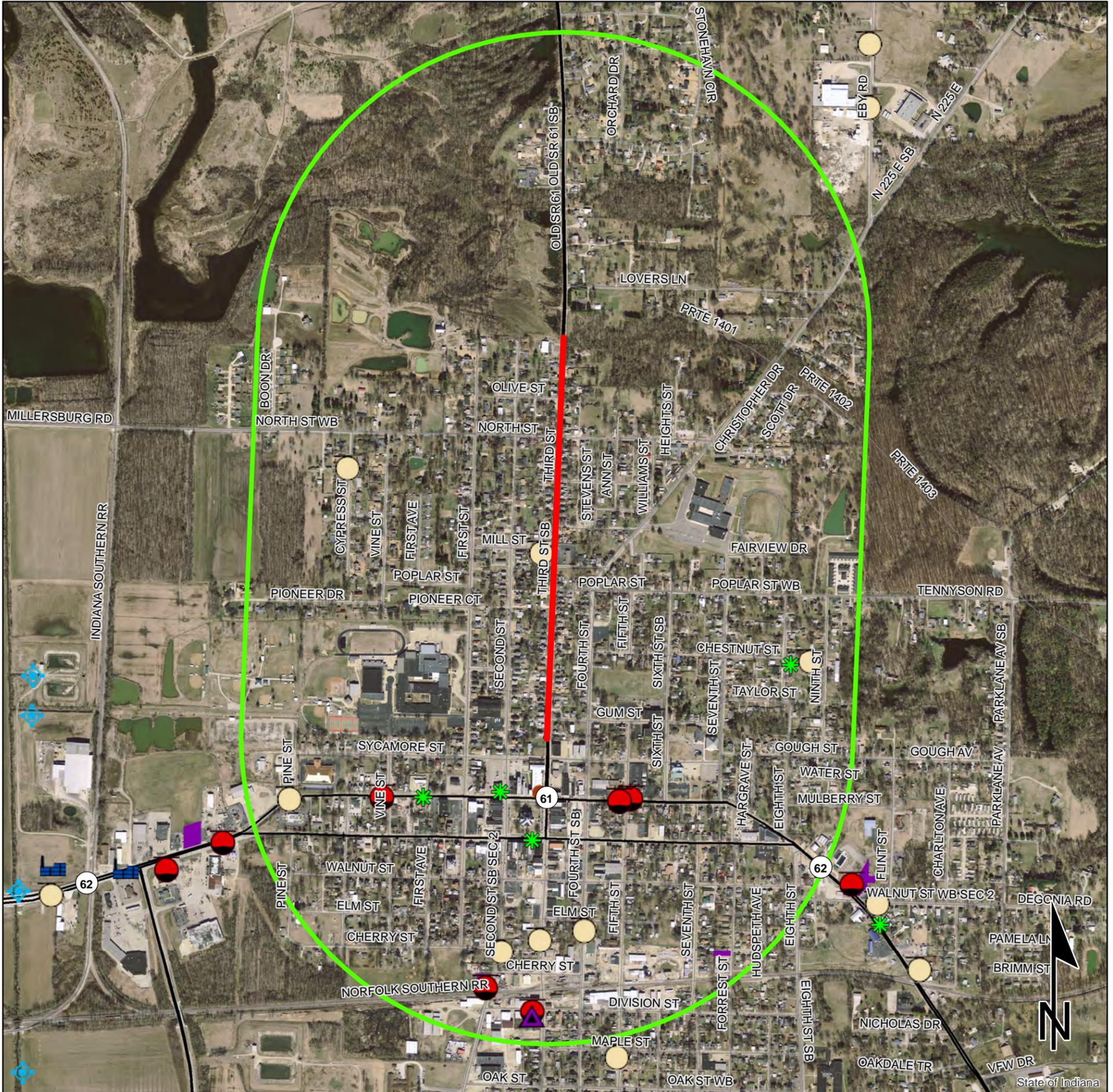


# Red Flag Investigation - Hazardous Material Concerns

## 3rd Street from North of Sycamore Street to North of Olive Street

### Des. No. 1600891, Roadway Improvement Project

#### Warrick 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 0.1 0.2 0.4 Miles

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

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

## Indiana County Endangered, Threatened and Rare Species List

### County: Warrick

| Species Name                       | Common Name                  | FED   | STATE | GRANK | SRANK |
|------------------------------------|------------------------------|-------|-------|-------|-------|
| <b>Mollusk: Bivalvia (Mussels)</b> |                              |       |       |       |       |
| Lampsilis ovata                    | Pocketbook                   |       |       | G5    | S2    |
| Ligumia recta                      | Black Sandshell              |       |       | G4G5  | S2    |
| Plethobasus cyphus                 | Sheepnose                    | LE    | SE    | G3    | S1    |
| Pleurobema cordatum                | Ohio Pigtoe                  |       | SSC   | G4    | S2    |
| <b>Fish</b>                        |                              |       |       |       |       |
| Etheostoma squamiceps              | Spottail Darter              |       |       | G4G5  | S2S3  |
| <b>Reptile</b>                     |                              |       |       |       |       |
| Nerodia erythrogaster neglecta     | Copperbelly Water Snake      | PS:LT | SE    | G5T3  | S2    |
| Ophedrys aestivus                  | Rough Green Snake            |       | SSC   | G5    | S3    |
| <b>Bird</b>                        |                              |       |       |       |       |
| Ammodramus henslowii               | Henslow's Sparrow            |       | SE    | G4    | S3B   |
| Asio flammeus                      | Short-eared Owl              |       | SE    | G5    | S2    |
| Botaurus lentiginosus              | American Bittern             |       | SE    | G5    | S2B   |
| Buteo lineatus                     | Red-shouldered Hawk          |       | SSC   | G5    | S3    |
| Circus hudsonius                   | Northern Harrier             |       | SE    | G5    | S2    |
| Cistothorus platensis              | Sedge Wren                   |       | SE    | G5    | S3B   |
| Haliaeetus leucocephalus           | Bald Eagle                   |       | SSC   | G5    | S2    |
| Helmitheros vermivorus             | Worm-eating Warbler          |       | SSC   | G5    | S3B   |
| Ictinia mississippiensis           | Mississippi Kite             |       | SSC   | G5    | S1B   |
| Ixobrychus exilis                  | Least Bittern                |       | SE    | G5    | S3B   |
| Lanius ludovicianus                | Loggerhead Shrike            |       | SE    | G4    | S3B   |
| Nyctanassa violacea                | Yellow-crowned Night-heron   |       | SE    | G5    | S2B   |
| Pandion haliaetus                  | Osprey                       |       | SE    | G5    | S1B   |
| Rallus limicola                    | Virginia Rail                |       | SE    | G5    | S3B   |
| Setophaga cerulea                  | Cerulean Warbler             |       | SE    | G4    | S3B   |
| Tyto alba                          | Barn Owl                     |       | SE    | G5    | S2    |
| <b>Mammal</b>                      |                              |       |       |       |       |
| Lasiurus borealis                  | Eastern Red Bat              |       | SSC   | G3G4  | S4    |
| Myotis sodalis                     | Indiana Bat or Social Myotis | LE    | SE    | G2    | S1    |
| Nycticeius humeralis               | Evening Bat                  |       | SE    | G5    | S1    |
| Sylvilagus aquaticus               | Swamp Rabbit                 |       | SE    | G5    | S1    |
| Taxidea taxus                      | American Badger              |       | SSC   | G5    | S2    |
| <b>Vascular Plant</b>              |                              |       |       |       |       |
| Bacopa rotundifolia                | Roundleaf Water-hyssop       |       | ST    | G5    | S1    |
| Carex bushii                       | Bush's Sedge                 |       | ST    | G4    | S1    |
| Carex socialis                     | Social Sedge                 |       | SR    | G4    | S2    |
| Catalpa speciosa                   | Northern Catalpa             |       | SR    | G4?   | S2    |
| Clematis pitcheri                  | Pitcher Leather-flower       |       | SR    | G4G5  | S2    |
| Croton willdenowii                 | Elliptical Rushfoil          |       | SE    | G5    | S1    |

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

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

Indiana County Endangered, Threatened and Rare Species List

County: Warrick

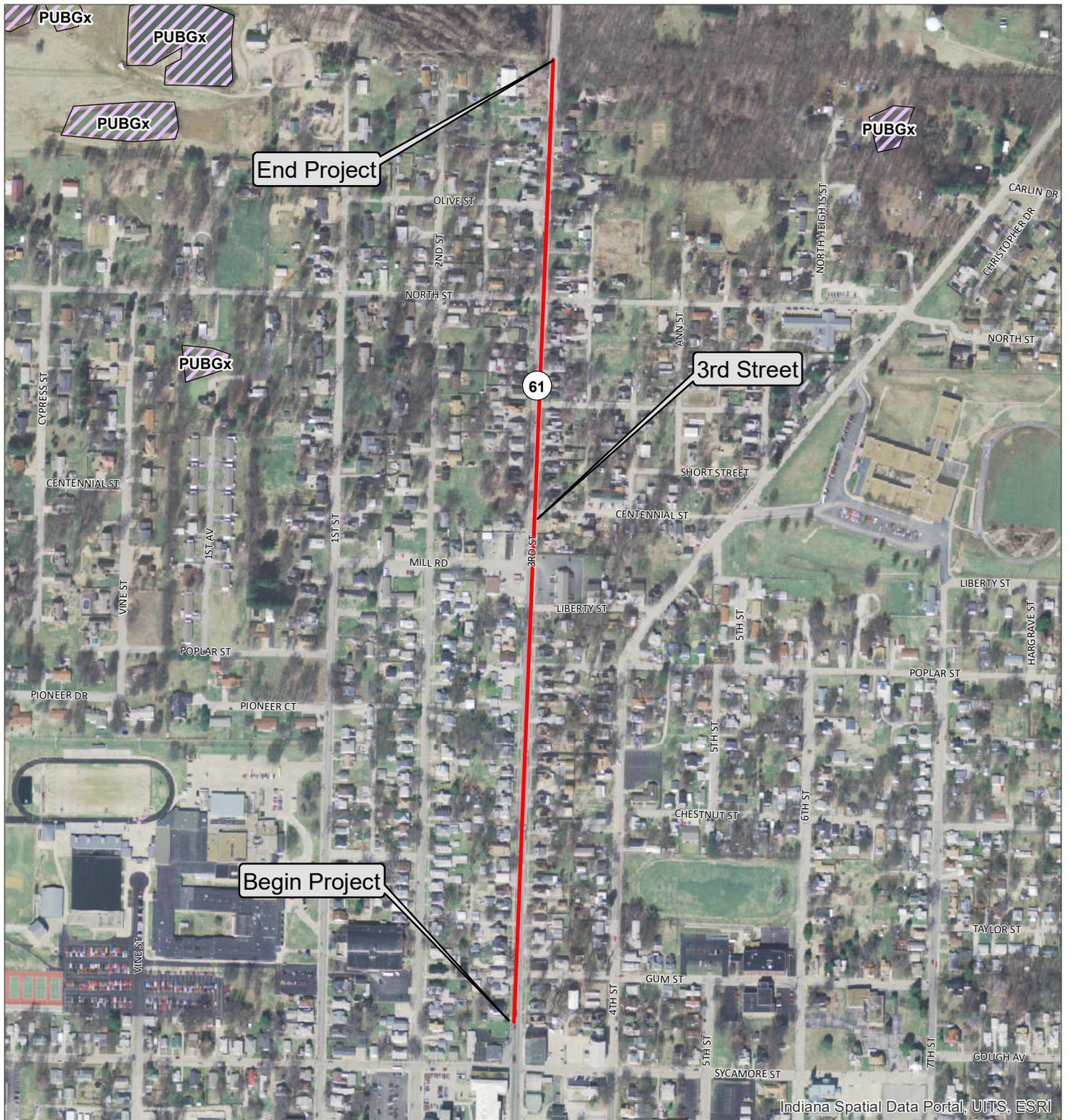
| Species Name                                   | Common Name                                     | FED | STATE | GRANK   | SRANK |
|------------------------------------------------|-------------------------------------------------|-----|-------|---------|-------|
| Dicliptera brachiata                           | Wild Mudwort                                    |     | SE    | G5      | S1    |
| Didiplis diandra                               | Water-purslane                                  |     | SE    | G5      | S2    |
| Eleocharis wolfii                              | Wolf Spikerush                                  |     | SR    | G3G5    | S2    |
| Festuca paradoxa                               | Cluster Fescue                                  |     | ST    | G5      | S1    |
| Hypericum denticulatum                         | Coppery St. John's-wort                         |     | ST    | G5      | S2    |
| Iresine rhizomatosa                            | Eastern Bloodleaf                               |     | SR    | G5      | S2    |
| Nothoscordum bivalve                           | Crow-poison                                     |     | SR    | G4      | S2    |
| Orobanche riparia                              | Bottomland Broomrape                            |     | SE    | G4?     | S2    |
| Perideridia americana                          | Eastern Eulophus                                |     | SE    | G4      | S1    |
| Poa wolfii                                     | Wolf Bluegrass                                  |     | SR    | G4      | S2    |
| Rudbeckia fulgida var. fulgida                 | Orange Coneflower                               |     | WL    | G5T4?   | S2    |
| Scutellaria parvula var. australis             | Southern Skullcap                               |     | WL    | G4T4?   | S2    |
| Stenanthium gramineum                          | Eastern Featherbells                            |     | ST    | G4G5    | S1    |
| Strophostyles leiosperma                       | Slick-seed Wild-bean                            |     | ST    | G5      | S2    |
| Styrax americanus                              | American Snowbell                               |     | WL    | G5      | S3    |
| Taxodium distichum                             | Bald Cypress                                    |     | ST    | G5      | S2    |
| Thalictrum pubescens                           | Tall Meadowrue                                  |     | ST    | G5      | S2    |
| Trachelospermum difforme                       | Climbing Dogbane                                |     | SR    | G4G5    | S2    |
| Trifolium reflexum var. glabrum                | Buffalo Clover                                  |     | SE    | G5T2T4Q | S1    |
| <b>High Quality Natural Community</b>          |                                                 |     |       |         |       |
| Forest - flatwoods dry                         | Dry Flatwoods                                   |     | SG    | G2?     | S2    |
| Forest - floodplain wet                        | Wet Floodplain Forest                           |     | SG    | G3?     | S3    |
| Forest - upland dry-mesic Southern Bottomlands | Southern Bottomlands Dry-mesic<br>Upland Forest |     |       | GNR     | S1    |
| <b>Other Significant Feature</b>               |                                                 |     |       |         |       |
| Freshwater Mussel Concentration Area           | Mussel Bed                                      |     | SG    | G3      | SNR   |

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

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State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list  
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SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

# **Appendix F:**

# **Water Resources**



Indiana Spatial Data Portal, UITS, ESRI



Source: U.S. Fish & Wildlife Service

1:6,000

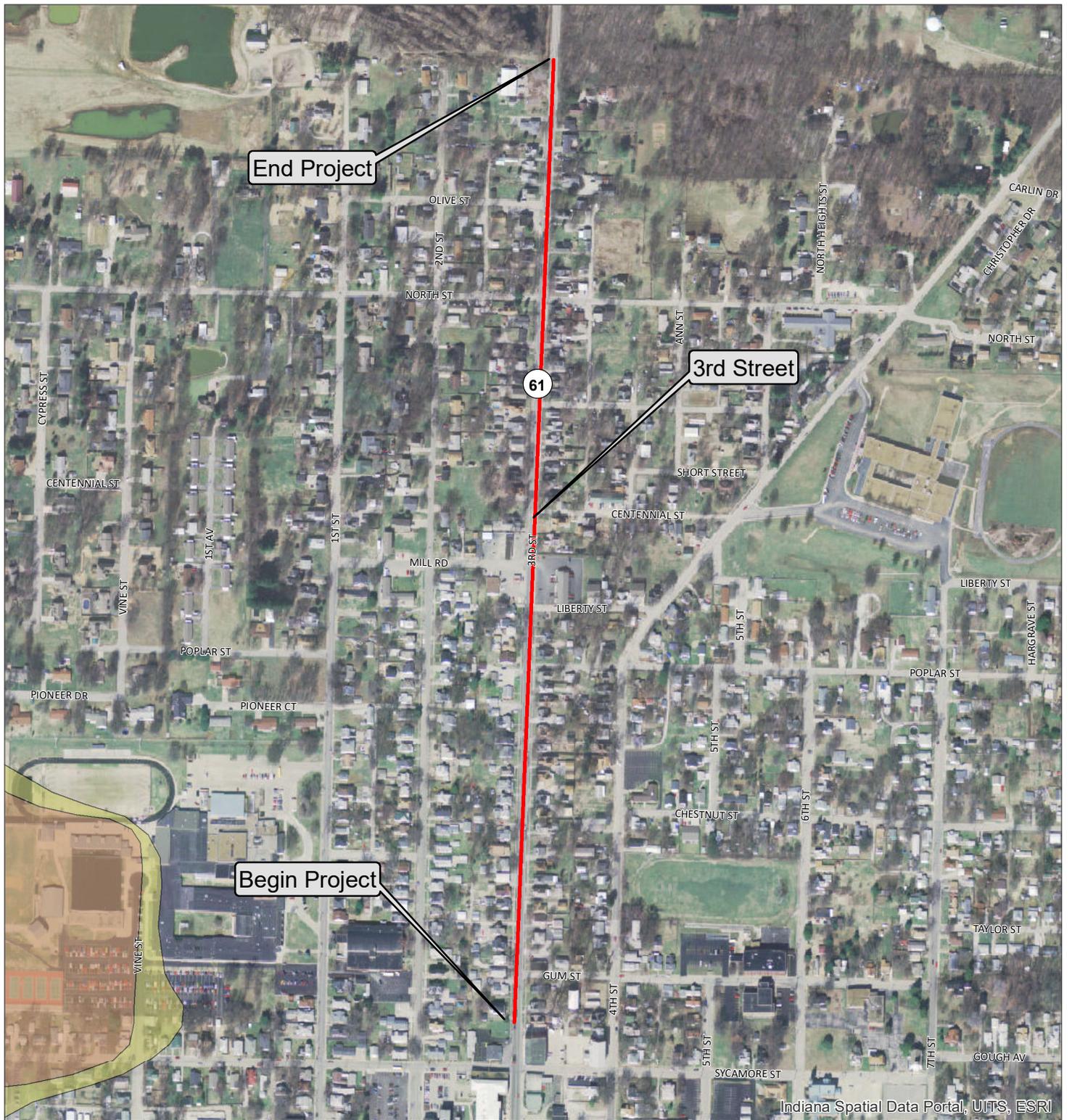
1 in = 500 ft



| Legend |                                   |                   |
|--------|-----------------------------------|-------------------|
|        | Freshwater Pond                   | Project Alignment |
|        | Freshwater Forested/Shrub Wetland | Riverine          |
|        | Freshwater Emergent Wetland       | Lake              |
|        | Other                             |                   |

**National Wetlands Inventory Map**  
 Roadway Rehabilitation  
 3rd Street from Sycamore Street to 460 ft North of Olive  
 Warrick County, Indiana  
 Des. No. 1600891

June 15, 2018



Source: Indiana Department of Natural Resources

1:6,000

1 in = 500 ft



**Legend**

-  Floodway
-  1 % Annual Chance Flood Hazard
-  0.2 % Annual Chance Flood Hazard
-  0.2 % Annual Chance, Protected by Levee
-  Project Alignment

**Floodplain Map**  
 Roadway Rehabilitation  
 3rd Street from Sycamore Street to 460 ft North of Olive  
 Warrick County, Indiana  
 Des. No. 1600891

June 15, 2018

**Appendix G:**  
**Public Involvement**



NOTICE OF SURVEY  
June 5, 2018

Elks Club No. 1180, Inc.  
134 N. Third St.  
Boonville, IN 47601

Re: Boonville 3<sup>rd</sup> Street  
Improvement Project  
Booneville, Indiana

Dear Property Owner:

County records indicate that you own or occupy property near this proposed road project. We have been retained by the City of Boonville, Indiana for this project and our employees will be doing a field survey of the project area in the upcoming weeks. It will be necessary for them to come onto your property to complete the work. They will show you their identification, if you are available. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

The survey work will include mapping the location of features such as streets, utilities, buildings, trees, fences, drives, and property corners. This work is needed for the proper planning and design of this road project.

Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any problems do occur, please speak to our field crew or contact me at the telephone number or address shown above.

Sincerely,

BEAM, LONGEST AND NEFF, L.L.C.

Edward J. Sweetland  
Survey Department Manager

xc: Job #180031

# **Appendix H:**

## **Air Quality**

INDIANA DEPARTMENT OF TRANSPORTATION

# STATE TRANSPORTATION IMPROVEMENT PROGRAM

(STIP) FY2020 - FY2024



Indiana Department of Transportation (INDOT)  
 State Preservation and Local Initiated Projects FY 2020 - 2024

| SPONSOR                              | CONTR ACT # / LEAD DES | STIP NAME | ROUTE   | WORK TYPE                              | LOCATION                                                                       | DISTRICT  | MILES | FEDERAL CATEGORY | Estimated Cost left to Complete Project* | PROGRAM                     | PHASE | FEDERAL        | MATCH          | 2020           | 2021           | 2022           | 2023           | 2024 |
|--------------------------------------|------------------------|-----------|---------|----------------------------------------|--------------------------------------------------------------------------------|-----------|-------|------------------|------------------------------------------|-----------------------------|-------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| <b>Warrick County</b>                |                        |           |         |                                        |                                                                                |           |       |                  |                                          |                             |       |                |                |                |                |                |                |      |
| Warrick County                       | 1593023                | Init.     | VA VARI | Bridge Inspections                     | Countywide Bridge Inspection and Inventory Program for Cycle Years 2017-2020   | Vincennes | 0     | Multiple         |                                          | Local Funds                 | PE    | \$0.00         | \$35,178.14    | \$29,971.81    | \$5,206.33     |                |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Local Bridge Program        | PE    | \$140,712.54   | \$0.00         | \$119,887.23   | \$20,825.31    |                |                |      |
| Warrick County                       | 37940 / 1401384        | Init.     | IR 1023 | Road Reconstruction (3R/4R Standards)  | Bell Road from High Point Dr. to Telephone Rd                                  | Vincennes | 0     | STPBG            |                                          | Local Funds                 | CN    | \$0.00         | \$2,155,000.00 | \$2,155,000.00 |                |                |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Evansville MPO - PYB        | CN    | \$5,600,000.00 | \$0.00         | \$5,600,000.00 |                |                |                |      |
| Indiana Department of Transportation | 38721 / 1400157        | Init.     | SR 68   | Small Structure Replacement            | 0.08 mile W of SR 61 Junction                                                  | Vincennes | 0     | STPBG            |                                          | Bridge Construction         | CN    | \$248,204.00   | \$62,051.00    | \$310,255.00   |                |                |                |      |
| Warrick County                       | 38918 / 1592154        | Init.     | ST 1024 | Bike/Pedestrian Facilities             | Warrick Trail SRTS Vann Rd btwn SR261 and Casey Rd, Casey Rd from Oak Grove Rd | Vincennes | 1.34  | STPBG            |                                          | Local Funds                 | RW    | \$0.00         | \$13,252.00    | \$13,252.00    |                |                |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Local Funds                 | CN    | \$0.00         | \$278,800.00   |                | \$278,800.00   |                |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Evansville MPO              | RW    | \$53,008.00    | \$0.00         | \$53,008.00    |                |                |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Evansville MPO              | CN    | \$1,115,200.00 | \$0.00         |                | \$1,115,200.00 |                |                |      |
| Indiana Department of Transportation | 39367 / 1593068        | Init.     | I 64    | Replace Superstructure                 | Over Plum Creek, 3.92 miles W of SR-61, EBL                                    | Vincennes | 0     | NHPP             |                                          | Bridge Construction         | CN    | \$3,281,400.00 | \$364,600.00   |                |                |                | \$3,646,000.00 |      |
| Indiana Department of Transportation | 39377 / 1592969        | Init.     | SR 61   | HMA Overlay, Preventive Maintenance    | From 0.17 mi E of W Jct SR-62 to E Jct SR-62                                   | Vincennes | .5    | STPBG            |                                          | District Other Construction | CN    | \$135,113.60   | \$33,778.40    | \$168,892.00   |                |                |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Road Construction           | CN    | \$1,275,100.00 | \$318,775.00   | \$1,593,875.00 |                |                |                |      |
| Indiana Department of Transportation | 39380 / 1592941        | Init.     | SR 161  | HMA Overlay, Structural                | From E Jct with SR-62 to W Jct with SR-68 (RP 15+71 to 27+12)                  | Vincennes | 11.37 | STPBG            |                                          | Road Construction           | CN    | \$3,237,796.80 | \$809,449.20   | \$4,047,246.00 |                |                |                |      |
| Indiana Department of Transportation | 39418 / 1593067        | Init.     | SR 68   | Bridge Replacement, Other Construction | Over Pigeon Creek Overflow, 2 .08 miles E of SR-57                             | Vincennes | 0     | STPBG            |                                          | Bridge Construction         | CN    | \$1,608,980.80 | \$402,245.20   |                | \$2,011,226.00 |                |                |      |
| Warrick County                       | 39837 / 1600739        | Init.     | IR 1010 | Bridge Replacement, Other Construction | Shilo Road Bridge # 113                                                        | Vincennes | .5    | STPBG            |                                          | Local Funds                 | CN    | \$0.00         | \$268,750.00   |                | \$10,000.00    | \$258,750.00   |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Local Bridge Program        | CN    | \$1,075,000.00 | \$0.00         |                | \$40,000.00    | \$1,035,000.00 |                |      |
| Boonville                            | 39840 / 1600891        | Init.     | ST 1025 | Road Rehabilitation (3 R/4R Standards) | 3rd Street (formerly SR 61)                                                    | Vincennes | 1     | STPBG            |                                          | Group III Program           | RW    | \$438,600.00   | \$0.00         | \$438,600.00   |                |                |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Group III Program           | CN    | \$2,480,000.00 | \$0.00         |                |                | \$2,480,000.00 |                |      |
|                                      |                        |           |         |                                        |                                                                                |           |       |                  |                                          | Local Funds                 | RW    | \$0.00         | \$109,650.00   | \$109,650.00   |                |                |                |      |

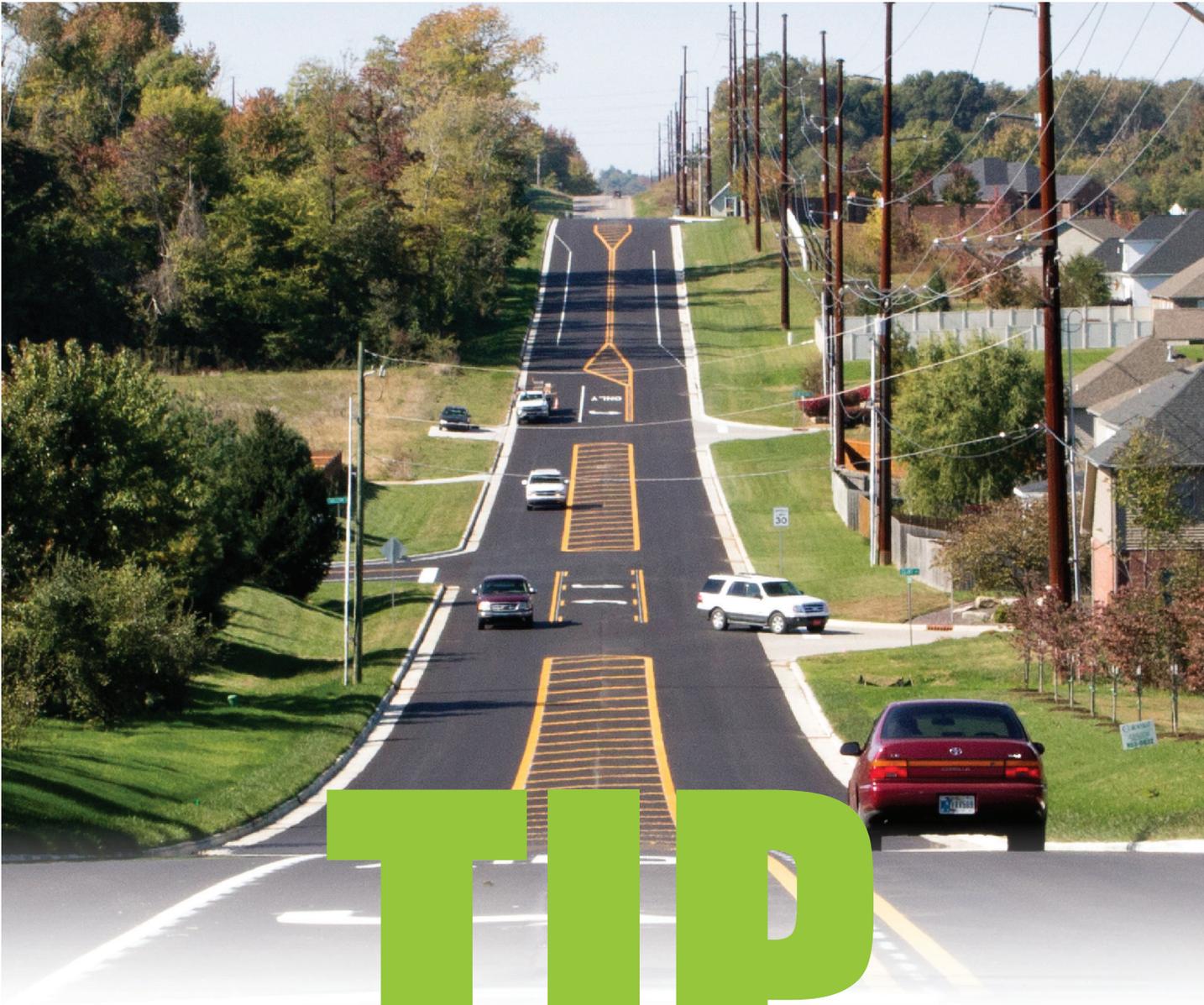
\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

Indiana Department of Transportation (INDOT)  
 State Preservation and Local Initiated Projects FY 2020 - 2024

| SPONSOR                              | CONTR ACT # / LEAD DES | STIP NAME | ROUTE   | WORK TYPE                              | LOCATION                                                   | DISTRICT  | MILES  | FEDERAL CATEGORY | Estimated Cost left to Complete Project* | PROGRAM                | PHASE | FEDERAL        | MATCH        | 2020           | 2021           | 2022           | 2023           | 2024           |
|--------------------------------------|------------------------|-----------|---------|----------------------------------------|------------------------------------------------------------|-----------|--------|------------------|------------------------------------------|------------------------|-------|----------------|--------------|----------------|----------------|----------------|----------------|----------------|
| Boonville                            | 39840 / 1600891        | Init.     | ST 1025 | Road Rehabilitation (3 R/4R Standards) | 3rd Street (formerly SR 61)                                | Vincennes | 1      | STPBG            |                                          | Local Funds            | CN    | \$0.00         | \$620,000.00 |                |                | \$620,000.00   |                |                |
| Indiana Department of Transportation | 39921 / 1400195        | Init.     | SR 66   | Other Intersection Improvement         | At Epworth Road, 0.16 mile E I-69                          | Vincennes | 1.081  | NHPP             |                                          | Mobility Construction  | CN    | \$3,268,456.80 | \$817,114.20 | \$175,000.00   | \$3,910,571.00 |                |                |                |
| Indiana Department of Transportation | 40051 / 1602256        | Init.     | SR 68   | Bridge Thin Deck Overlay               | Over Old Pigeon Creek, 1.56 miles E SR-57                  | Vincennes | 0      | STPBG            |                                          | Bridge Construction    | CN    | \$2,629,128.80 | \$657,282.20 | \$3,286,411.00 |                |                |                |                |
| Indiana Department of Transportation | 40541 / 1700167        | Init.     | SR 68   | Bridge Replacement, Concrete           | Over Wallace Creek, 00.95 miles E SR-161                   | Vincennes | 0      | STPBG            |                                          | Bridge Construction    | CN    | \$662,916.80   | \$165,729.20 |                |                | \$828,646.00   |                |                |
|                                      |                        |           |         |                                        |                                                            |           |        |                  |                                          | Bridge ROW             | RW    | \$24,000.00    | \$6,000.00   | \$30,000.00    |                |                |                |                |
| Indiana Department of Transportation | 40551 / 1700170        | Init.     | SR 161  | Small Structure Replacement            | 10.46 miles N Jct SR-66                                    | Vincennes | 0      | STPBG            |                                          | Bridge Construction    | CN    | \$1,619,550.40 | \$404,887.60 |                |                | \$2,024,438.00 |                |                |
|                                      |                        |           |         |                                        |                                                            |           |        |                  |                                          | Bridge ROW             | RW    | \$14,400.00    | \$3,600.00   | \$18,000.00    |                |                |                |                |
| Indiana Department of Transportation | 40626 / 1701206        | Init.     | SR 662  | HMA Overlay, Preventive Maintenance    | From I-69 to Ellerbusch Road, 1 .51 miles East of I-69     | Vincennes | 1.555  | STPBG            |                                          | Road Construction      | CN    | \$701,681.60   | \$175,420.40 | \$877,102.00   |                |                |                |                |
| Indiana Department of Transportation | 41407 / 1800176        | Init.     | SR 61   | HMA Overlay, Preventive Maintenance    | From 0.14 mi S of I-64 to 0.88 mi N of SR-68 (Lynnville)   | Vincennes | 1.156  | STPBG            |                                          | Road Construction      | CN    | \$576,800.00   | \$144,200.00 |                |                |                | \$721,000.00   |                |
|                                      |                        |           |         |                                        |                                                            |           |        |                  |                                          | Road ROW               | RW    | \$24,000.00    | \$6,000.00   |                |                | \$30,000.00    |                |                |
| Indiana Department of Transportation | 41768 / 1802047        | Init.     | I 64    | ITS Traffic Management Systems         | CCTV Cameras/Detection from SR 69 to Lanesville (Exit 113) | Vincennes | 108.95 | NHPP             |                                          | Statewide Construction | CN    | \$1,552,500.00 | \$172,500.00 |                |                |                |                | \$1,725,000.00 |
|                                      |                        |           |         |                                        |                                                            |           |        |                  |                                          | Statewide Consulting   | PE    | \$139,500.00   | \$15,500.00  |                |                |                | \$155,000.00   |                |
| Warrick County                       | 41772 / 1802049        | Init.     | IR 1004 | Road Reconstruction (3R/4R Standards)  | Telephone Road from Bell Road to Fuquay Road               | Vincennes | 0      | STPBG            |                                          | Local Funds            | PE    | \$0.00         | \$350,000.00 | \$350,000.00   |                |                |                |                |
|                                      |                        |           |         |                                        |                                                            |           |        |                  |                                          | Local Funds            | RW    | \$0.00         | \$500,000.00 |                | \$500,000.00   |                |                |                |
|                                      |                        |           |         |                                        |                                                            |           |        |                  |                                          | Local Funds            | CN    | \$0.00         | \$830,000.00 |                |                |                | \$830,000.00   |                |
|                                      |                        |           |         |                                        |                                                            |           |        |                  |                                          | Evansville MPO         | CN    | \$3,320,000.00 | \$0.00       |                |                |                | \$3,320,000.00 |                |

**Warrick County Total**  
 Federal: \$35,222,050.14      Match :\$9,719,762.54      2020: \$19,376,150.04      2021: \$7,891,828.64      2022: \$7,276,834.00      2023: \$8,672,000.00      2024: \$1,725,000.00

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



# TIP

# 2020-2024

## Transportation Improvement Program

Evansville MPO

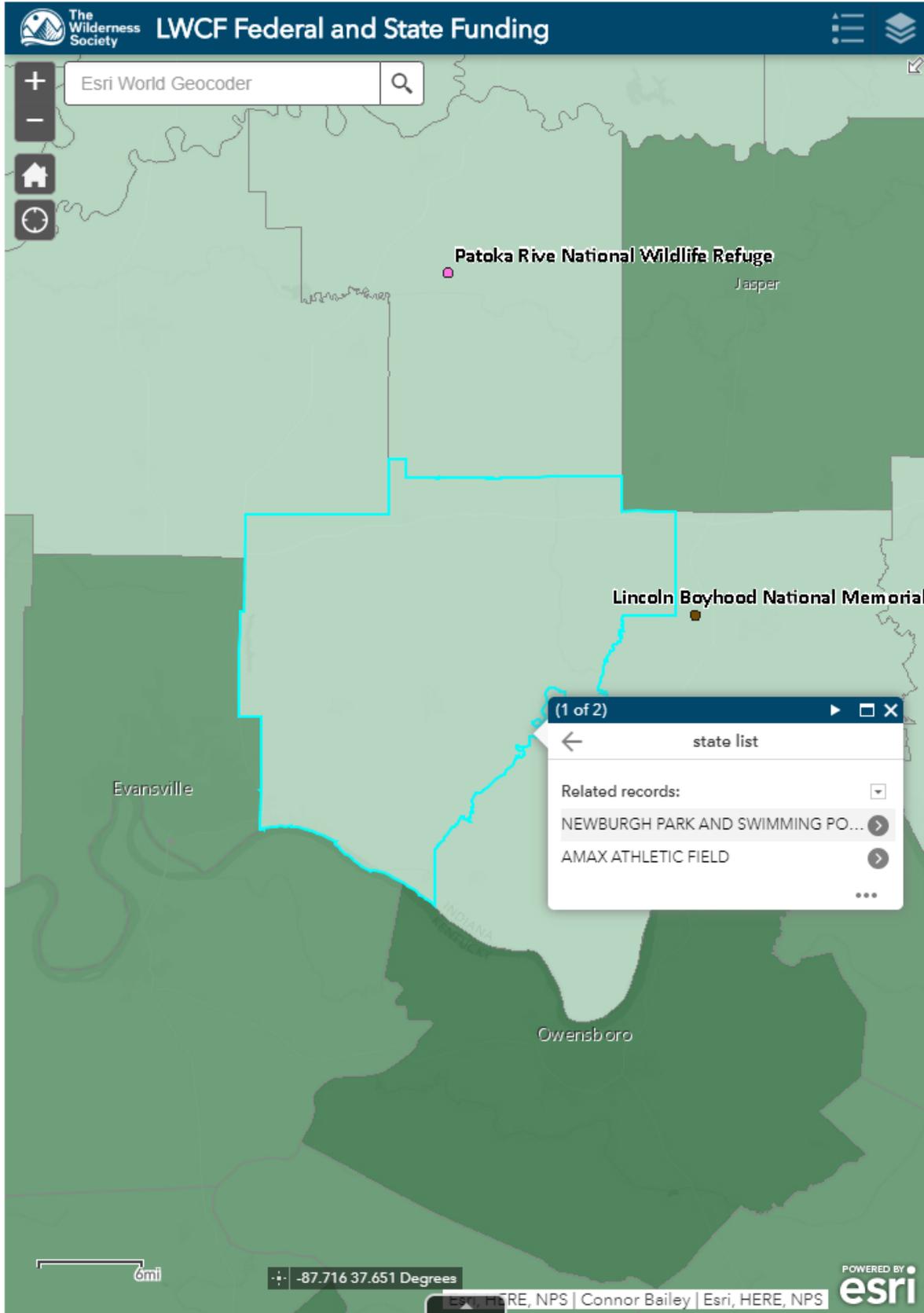


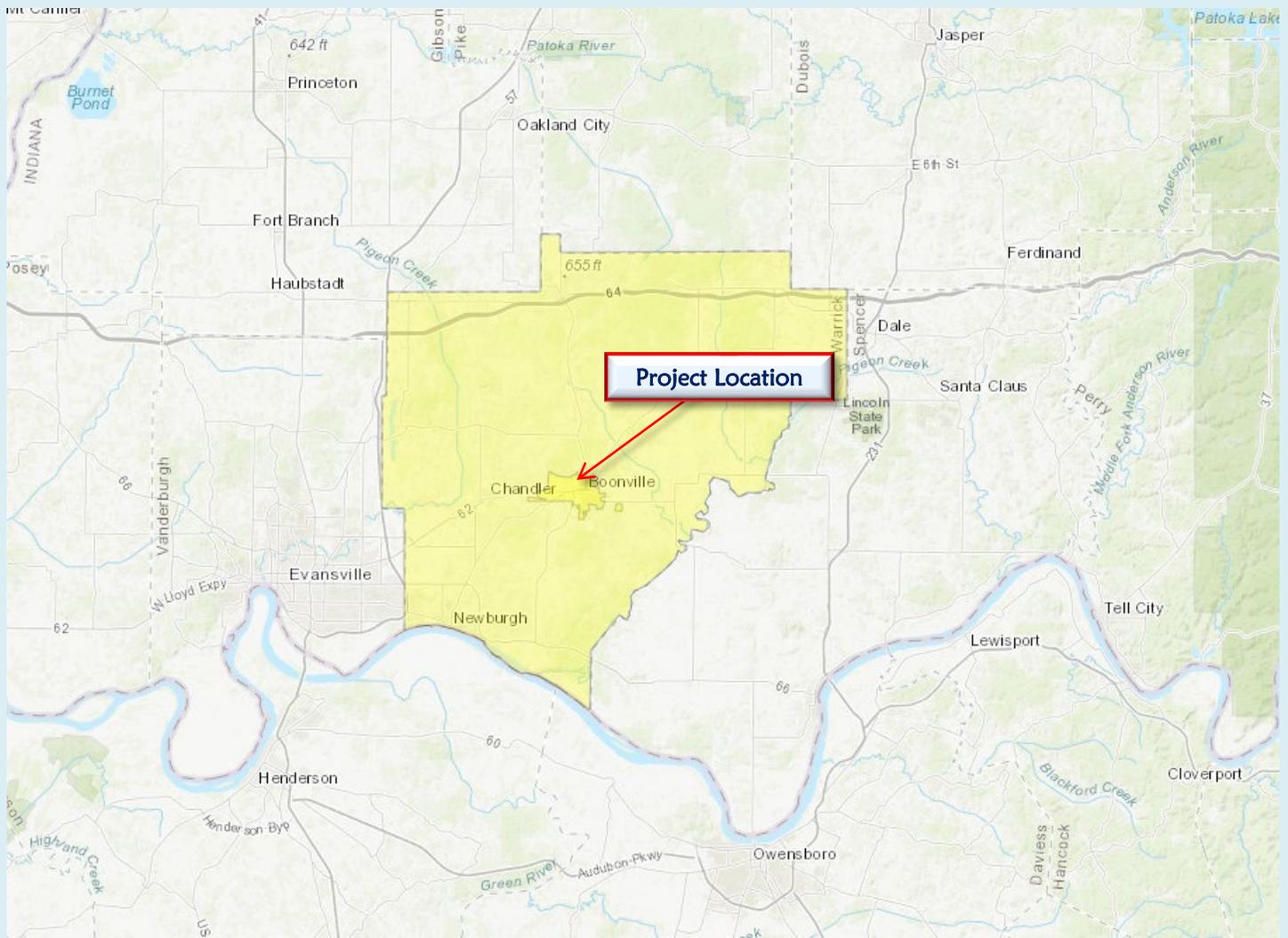
Henderson • Vanderburgh • Warrick

**Table 5.4:  
TIP Projects Listing Cont.**

| Sponsor: City of Boonville                              |                                                                |                                           |                |                          |             |                 |             |             |                                  |                            |                          |
|---------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------|----------------|--------------------------|-------------|-----------------|-------------|-------------|----------------------------------|----------------------------|--------------------------|
| Route<br>Des#<br>Length:<br>Description:                | Project Limits<br>Planning Reference<br>Federal Funding Source | Map ID<br>Amendment/<br>Modification Date | Phase          | All amounts in thousands |             |                 |             |             | Planning/<br>Cost to<br>Complete | Federal<br>Share           | Local Share              |
|                                                         |                                                                |                                           |                | 2020                     | 2021        | 2022            | 2023        | 2024        |                                  |                            |                          |
| Third St.<br>1600891<br>0.68 mi.<br>Road rehabilitation | Sycamore St.to 460 ft. past Olive St.<br>STBG-R                | 12                                        | PE<br>RW<br>CN |                          | \$ 548      |                 | \$ 3,100    |             |                                  | \$ -<br>\$ 438<br>\$ 2,480 | \$ -<br>\$ 110<br>\$ 620 |
|                                                         |                                                                |                                           | PE             | \$ -                     | \$ -        | \$ -            | \$ -        | \$ -        | \$ -                             | \$ -                       | \$ -                     |
|                                                         |                                                                |                                           | RW             | \$ 548                   | \$ -        | \$ -            | \$ -        | \$ -        | \$ -                             | \$ -                       | \$ 438                   |
|                                                         |                                                                |                                           | CN             | \$ -                     | \$ -        | \$ 3,100        | \$ -        | \$ -        | \$ -                             | \$ -                       | \$ 2,480                 |
|                                                         |                                                                |                                           | <b>Total</b>   | <b>\$ 548</b>            | <b>\$ -</b> | <b>\$ 3,100</b> | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b>                      | <b>\$ 2,918</b>            | <b>\$ 730</b>            |
|                                                         |                                                                |                                           | <b>Federal</b> | <b>\$ 438</b>            | <b>\$ -</b> | <b>\$ 2,480</b> | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b>                      | <b>\$ 2,918</b>            |                          |
|                                                         |                                                                |                                           | <b>Local</b>   | <b>\$ 110</b>            | <b>\$ -</b> | <b>\$ 620</b>   | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b>                      |                            | <b>\$ 730</b>            |

**Appendix I:**  
**Additional Studies**





Source: US Census Bureau 2017



Affected Community: Boonville, IN

Community of Comparison: Warrick County, IN

|                                                              | Warrick County, Indiana |                 | Boonville city, Indiana |                 |
|--------------------------------------------------------------|-------------------------|-----------------|-------------------------|-----------------|
|                                                              | Estimate                | Margin of Error | Estimate                | Margin of Error |
| Total:                                                       | 61,581                  | *****           | 6,379                   | +/-20           |
| Not Hispanic or Latino:                                      | 60,491                  | *****           | 6,096                   | +/-207          |
| White alone                                                  | 57,148                  | +/-79           | 5,848                   | +/-231          |
| Black or African American alone                              | 968                     | +/-120          | 32                      | +/-39           |
| American Indian and Alaska Native alone                      | 108                     | +/-68           | 19                      | +/-24           |
| Asian alone                                                  | 1,519                   | +/-94           | 0                       | +/-16           |
| Native Hawaiian and Other Pacific Islander alone             | 14                      | +/-24           | 0                       | +/-16           |
| Some other race alone                                        | 32                      | +/-34           | 0                       | +/-16           |
| Two or more races:                                           | 702                     | +/-187          | 197                     | +/-118          |
| Two races including Some other race                          | 50                      | +/-54           | 0                       | +/-16           |
| Two races excluding Some other race, and three or more races | 652                     | +/-184          | 197                     | +/-118          |
| Hispanic or Latino:                                          | 1,090                   | *****           | 283                     | +/-207          |
| White alone                                                  | 793                     | +/-174          | 283                     | +/-207          |
| Black or African American alone                              | 0                       | +/-27           | 0                       | +/-16           |
| American Indian and Alaska Native alone                      | 0                       | +/-27           | 0                       | +/-16           |
| Asian alone                                                  | 0                       | +/-27           | 0                       | +/-16           |
| Native Hawaiian and Other Pacific Islander alone             | 0                       | +/-27           | 0                       | +/-16           |
| Some other race alone                                        | 197                     | +/-160          | 0                       | +/-16           |
| Two or more races:                                           | 100                     | +/-81           | 0                       | +/-16           |
| Two races including Some other race                          | 55                      | +/-58           | 0                       | +/-16           |
| Two races excluding Some other race, and three or more races | 45                      | +/-62           | 0                       | +/-16           |

|                                                   | Warrick County, Indiana |                 | Boonville city, Indiana |                 |
|---------------------------------------------------|-------------------------|-----------------|-------------------------|-----------------|
|                                                   | Estimate                | Margin of Error | Estimate                | Margin of Error |
| Total:                                            | 60,540                  | +/-239          | 6,177                   | +/-40           |
| Income in the past 12 months below poverty level: | 4,656                   | +/-822          | 1,088                   | +/-492          |

Source: US Census Bureau  
2013 - 2017 American Community Survey 5 Year Estimates

Environmental Justice

Pavement Rehabilitation Project  
Des No. 1600891  
Boonville 3<sup>rd</sup> Street  
Warrick County, Indiana

| <b>Minority by Race</b>                  | <b>COC Warrick County</b> | <b>AC Boonville, IN</b> |
|------------------------------------------|---------------------------|-------------------------|
| Total Population                         | 61581                     | 6379                    |
| Black or African American alone          | 968                       | 32                      |
| American Indian & Alaska Native alone    | 108                       | 19                      |
| Asian alone                              | 1519                      | 0                       |
| Native Hawaiian & other Pacific Islander | 14                        | 0                       |
| Some other race alone                    | 32                        | 0                       |
| Two or more races                        | 702                       | 197                     |
| Hispanic or Latino                       | 1090                      | 283                     |

| <b>Poverty Status</b>      | <b>COC Warrick County</b> | <b>AC Boonville, IN</b> |
|----------------------------|---------------------------|-------------------------|
| Total Population           | 60540                     | 6177                    |
| Income below poverty level | 4656                      | 1088                    |

| <b>Table: Minority and Low-Income Data (ACS, 2013-2017)</b> |                           |                         |
|-------------------------------------------------------------|---------------------------|-------------------------|
|                                                             | <b>COC Warrick County</b> | <b>AC Boonville, IN</b> |
| Percent Minority                                            | 7.20                      | 8.32                    |
| 125% of COC                                                 | 9.00                      |                         |
| EJ Population of Concern                                    |                           | No                      |
| Percent Low-Income                                          | 7.69                      | 17.61                   |
| 125% of COC                                                 | 9.61                      |                         |
| EJ Population of Concern                                    |                           | Yes                     |

Source: US Census Bureau  
2013 - 2017 American Community Survey 5 Year Estimates

Environmental Justice

Pavement Rehabilitation Project  
Des No. 1600891  
Boonville 3<sup>rd</sup> Street  
Warrick County, Indiana