

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

**Road No./County:**

County Road (CR) 100 N/Wells County

**Designation Number(s):**

1702735

**Project**

**Description/Termini:**

Bridge project involving existing structure carrying CR 100 N over Rock Creek, approximately 0.50 mile west of CR 400 W.

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

**Approval**

\_\_\_\_\_  
INDOT DE Signature and Date

\_\_\_\_\_  
INDOT ESD Signature and Date

\_\_\_\_\_  
FHWA Signature and Date

**Release for Public Involvement**

N/A

\_\_\_\_\_  
INDOT DE Initials and Date

*REB*

11-8-2021

\_\_\_\_\_  
INDOT ESD Initials and Date

**Certification of Public Involvement**

\_\_\_\_\_  
INDOT Consultant Services Signature and Date

**INDOT DE/ESD Reviewer Signature and Date:**

\_\_\_\_\_

**Name and Organization of CE/EA Preparer:**

\_\_\_\_\_  
Christian Radcliff, SJCA Inc.

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### 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.**

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

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

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

Notice of Entry letters were mailed to potentially affected property owners near the project area on August 29, 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, page 1.

This project involves Bridge No. 90-00106 [National Bridge Inventory (NBI) No. 9000080], which carries CR 100 N over Rock Creek in the Town of Rockford, Wells County, Indiana. The bridge is listed in the Indiana Department of Transportation (INDOT) Historic Bridge Inventory Collection as eligible for the National Register of Historic Places (NRHP) under Criterion C because it "represents an early or distinctive phase in bridge construction, design or engineering and it retains the historic integrity necessary to convey its engineering significance." Furthermore, it is an example of an outstanding filled spandrel double-span bridge. The bridge is classified as a "Select" bridge by the INDOT Historic Bridge Inventory Collection. Per the terms of the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA, or HBPA), the Federal Highway Administration (FHWA) will satisfy its responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the HBPA (Stipulation III.A.) to comply with the Section 106 responsibilities of the National Historic Preservation Act (NHPA) of 1966.

To meet the public involvement requirements of Section 106, a legal notice of the FHWA's finding of "No Historic Properties Affected" was published in *The Bluffton News-Banner* on April 24, 2021, offering the public an opportunity to submit comments pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The published public comment period end date was May 25, 2021. The text of the public notice and the affidavit of publication appear in Appendix D, pages 17 to 19. One (1) comment from the public was received during the public comment period. This comment suggested that other alternatives should be considered to allow for two lanes of traffic while preserving the historic nature of the existing bridge (Appendix D, pages 20 to 22). A feasible and prudent alternative was selected as part of the Historic Bridge Alternatives Analysis prior to analyzing alternatives that include adding a second lane of traffic.

Pursuant to the Historic Bridges Programmatic Agreement (PA), a public hearing is required. A legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

### **Public Controversy on Environmental Grounds**

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

At this time, there is not substantial public controversy concerning impacts to the community or to natural resources.

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

Sponsor of the Project: Wells County INDOT District: Fort Wayne

Local Name of the Facility: CR 100 N over Rock Creek

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

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

#### **PURPOSE AND NEED:**

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

##### **Need**

The primary need for this project is based on the deteriorated condition of the existing structure.

- Condition: The reinforced concrete arch is classified as a structure under fill and is classified under the general category of "culvert". According to the latest bridge inspection on October 8, 2020, the bridge wearing surface was given a rating of 5 out of 9 (fair condition), and an overall bridge sufficiency rating of 42.7 out of 100 due to the poor condition of the existing bridge main components. Although not rated in the bridge inspection due to the type of structure (reinforced concrete arch under fill), individual components of the structure such as the spandrel walls, arch barrels, pier, foundations and bridge rail are deteriorated with leaching, numerous spalls, exposed reinforcement and voids behind the arch barrels. These, if rated, would be 5 (fair condition) to 4 (poor condition). In 1983, toe walls were added to the badly deteriorated Pier 2.
- Capacity: The bridge, built in 1920, was originally designed to carry vehicles up to 20 tons (H-20 inventory rating). However, due to the structure's deterioration and poor condition of the concrete arches, current loads are limited to 16 tons (H-20 inventory rating)/27 tons (H-S inventory rating). Bridges typically have multiple load ratings based on its capacity to carry different types of large vehicles such as fire trucks and school buses, which have different axle loads, axle spacings, and other size dimensions and weight distributions. Currently semi-tractor trailers, grain haulers, large farm equipment, and large emergency vehicles such as fire trucks are prohibited from using the bridge. Please refer to the FHWA's Comprehensive Truck Size and Weight Study (<https://www.fhwa.dot.gov/reports/tswstudy/Vol3-Chapter6.pdf>) for additional information.
- Safety: The existing concrete bridge rail does not meet FHWA or INDOT current safety standards. There is no existing approach rail.

##### **Purpose**

The purpose of the project is to improve the condition of the historic arch bridge, provide a safe bridge railing, raise the condition rating of the bridge (and all individual components such as spandrel walls, arch barrels, piers, foundations, and ridge rail) to Good (7), and to extend the life of the bridge for at least another 25 years.

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Wells Municipality: Rock Creek Township

Limits of Proposed Work: The project will be along approximately 0.062 mile of CR 100 N, from approximately 0.63 mile west of CR 400 W to approximately 0.57 mile west of CR 400 W.

Total Work Length: 0.062 Mile(s) Total Work Area: 0.53 Acre(s)

Is an Interstate Access Document (IAD)<sup>1</sup> required?

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

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

| Yes <sup>1</sup>           | No                                  |
|----------------------------|-------------------------------------|
| <input type="checkbox"/>   | <input checked="" type="checkbox"/> |
| Date: <input type="text"/> |                                     |

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

#### Location

The proposed project is in Wells County, east of the Town of Rockford, Indiana. Specifically, the project is in Section 29, Township 27 North, Range 11 East, as shown on the Markle, Indiana 1:24,000 topographic quadrangle map. The project will occur along approximately 0.062 mile of CR 100 N, from approximately 0.63 mile west of CR 400 W to approximately 0.57 mile west of CR 400 W. Project location maps can be found in Appendix B, pages 1 to 3.

#### Existing Conditions

CR 100 N is a Rural Local roadway, with a posted speed limit of 30 miles per hour (mph). The existing roadway has two (2) lanes approximately 9 feet in width, with crushed aggregate shoulders varying between 1 to 4 feet in width. Land use in the vicinity of the project is primarily rural with a residential property in the vicinity of the bridge and a cemetery to the east. Existing conditions surrounding the bridge also include early successional and invasive vegetation common along floodplains and roadways, and trees and shrubs adjacent to the bridge on the eastern end of the project area. There is a driveway near the northeast quadrant of the existing structure, a natural field entrance with drainage structure in the southwest quadrant of the structure, and several above-ground utilities present within the project area, including electric and telephone lines.

The existing structure carrying CR 100 N over Rock Creek, Wells County Bridge No. 90-00106 (NBI: 9000080), is a 2-span reinforced concrete arch bridge that was constructed in 1920 and rehabilitated in 1983. The bridge is listed as a Select historic bridge in the INDOT Historic Bridges Inventory Summary (2010). The structure provides a 17-foot, 10-inch clear roadway width, and is 87 feet, 6 inches long (Appendix B, pages 13 to 14). One (1) lane of traffic is available on the structure. Individual components, such as the spandrel walls, arch barrels, piers, foundations, and bridge rail are deteriorated with leaching, numerous spalls, exposed reinforcement, and voids behind the arch barrels. The bridge is currently rated for 16 tons due to the poor condition of the concrete arches. Additionally, the existing bridge rail does not meet current INDOT/FHWA safety standards. In a bridge inspection report dated October 8, 2020, the bridge wearing surface was given a condition rating of Fair (5), and individual components such as spandrel walls, arch barrels, piers, foundations, and ridge rail, were given a rating of Poor (4); overall, the sufficiency rating of the existing structure was 42.7 out of 100, indicating that the bridge is deficient for vehicular traffic (Appendix I, pages 3 to 7).

#### Preferred Alternative

The Historic Bridge Alternatives Analysis (HBAA), completed in October 2019, evaluated two (2) alternatives to determine what option was feasible and prudent, and met the purpose and need of the project:

- Alternative A: Do Nothing
- Alternative B: Rehabilitation of Existing Structure for Continued Vehicular Use (one-lane option)

Alternative A: Do Nothing is discussed in more detail in the Other Alternatives Section below. Alternative B meets the purpose and need of the project and is feasible and prudent. Deteriorated components of the bridge, such as the arch ring, spandrel walls, piers, abutments and bridge rail, will be returned to near original condition, enhancing the overall appearance of the bridge, structural capacity and importance to the community. Therefore, this is the preferred alternative and no additional options were analyzed in the HBAA.

This is page 4 of 26 Project name: CR 100 N over Rock Creek Bridge Project Date: November 8, 2021

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

The full HBAA can be found in Appendix J, pages 1 to 35. The Indiana State Historic Preservation Officer (SHPO) responded on October 27, 2020, after their review of the HBAA, stating that the agency agreed that Alternative B: Rehabilitation of Existing Structure for Continued Vehicular Use (one-lane option) should be the preferred alternative for this project (Appendix D, pages 37 to 38). The preferred alternative will consist of rehabilitating the existing structure in accordance with the Secretary of Interior's Standards for Rehabilitation or as close to the Secretary's Standards as is practicable.

The structure will continue to serve as a one-lane bridge. The existing bridge surface, spandrel walls, arch barrel, bridge rail, and foundation will be repaired or replaced, as necessary.

The proposed bridge rehabilitation work will include the following:

- Remove the asphalt overlay, existing concrete deck, and arch fill; Replace existing fill with clean fill and install new reinforced concrete deck.
- Replace attached bridge rail and curb.
- Clean and patch the arch rings, spandrel walls, and pier.
- Install a waterproofing membrane to the top of the arch ring to minimize the infiltration of water and salts onto the arch
- Install embedded galvanic anodes in conjunction with arch, spandrel wall and pier patching to protect and slow the rate of corrosion of the existing steel reinforcement.
- Develop a new drainage system to provide positive drainage of the bridge deck and earth fill.

This alternative meets the purpose and need of the project because it will raise the bridge elements' condition ratings to good (7) or higher, thereby extending the life of the bridge by at least 25 years. Refer to project plans in Appendix B, pages 7 to 18.

The Maintenance of Traffic (MOT) for the project will require a road and bridge closure for rehabilitation of the bridge over Rock Creek. A detour route will be available that utilizes CR 400 W, SR 124, and CR 500 W, and will be approximately 3.5 miles in length. The detour and road closure will be required for the duration of construction. Signage notifying motorists of the bridge closure will be placed in the vicinity of the existing bridge. Refer to the MOT section below. The proposed MOT plan is included in Appendix B, page 10.

The estimated construction cost of the structure rehabilitation included in the HBAA is approximately \$292,605; a breakdown of this cost is included in Appendix J, pages 11 to 13. The estimated cost of construction in the Indiana State Transportation Improvement Program (STIP) is \$1,566,000 (Appendix H, page 1). The cost differences between the HBAA and STIP are due to the increased cost of construction materials and labor, and the HBAA estimate being a comparative cost estimate. This means that only costs that are unique to that alternative were calculated, and other costs that were present in all alternatives, such as approach roadway work, are not included in that cost estimate.

The project footprint was selected to encompass the entire area needed to complete construction. This project will tie into the existing CR 100 N roadway east and west of the bridge. The project has independent utility because it doesn't rely on another project to meet its purpose and need. Therefore, this project has logical termini and independent utility.

### OTHER ALTERNATIVES CONSIDERED:

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

One (1) alternative besides the preferred alternative was investigated in the HBAA, which can be found in Appendix J, page 5.

#### **Alternative A: No Build / Do Nothing**

This alternative would require no funding and no improvements to the bridge would be completed. This alternative would result in no environmental impacts and no impacts to the historic bridge. The bridge arch, spandrel walls, piers and foundation are in poor condition. Without rehabilitation, the bridge may last another 5 to 10 years before its condition would require posting for weight restrictions and extensive repairs. This alternative would not maintain a functional bridge crossing to meet current design standards for vehicular traffic. This alternative would lead to continued deterioration of the structure, which would further reduce the structure's capacity, eventually leading to a potential closure of the bridge and impacted local traffic patterns. The bypass detour length for this structure is 2 miles. This alternative does not meet the project purpose and need. Therefore, the Do Nothing Alternative is not considered prudent.

# Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

It would not correct existing capacity deficiencies;

It would not correct existing safety hazards;

It would not correct the existing roadway geometric deficiencies;

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

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

Other (Describe):

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

## ROADWAY CHARACTER:

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

Name of Roadway CR 100 N  
 Functional Classification: Rural Local Road  
 Current ADT: 250 VPD (2017) Design Year ADT: 324 VPD (2043)  
 Design Hour Volume (DHV): 32 Truck Percentage (%) 3  
 Designed Speed (mph): 30 Legal Speed (mph): 30

|                  | Existing              | Proposed              |
|------------------|-----------------------|-----------------------|
| Number of Lanes: | 2                     | 2                     |
| Type of Lanes:   | Asphalt through lanes | Asphalt through lanes |
| Pavement Width:  | 15 – 17 ft.           | 15 – 17 ft.           |
| Shoulder Width:  | 1 – 4 ft.             | 1 – 4 ft.             |
| Median Width:    | N/A ft.               | N/A ft.               |
| Sidewalk Width:  | N/A ft.               | N/A ft.               |

Setting: ☐ Urban ☐ Suburban ☒ Rural  
 Topography: ☒ Level ☐ Rolling ☐ Hilly

## BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s): 90-00106 / NBI: 900080 Sufficiency Rating: 5 out of 9 (fair condition) (October 8, 2020, Bridge Inspection Report) (Appendix I, pages 3 to 7)  
 (Rating, Source of Information)

|                           | Existing                 | Proposed                 |
|---------------------------|--------------------------|--------------------------|
| Bridge/Structure Type:    | Reinforced Concrete Arch | Reinforced Concrete Arch |
| Number of Spans:          | 2                        | 2                        |
| Weight Restrictions:      | 16 ton                   | 36 (open) ton            |
| Height Restrictions:      | N/A ft.                  | N/A ft.                  |
| Curb to Curb Width:       | 17.8 ft.                 | 17.8 ft.                 |
| Outside to Outside Width: | 20.5 ft.                 | 20.5 ft.                 |
| Shoulder Width:           | 2.92 ft.                 | 2.92 ft.                 |

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

This project involves the rehabilitation of the existing bridge (Structure #: 90-00106, NBI: 900080) carrying CR 100 N over Rock Creek. The existing structure is a 2-span reinforced concrete arch bridge that was constructed in 1920 and rehabilitated in 1983. The structure is 87 feet, 6 inches long, with a 17-foot, 10-inch clear roadway width (Appendix B, pages 13 to 14). One (1) lane of travel is available on the structure. The bridge is listed in the INDOT Historic Bridge Inventory Collection as eligible for the NRHP under Criterion C because it "represents an early or distinctive phase in bridge construction, design or engineering and it retains the historic integrity necessary to convey its engineering significance." Furthermore, it is an example of an outstanding filled spandrel double-span bridge. The bridge is listed as a Select bridge in the INDOT Historic Bridge Inventory Summary (2010). The existing structure will be rehabilitated, with the new structure matching the same overall geometric dimensions and aesthetic appearance, as well as maintaining the existing one-lane roadway geometry. This project includes removing and replacing the existing bridge wearing surface, structural backfill, bridge rails, and curbs, as well as the construction of a new concrete deck and approach slabs. Specific details about the proposed bridge and scope of work are included in the Project Description section of this document and in the project plans in Appendix B, pages 7 to 18.

There is an existing drainage structure in the southwest quadrant of the bridge that carries drainage under an agricultural field entrance. This structure will remain in place and will not be altered as a result of this project. Refer to Appendix B, page 11 for the structure's location. No other bridges or small structures are located within the project area.

### MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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

The MOT for the project will require a road and bridge closure for the project. A detour route will be available that utilizes CR 400 W, SR 124, and CR 500 W, and will be approximately 3.5 miles in length. The detour and road closure will be required for the duration of construction, which is anticipated to last for one construction season (approximately 6 months). Signage notifying motorists of the bridge closure will be placed in the vicinity of the existing bridge. The proposed MOT plan is included in Appendix B, page 10.

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

### ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 275,020 (2020) Right-of-Way: \$ 180,000 (2022) Construction: \$ 1,566,000 (2023)

Anticipated Start Date of Construction: Winter 2022

This is page 7 of 26 Project name: CR 100 N over Rock Creek Bridge Project Date: November 8, 2021

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### RIGHT OF WAY:

| Land Use Impacts | Amount (acres) |           |
|------------------|----------------|-----------|
|                  | Permanent      | Temporary |
| Residential      | 0.0            | 0.0       |
| Commercial       | 0.0            | 0.0       |
| Agricultural     | 0.0            | 0.0       |
| Forest           | 0.0            | 0.0       |
| Wetlands         | 0.0            | 0.0       |
| Other: Riparian  | 0.13           | 0.00      |
| TOTAL            | 0.13           | 0.00      |

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

The existing right of way (ROW) widths within the project area are approximately 20 feet from the centerline in either direction of the bridge and roadway. Land use in the area surrounding the project is primarily roadside and agricultural, with some nearby residences.

The project requires approximately 0.13 acre of permanent ROW from the areas immediately north and south of the bridge, including Rock Creek and the surrounding banks. The proposed permanent ROW limits will extend north and south of the structure approximately 35 feet from the centerline of the roadway. The project will not require any temporary ROW. An existing easement from the Rock Creek Conservancy District will be utilized for construction access for rock excavation. All new permanent ROW will come from the immediately adjacent roadsides, banks, and Rock Creek, from land classified as riparian.

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

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

#### **SECTION A - EARLY COORDINATION:**

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

Early coordination letters were sent on November 19, 2020 (Appendix C, pages 1 to 2).

| Agency                                                     | Date Sent / Accessed | Response Date     | Appendix  |
|------------------------------------------------------------|----------------------|-------------------|-----------|
| Indiana Department of Natural Resources (IDNR)             | November 19, 2020    | November 19, 2020 | C4 – C6   |
| U.S. Fish and Wildlife Service (USFWS)                     | November 19, 2020    | November 23, 2020 | C7        |
| Northeastern Indiana Regional Coordinating Council (NIRCC) | November 19, 2020    | November 30, 2020 | C8 – C9   |
| U.S. Coast Guard (USCG)                                    | November 19, 2020    | December 7, 2020  | C10       |
| Indiana Geological & Water Survey (IGWS)                   | April 14, 2021       | April 14, 2021    | C11 – C13 |
| Indiana Department of Environmental Management (IDEM)      | April 14, 2021       | April 14, 2021    | C14 – C20 |
| FHWA                                                       | November 19, 2020    | No Response       | N/A       |
| IDEM Groundwater Section                                   | November 19, 2020    | No Response       | N/A       |
| INDOT Fort Wayne District                                  | November 19, 2020    | No Response       | N/A       |
| INDOT Historic Bridges Specialist                          | November 19, 2020    | No Response       | N/A       |
| INDOT Project Manager                                      | November 19, 2020    | No Response       | N/A       |
| INDOT Public Hearings                                      | November 19, 2020    | No Response       | N/A       |
| National Park Service                                      | November 19, 2020    | No Response       | N/A       |
| Natural Resources Conservation Service (NRCS)              | November 19, 2020    | No Response       | N/A       |
| U.S. Army Corps of Engineers (USACE)                       | November 19, 2020    | No Response       | N/A       |
| U.S. Department of Housing & Urban Development             | November 19, 2020    | No Response       | N/A       |
| Wells County Council                                       | November 19, 2020    | No Response       | N/A       |
| Wells County Floodplain Administrator                      | November 19, 2020    | No Response       | N/A       |
| Wells County Highway Department                            | November 19, 2020    | No Response       | N/A       |
| Wells County Surveyor                                      | November 19, 2020    | No Response       | N/A       |

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

#### **SECTION B – ECOLOGICAL RESOURCES:**

##### **Streams, Rivers, Watercourses & Other Jurisdictional Features**

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

##### Presence

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

##### Impacts

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

Total stream(s) in project area: 265 Linear feet Total impacted stream(s): 0 Linear feet

| Stream Name | Classification | Total Size in Project Area (linear feet) | Impacted linear feet | Comments (i.e. location, flow direction, likely Water of the US, appendix reference)                                                                                     |
|-------------|----------------|------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rock Creek  | Perennial      | 265                                      | 0                    | South to north flow direction, with eventual drainage into the Wabash River approximately 4.85 miles downstream. Likely a Water of the U.S. Refer to Appendix F, page 4. |

# Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

Based on the desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, pages 2 to 3 and page 9), there are three (3) streams within the 0.5 mile search radius. One (1) stream segment, associated with Rock Creek, is present within the project area. This was confirmed by the site visit on August 7, 2020, by SJCA Inc. No Federal Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana; navigable waterways or National Rivers Inventory waterways were identified within or adjacent to the project area during desktop review.

Three (3) IDEM 303d Listed Impaired Streams are located within 0.5 mile of the project area (Appendix E, pages 2 to 3 and page 9). One (1) impaired stream segment associated with Rock Creek, is present within the project area. Rock Creek is impaired for *E. coli*, impaired biotic communities (IBC), and Polychlorinated Biphenyls (PCBs). Regarding IBC, Best Management Practices (BMPs) will be used to avoid further degradation to the stream. Regarding *E. coli*, workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Lastly, regarding PCBs, exposure to PCBs is considered low, assuming workers are not eating biota surrounding or associated with the water body. If there will be sediments and/or soils disturbed by construction, additional investigation may be necessary.

A *Waters of the U.S. Determination / Wetland Delineation Report* was completed by SJCA Inc. for the project on February 3, 2021. Please refer to Appendix F pages 1 to 25 for the *Waters of the U.S. Determination / Wetland Delineation Report*. The report identified one (1) stream in the investigated area, Rock Creek, which was classified as a perennial stream. Approximately 265 linear feet of Rock Creek is present within the project area, flowing from south to north through the project area. This feature is likely jurisdictional under the authority of the USACE because it exhibits an Ordinary High Water Mark (OHWM), exhibits perennial flow conditions, and eventual connectivity to the Wabash River, which is approximately 4.85 miles northwest of the investigated area. The Wabash River is a jurisdictional waterway because it is considered navigable. No other streams, rivers, watercourses, roadside ditches, or jurisdictional ditches were identified in the project area in the report. The USACE makes all final determinations regarding jurisdiction.

Rock will be excavated outside of the OHWM of Rock Creek north and south of the bridge to improve flow conditions, with no permanent or temporary impacts anticipated below the OHWM. A Section 401 permit with IDEM and a Section 404 permit with the USACE will not likely be required due to impacts occurring outside of the OHWM of Rock Creek.

The USFWS responded on November 23, 2020, but did not have any recommendations about waterways (Appendix C, page 4). The USCG responded on December 7, 2020, and stated that this project is exempt from permitting requirements through the USCG (Appendix C, page 7). IDNR responded to early coordination on December 18, 2020, providing recommendations to avoid work in the waterway from April 1 through June 30, avoid excavation in the low flow area, minimize the movement of resuspended bottom sediment, and use appropriately designed measures to control erosion and sediment movement into the stream (Appendix C, pages 8 to 10). The IDEM automated early coordination response letter dated April 14, 2021, recommended that the physical disturbance of stream and riparian vegetation be limited to that which is absolutely necessary to complete the project, appropriate structures and techniques be utilized to minimize the impacts the impacts associated with storm water runoff, and that the proper permits be obtained for impacts to water resources (Appendix C, pages 14 to 20). All applicable recommendations are included in the Environmental Commitments section of this CE document.

| Open Water Feature(s)             | Presence                 | Impacts                  |                          |
|-----------------------------------|--------------------------|--------------------------|--------------------------|
|                                   |                          | Yes                      | No                       |
| Reservoirs                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lakes                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Farm Ponds                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Retention/Detention Basin         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Storm Water Management Facilities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other: _____                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

# Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, pages 2 to 3 and page 9), there is one (1) lake within the 0.5 mile search radius. No open water features are present within or adjacent to the project area. This was confirmed by the site visit on August 7, 2020, by SJCA Inc. No impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was completed for the project on February 3, 2021. Please refer to Appendix F, pages 1 to 25 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that no open water features are within the investigated area.

The USFWS responded on November 23, 2020, but did not have any recommendations about other water features (Appendix C, page 4). The IDNR responded on November 19, 2020, but did not offer any comments about open water features (Appendix C, pages 8 to 10). The IDEM automated early coordination response letter dated April 14, 2021, recommended that the necessary permits be obtained from the appropriate agencies if open water feature impacts will occur as a result of the project (Appendix C, pages 14 to 20). All applicable recommendations are included in the Environmental Commitments section of this CE document.

## Wetlands

### Presence

☐

### Impacts

Yes

No

☐
☐

Total wetland area: 0.0 Acre(s) Total wetland area impacted: 0.0 Acre(s)

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

## Wetlands (Mark all that apply)

### Documentation

### ESD Approval Dates

Wetland Determination

X

N/A

Wetland Delineation

USACE Isolated Waters Determination

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

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

Substantially increased project costs;

Unique engineering, traffic, maintenance, or safety problems;

Substantial adverse social, economic, or environmental impacts, or

The project not meeting the identified needs.

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

Based on the desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, pages 2 to 3 and page 9), there are eight (8) wetlands and one (1) National Wetland Inventory (NWI) line mapped within the 0.5 mile search radius. One (1) NWI line is mapped within the project area. Based on the site visit by SJCA Inc. on August 7, 2020, and the *Waters of the U.S. Determination / Wetland Delineation Report*, completed by SJCA Inc. on February 3, 2021, there were no wetlands identified within the project area. Therefore, no impacts are expected. Please refer to Appendix F, pages 1 to 25 for the *Waters of the U.S. Determination / Wetland Delineation Report*.

The USFWS responded on November 23, 2020, but did not have any recommendations about wetlands (Appendix C, page 4). The IDNR responded on November 19, 2020, but did not offer any comments about wetlands that are applicable to this project (Appendix C, pages 8 to 10). IDNR responded to early coordination on December 18, 2020, providing a recommendation to not excavate or place fill in any riparian wetland (Appendix C, pages 8 to 10). The IDEM automated early coordination response letter dated April 14, 2021, recommended that the necessary permits be obtained from the appropriate agencies for impacts to water resources (Appendix C, pages 14 to 20). All applicable recommendations are included in the Environmental Commitments section of this CE document.

This is page 11 of 26 Project name: CR 100 N over Rock Creek Bridge Project Date: November 8, 2021

# Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

## Terrestrial Habitat

### Presence

☒ X

### Impacts

Yes

No

☒ X

☐

Total terrestrial habitat in project area: 0.53 Acre(s) Total tree clearing: 0.00 Acre(s)

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

Based on a desktop review, a site visit on August 7, 2020, by SJCA Inc., and the aerial map of the project area (Appendix B, page 3), terrestrial habitat exists in the form of maintained roadside lawn, agricultural fields, landscape and roadside trees, and streambank vegetation within and adjacent to the project area. There is approximately 0.53 acre of terrestrial habitat within the project area. Dominant tree species within the project area include Honey Locust (*Gleditsia triacanthos*), Green Ash (*Fraxinus pennsylvanica*), Silver Maple (*Acer saccharinum*), and Box Elder Maple (*Acer negundo*). No tree removal will be required for this project, and there will not be any excavation in the vicinity of the trees. Dominant sapling and shrub species include Amur Honeysuckle (*Lonicera mackii*), American Black Walnut (*Juglans nigra*), Multiflora Rose (*Rosa multiflora*), and Hackberry (*Celtis occidentalis*). Dominant grass and vegetation species include Reed Canary Grass (*Phalaris arundinacea*), Field Brome (*Bromus arvensis*), Yellowfruit Horse-Gentian (*Triosteum angustifolium*), Orange Jewelweed (*Impatiens capensis*), Moneywort (*Lysimachia nummularia*), Cleavers (*Galium aparine*), and Common Wood Sedge (*Carex blanda*). Approximately 0.21 acre of streambank vegetation will be disturbed in order for excavation of rock north and south of the existing bridge to occur. Complete avoidance of this impact would not allow the project to proceed. All disturbed areas will be revegetated upon project completion. Mitigation for impacts to disturbed areas may occur as a condition of a Construction in a Floodway permit from the IDNR.

The USFWS responded on November 23, 2020, but did not have any recommendations about terrestrial habitat (Appendix C, page 4). Those recommendations include evaluating wildlife crossings under the bridge, restricting channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure, not clearing trees or understory vegetation outside the construction zone boundaries, and implementing temporary erosion and sediment control methods within areas disturbed soil. IDNR responded to early coordination on December 18, 2020, with recommendations to revegetate all bare and disturbed areas, minimize the clearing of trees and brush within the project limits, and seed and protect all disturbed streambanks and slopes (Appendix C, pages 8 to 10). The IDEM automated early coordination response letter dated April 14, 2021, did not provide recommendations for terrestrial habitat (Appendix C, pages 14 to 20). All applicable recommendations are included in the Environmental Commitments section of this CE document.

## Protected Species

### Federally Listed Bats

Information for Planning and Consultation (IPaC) determination key completed

Yes

No

☒ X

☐

Section 7 informal consultation completed (IPaC cannot be completed)

☐

☒ X

Section 7 formal consultation Biological Assessment (BA) required

☐

☒ X

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

### Other Species not included in IPaC

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

Yes

No

☐

☒ X

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

☐

☒ X

### Migratory Birds

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

Yes

No

☐

☒ X

State bird species based upon coordination with IDNR

☐

☒ X

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

Based on a desktop review and the RFI report (Appendix E, pages 1 to 13) completed by SJCA Inc. on August 21, 2021, the IDNR Wells County Endangered, Threatened, and Rare (ETR) Species List has been checked Appendix E, pages 12 to 13. According to the IDNR early coordination response letter dated December 18, 2020 (Appendix C, pages 8 to 10), the Natural Heritage Program's Database has been checked and no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages 21 to 26). The project is within range of the federally endangered Indiana Bat (*Myotis sodalis*) and the federally threatened Northern Long-Eared Bat (NLEB) (*Myotis septentrionalis*). No additional species were generated in the IPaC species list other than the Indiana Bat and the Northern Long-Eared Bat.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana Bat and Northern Long-Eared Bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. A bridge inspection occurred on August 7, 2020, by SJCA Inc. and no bats or signs of bats were found to be using the structure (Appendix C, page 38). An effect determination key was completed on December 8, 2020, and based on the responses provided, the project was found to "May Affect – Not Likely to Adversely Affect" the Indiana Bat and/or the NLEB (Appendix C, pages 27 to 37). INDOT reviewed and verified the effect finding on December 8, 2020, 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 Minimization Measures (AMMs) were provided regarding temporary lighting. AMMs and/or commitments 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.

### Geological and Mineral Resources

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

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

Date Karst Study/Report reviewed by INDOT EWPO (if applicable): \_\_\_\_\_

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

Based on a desktop review, the project is located outside the designated karst region of Indiana as outlined in the October 13, 1993, Karst Memorandum of Understanding (MOU). According to the topographic map of the project area (Appendix B, page 2), and the RFI report (Appendix E, pages 2 and 9), there are no karst features identified within or adjacent to the project area. In the early coordination response letter dated April 14, 2021, the Indiana Geological and Water Survey (IGWS) did not indicate that karst features exist in the project area (Appendix C, pages 11 to 13). The IGWS response indicated a high liquefaction potential, a 1% Annual Chance Flood Hazard, high potential for bedrock resources, low potential for sand and gravel resources, presence of petroleum exploration wells, and a presence of abandoned industrial minerals quarries within the 0.5 mile search radius of the project area. The RFI report (Appendix E, pages 3 and 10) identified one petroleum well and one mineral resource site within 0.5 mile of the project area. These features will not be affected because the project will rehabilitate existing structure along the same alignment with no extraction sites existing or planned within or adjacent to the project area. Response from IGWS has been communicated with the designer on May 5, 2021. No impacts are expected.

# Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

## SECTION C – OTHER RESOURCES

### Drinking Water Resources

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

#### Presence

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

#### Impacts

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

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

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

If Yes, is a Groundwater Assessment Required?

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

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

### **Sole Source Aquifer**

The project is located in Wells 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/EPA Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project, a detailed groundwater assessment is not needed, and no impacts are expected.

### **Wellhead Protection Area and Source Water**

The IDEM Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on April 27, 2021, by SJCA Inc. This project is not located within a Wellhead Protection Area or Source Water Area. Therefore, no impacts are expected.

### **Water Wells**

The Indiana Department of Natural Resources Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on April 27, 2021, by SJCA Inc. No wells are located near this project. Therefore, no impacts are expected.

### **Urban Area Boundary**

Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) by SJCA Inc. on April 27, 2021, and the RFI report (Appendix E, page 3), this project is not located in an Urban Area Boundary. No impacts are expected.

### **Public Water System**

Based on a desktop review, a site visit on August 7, 2020, by SJCA Inc., the aerial map of the project area (Appendix B, page 3), and the project plans (Appendix B, page 8), no public water systems were identified. No impacts are expected.

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### Floodplains

Project located within a regulated floodplain

Longitudinal encroachment

Transverse encroachment

Homes located in floodplain within 1000' up/downstream from project

### Presence

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

### Impacts

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

If applicable, indicate the Floodplain Level?

Level 1 ☐

Level 2 ☐

Level 3 ☒

Level 4 ☐

Level 5 ☐

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

Based on a desktop review of the Indiana Department of Natural Resources Indiana Floodway Information Portal website (<http://dnrmmaps.dnr.in.gov/appsphp/fdms/>) by SJCA Inc. on April 27, 2021, and the RFI report (Appendix E, pages 2 to 3 and page 9), this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, page 26). An early coordination letter was sent on November 19, 2020, to the local Floodplain Administrator. The floodplain administrator did not respond within the 30-day time frame. The IDNR responded to the early coordination letter on December 18, 2020 (Appendix C, pages 8 to 10), stating that the project will require formal approval of the agency for construction in a floodway under the Flood Control Act, Indiana Code (IC) 14-28-1.

This project qualifies as a Category 3 per the current INDOT CE Manual, which states, "The modifications to drainage structures included in this project will result in an insubstantial change in their capacity to carry flood water. This change could cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any substantial adverse impacts on the natural and beneficial floodplain values, they will not result in substantial change in flood risks or damage, and they do not have substantial potential for interruption or termination of emergency service or emergency routes. Therefore, it has been determined that this encroachment is not substantial."

### Farmland

Agricultural Lands

Prime Farmland (per NRCS)

### Presence

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

### Impacts

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

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

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

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

Based on a desktop review, a site visit on August 7, 2020, by SJCA Inc., the aerial map of the project area (Appendix B, page 3), and the U.S. Department of Agriculture (USDA) NRCS Web Soil Survey (<https://websoilsurvey.sc.egov.usda.gov/>), there is farmland as defined by the Farmland Protection Policy Act within and adjacent to the project. The project will not convert any farmland, as all new permanent and temporary ROW will be acquired from riparian and stream areas adjacent to the structure. An early coordination letter was sent on November 19, 2020, to the NRCS. No response was received from NRCS within the 30-day response period. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

# Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

## SECTION D – CULTURAL RESOURCES

Minor Projects PA Category(ies) and Type(s)  INDOT Approval Date(s)  N/A ☒

### Full 106 Effect Finding

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

### Eligible and/or Listed Resources Present

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

### Documentation Prepared (mark all that apply)

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

### ESD Approval Date(s)

☒ January 14, 2021  
☒ April 21, 2021  
☒ January 14, 2021  
☒ January 14, 2021  
☐  
☐  
☐

### SHPO Approval Date(s)

☒ February 5, 2021  
☒ May 21, 2021  
☒ February 5, 2021  
☒ February 5, 2021  
☐  
☐  
☐

### MOA Signature Dates (List all signatories)

Memorandum of Agreement (MOA) ☐

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

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires that federal agencies identify and assess the effects of federal projects, programs, and actions on historic resources. This includes projects that are supported by federal funds. The Section 106 process was managed by SJCA Inc. (formerly Green 3, LLC), who is listed on the IDNR Department of Historic Preservation and Archaeology's Roster of Qualified Professionals.

Per the terms of the "Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges" (Historic Bridges PA), the FHWA-Indiana Division will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the Historic Bridges PA (Stipulation III). Wells County Bridge No. 90-00106 is a "Select" bridge; therefore, the procedures outlined in Stipulation III.A of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the project. The Historic Bridges PA can be found on the INDOT Indiana Historic Bridges Inventory website (<https://www.in.gov/indot/2530.htm>).

### Area of Potential Effect (APE):

The APE of the project includes all properties adjacent to the project and those with a proximate viewshed of the project. Land use within the APE consists primarily of agricultural fields and residential properties. CR 100 N bisects the APE through its center. The dimensions of the APE were defined by the open space of the agricultural fields and restricted views caused by the bends in the road and tree lines near residential property boundaries. From the center of the project area, the APE extends 0.13 mile north, 0.09 mile east, 0.12 mile south, and 0.15 mile west. Please refer to Appendix D, page 48 for a map of the APE.

### Coordination with Consulting Parties:

The following parties/agencies were invited to become consulting parties (CPs) to this project and were sent early coordination information on May 26, 2020 (Appendix D, pages 22 to 24). CPs that accepted consulting party status are shown in boldface type below. All CP correspondence is located in Appendix D.

### SHPO

Indiana Landmarks – Northeast Field Office  
Mayor of Bluffton  
Wells County Council  
Wells County Commissioners

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

Wells County Highway Department  
Wells County Area Planning Commission  
Wells County Historical Society and Museum, and Wells County Historian

**NIRCC (Responded on May 29, 2020)**

Historic Hoosier Bridges

**Indiana Historic Spans Task Force (Responded on July 18, 2020)**

Historicbridges.org

Dr. James Cooper

Historic Bridge Foundation

Eastern Shawnee Tribe of Oklahoma

**Miami Tribe of Oklahoma (Responded on June 2, 2020)**

Peoria Tribe of Oklahoma

Pokagon Band of Potawatomi Indians

**Shawnee Tribe (Responded on February 12, 2021)**

Delaware Nation of Oklahoma

Note: INDOT CRO is acting on behalf of FHWA. FHWA is the lead federal agency. The IDNR SHPO is an automatic consulting party.

In a letter dated June 24, 2020, the SHPO staff responded, stating that they were “not aware of any parties who should be invited to participate in the Section 106 consultation on this federal undertaking, beyond those whom INDOT already invited” (Appendix D, pages 29 to 30). In an early coordination letter response dated May 29, 2020, the NIRCC accepted CP status and commented on several properties surrounding the project area that are listed in the State Historic Architectural and Archaeological Research Database (SHAARD) (Appendix D, pages 26 to 27). NIRCC commented on some environmental sites addressed in the Red Flag Investigation, as well as the following sites: Wells County Bridge No. 90-00106, Friends Rockford Cemetery, a historic Farm, Redman’s Lodge and Store, Adventist Church, and a historic house. Wells County Bridge No. 90-00106 and Friends Rockford Cemetery are located within or adjacent to the project area, and are described in the Section 4(f) resources section of this document. The Miami Tribe of Oklahoma responded on June 2, 2020, accepting CP status (Appendix D, page 28). Indiana Historic Spans Task Force responded on July 18, 2020, and accepted CP status (Appendix D, page 31). The Shawnee Tribe responded on February 12, 2021, accepting CP status (Appendix D, page 45). None of the other contacted agencies accepted the invitation to become a consulting party.

**Archaeology:**

A Qualified Professional (QP) from SJCA Inc. completed a Phase Ia archaeological reconnaissance investigation on January 12, 2021. The investigation identified no archaeological sites within the project area, and the report recommended that the project be allowed to proceed as planned (Appendix D, page 49). The archaeology report was sent to SHPO and tribes only on January 14, 2021.

On February 5, 2021, SHPO staff commented that “We note no archaeological resources were identified as a result of the reconnaissance survey (Jackson, 1/12/2021). Therefore, we concur with the recommendation that project activities may proceed without additional archaeological reconnaissance” (Appendix D, pages 43 to 44). The Miami Tribe of Oklahoma responded on June 2, 2020, stating that they do not object to the project and “are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site” (Appendix D, page 28). The Shawnee Tribe responded on February 12, 2021, concurring with the HPSR that “no known historic properties will be negatively impacted by this project,” and noting that they do not have concerns or issues currently with the project moving forward but would like to be notified in the event archaeological materials are encountered at the project location (Appendix D, page 45).

**Historic Properties:**

The NRHP, Indiana Register of Historic Sites and Structures (State Register), and the State Historic Architectural and Archaeological Research Databases (SHAARD and the Indiana Historic Buildings, Bridges, and Cemeteries Map) were consulted. The APE contains one property eligible for listing in the NRHP: Wells County Bridge No. 90-00106 (NBI 9000080), which was built in 1920 and is an 87.5-foot-long two span reinforced concrete arch bridge carrying CR 100 N over Rock Creek. The bridge is eligible under Criterion C, as it has a character-defining arch and is an example of an outstanding fillee spandrel double-span. The bridge is classified “Select.” No other properties within the APE are listed in or recommended eligible for listing in the NRHP.

Per the Section 106 responsibilities listed in Stipulation III.A.3 of the NHPA, a Purpose and Need statement, Historic Bridge Alternative Analysis (HBAA), and 30% plans were prepared and distributed to CPs on October 5, 2020, through IN SCOPE at <http://erms.indot.gov/Section106Documents/>. The HBAA is included in Appendix J, pages 1 to 35. On October 27, 2020, SHPO staff responded to the HBAA stating that they “agree with the HBAA that Alternative B: Rehabilitation of Existing Structure for Continued Vehicular Use (one-lane option) should be the preferred alternative for Bridge No. 106” (Appendix D, pages 37 to 38). Responding to the HBAA, in a letter dated October 14, 2020, the NIRCC had “no comments relating to the early coordination phase of the environment review process with this project” (Appendix D, page 36). No other responses to the HBAA were received from CPs. The HBAA can

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

be reviewed in Appendix J, pages 1 to 35. Per the terms of the Historic Bridges PA, the HBAA included the following Minimization and Mitigation measures:

- Alterations to the superstructure will not significantly change the character defining features of the existing bridge.
- The new bridge rail will match the details of the existing bridge rail as closely as possible, while providing a crash test level of TL-2.
- The bridge owner will consult with the Indian SHPO to determine if photo documentation of the bridge is needed.
- Per [Secretary of Interior's Standards for Rehabilitation] Attachment B, rehabilitation plans will be provided to the Indiana SHPO when the design is approximately 30% complete, 60% complete, and when final design plans are complete.

These minimization and mitigation measures are included as firm commitments at the end of this CE document.

A Historic Property Short Report (HPSR) was completed for the project and verified that Wells County Bridge No. 90-00106 (NBI 900080) remains eligible for inclusion in the NRHP. The HPSR also found the Rockford Society of Friends Cemetery (IHSSI 179-385-10048) to the east of the project bridge. No work is planned to occur within 100 feet of the cemetery; therefore, no impacts are expected. If work occurs within 100 feet of the Rockford Society of Friends Cemetery, a cemetery development plan shall be completed prior to construction in accordance with IC 14-21-1-26.5. This is included as a firm commitment in the Environmental Commitments section at the end of this CE document. The HPSR found no other NRHP-listed or eligible resources in the APE. The HPSR was sent to CPs on January 14, 2021, and a summary of the HPSR is included in Appendix D, pages 46 to 47.

On February 5, 2021, the SHPO staff agreed with the size of the APE and the conclusions of the HPSR that "there are no historic properties within the APE eligible for inclusion in the National Register, except Wells County Bridge No. 90-00106 (IHSSI # 179-385-10049)" (Appendix D, pages 43 to 44). On February 12, 2021, the Shawnee Tribe responded, concurring with the HPSR that "no known historic properties will be negatively impacted by this project" and that they do not have any concerns or issues with the project moving forward, but asked to be notified in the event archaeological materials were encountered at the project location" (Appendix D, page 45). On January 29, 2021, the NIRCC responded in a letter to the HPSR stating "The NIRCC staff does not have any comments regarding this project" (Appendix D, page 42). None of the other CPs provided comments regarding HPSR.

### Documentation Findings:

The procedures outlined in the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the bridge and any effects to the bridge. Per CFR Section 800.4(d)(1) and the Historic Bridges PA, because there are no historic properties present that are listed or eligible for the NHRP besides the project bridge, a finding of "no historic properties affected" was issued on behalf of the FHWA by INDOT CRO on April 21, 2021 (Appendix D, pages 8 to 11). The SHPO responded on May 21, 2021, that they "agree with INDOT's April 21, 2021, Section 106 finding of 'no historic properties affected' on behalf of FHWA for this federal undertaking" (Appendix D, pages 15 to 16). The NIRCC responded on April 28, 2021, providing comments regarding historic sites, historic structures, and potential hazardous sites that are located near the project area (Appendix D, pages 12 to 14). None of the other CPs provided any additional comments regarding the effect finding mailing within the 30-day comment period, which ended on May 21, 2021.

### Public Involvement:

To meet the public involvement requirements of Section 106, a legal notice of the "No Historic Properties Affected" finding was published in *The Bluffton News-Banner* on April 24, 2021, offering the public an opportunity to submit comment pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The published public comment period closed on May 25, 2021. The text of the public notice and the affidavit of publication appear in Appendix D, pages 17 to 19. One comment from the public was received during the public comment period. This comment suggested that other alternatives should be considered to allow for two lanes of traffic while preserving the historic nature of the existing bridge. A feasible and prudent alternative was selected as part of the HBAA prior to analyzing alternatives that include adding a second lane of traffic. No other comments from the public were received.

Pursuant to the Historic Bridges PA, a public hearing is required. 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.

Per the Historic Bridges PA between FHWA, INDOT, the Indiana SHPO, and the Advisory Council on Historic Preservation, rehabilitation plans will be provided to the Indiana SHPO when the design is approximately 30% complete, 60% complete, and when final design plans are complete. Note: 30% plans were provided to CPs with the HBAA on October 5, 2020 (Appendix D, pages 32 to 35). In their May 21, 2021, response letter, SHPO acknowledged receipt of the 60% plans that were provided with the effect finding documents and will review the final plans when received (Appendix D, pages 15 to 16).

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

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

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

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), the RFI report (Appendix E, pages 2 and 8), and the HPSR (Appendix D, pages 46 to 47), there is one (1) 4(f) resource located within the 0.5 mile search radius. The Wells County Bridge No. 90-00106 (NBI 9000080) is listed as a resource eligible for the NRHP and is listed as "Select" in the INDOT Historic Bridge Inventory Summary (2010).

Wells County Bridge No. 90-00106 (NBI 9000080) is afforded protection under Section 4(f) as a historic site that is eligible for listing on the NRHP. The Section 4(f) statute places restrictions on the use of land from historic sites for highway improvements but makes no mention of historic bridges or highways that are already serving as transportation facilities. FHWA therefore, determined that Section 4(f) will only apply when a historic bridge is demolished, or if the historic quality for which the facility was determined eligible for the NRHP is substantially affected by the proposed improvements.

As part of the Historic Bridges Programmatic Agreement, project alternatives are analyzed in consecutive order until a feasible and prudent alternative has been determined which also results in the least amount of harm to the protected resource. A feasible alternative is one that is possible to engineer, design, and build, and a prudent alternative is one that does not present significantly unique or unusual factors (e.g., cost; social, economic, or environmental impacts; community disruption). Once a feasible and prudent alternative has been determined, the remaining alternatives do not need to be analyzed. The following alternatives were previously discussed above. A summarized version of the alternatives is as follows:

#### **A: No Build / Do Nothing**

This alternative would require no funds to be expended and no work to be done, including rehabilitation, to the bridge. This alternative would result in no environmental impacts and no impacts to the historic bridge. The bridge arch, spandrel walls, piers, and foundation are in poor condition. Without rehabilitation, the bridge may last another 5 to 10 years before its condition would require posting for weight restrictions and extensive repairs. This alternative does not maintain a functional bridge crossing which meets current design standards for vehicular traffic. This alternative would lead to continued deterioration of the structure, which would further reduce the structure's capacity, eventually leading to a potential closure of the bridge and impacted local traffic patterns. The bypass detour length

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

for this structure is 2 miles. This alternative does not meet the project purpose and need. Therefore, the Do Nothing Alternative is not considered prudent.

### **B.1: Rehabilitation of Existing Structure for Continued Vehicular Use (one-lane option)**

This alternative would rehabilitate the existing structure in accordance with the Secretary of Interior's Standards for Rehabilitation or as close to the Secretary's Standards as is practicable. This alternative involves the removal and replacement of the existing bridge wearing surface, structural backfill, bridge rails, and curbs, as well as the construction of a new concrete deck and approach slabs. This project will also include milling and replacing the asphalt overlay of the approach pavement, installing guardrail alongside the bridge approaches, constructing aggregate shoulders, and excavating rock in the channel of Rock Creek for additional hydraulic capacity. The existing spandrel walls and deteriorated outer portions of the arch ring will be removed and replaced with the same overall geometric dimensions and aesthetic appearance. New reinforcing steel will be placed within the spandrel walls and portions of the arch ring to be replaced. The structure would continue to serve as a one-lane bridge with this alternative, and the proposed work would raise the condition ratings to good and extend the life of the bridge by at least 25 years. Therefore, this alternative meets the purpose and need of the project, and is feasible and prudent. Deteriorated components of the bridge, such as the arch ring, spandrel walls, piers, abutments and bridge rail, would be returned to near original condition, enhancing the overall appearance of the bridge, structural capacity, and importance to the community. Therefore, this is the preferred alternative and no additional alternatives will be analyzed at this time.

A Historic Bridge Alternatives Analysis was developed to evaluate the most feasible and prudent solution to the purpose and need of the project (Appendix I, pages 7 to 13). The first feasible and prudent build alternative was Alternate B.1: Rehabilitation of Existing Structure for Continued Vehicular Use.

The proposed bridge project will utilize Alternative B.1, which will rehabilitate the bridge meeting the Secretary of the Interior's standards. The bridge will not be demolished, and the historic quality for which the facility is determined eligible for the NRHP will not be substantially affected by the proposed improvements. Therefore, there would be no use of Section 4(f) properties as result of the project and no further 4(f) evaluation is required.

### **Section 6(f) Involvement**

### **Presence**

### **Use**

**Yes**

**No**

### **Section 6(f) Property**

☐☐☐

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

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

A review of 6(f) properties on the INDOT ESD website revealed a total of twelve (12) properties in Wells County (Appendix I, page 1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### SECTION F – Air Quality

#### STIP/TIP and Conformity Status of the Project

Is the project in the most current STIP/TIP?

Yes

No

☒

☐

Is the project located in an MPO Area?

☐

☒

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

☐

☒

If Yes, then:

Is the project in the most current MPO TIP?

☐

☐

Is the project exempt from conformity?

☐

☐

If No, then:

Is the project in the Transportation Plan (TP)?

☐

☐

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

☐

☐

Location in STIP:

FY 2020 – 2024 STIP, Amendment 4; August 30, 2019 (Appendix H, page 1)

Name of MPO (if applicable):

Location in TIP (if applicable):

Level of MSAT Analysis required?

Level 1a

☒

Level 1b

☐

Level 2

☐

Level 3

☐

Level 4

☐

Level 5

☐

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

This project is included in the Fiscal Year (FY) 2020 – 2024 Indiana STIP (Appendix H, page 1).

This project is located in Wells County, which is currently in attainment for all criteria pollutants according to the U.S. Environmental Protection Agency (EPA) Nonattainment Areas for Criteria Pollutants Green Book (<https://www.epa.gov/green-book>), as well as IDEM's Current and Historical List of Nonattainment Areas by County and IDEM's Map of Current Attainment Areas, which can be found at <https://www.in.gov/idem/sips/nonattainment-status-of-counties/>. Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

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 G - NOISE

#### Noise

Yes

No

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

☐

☒

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

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

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.

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### SECTION H – COMMUNITY IMPACTS

#### Regional, Community & Neighborhood Factors

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

Yes

**X**

No

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

**X**

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

**X**

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

**X**

Does the community have an approved transition plan?

**X**

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

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

**N/A**

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

Although a small part of Wells County is located within the NIRCC MPO, this project is not located within or near the MPO boundaries; therefore, there is not an MPO Transportation Plan that applies to this project. Wells County has an Americans with Disabilities Act (ADA) Transition Plan; this project will not include the installation of any sidewalks or curb ramps. Therefore, the ADA transition plan is not applicable. The 2014-2024 Wells County Comprehensive Plan (found at <https://wellscounty.org/area-planning-commission/#plan>) has a stated goal to maintain the county's existing roadways and bridges and to make improvements where warranted. Wells County also has the draft Wells County 2030 Vision Comprehensive Plan, which includes recommendations and items of consideration for transportation projects, including both roadway and bridge projects. Bridge recommendations include acting both preventatively and reactively to help improve the community's bridges following the required National Bridge Inspection Reports. This project will comply with this comprehensive plan, as the purpose of the proposed project is to improve the lifespan of the Wells County Bridge No. 90-00106 over Rock Creek. The draft of this comprehensive plan can be accessed at the following site: [https://www.dropbox.com/sh/882d4k9o7drbzcj/AAArU3ok7sw\\_BOUJQotavDBpya?dl=0](https://www.dropbox.com/sh/882d4k9o7drbzcj/AAArU3ok7sw_BOUJQotavDBpya?dl=0).

The project will not substantially impact the tax base or property values. The project will require approximately 0.13 acre of permanent ROW and approximately 0.37 acre of temporary ROW from the immediately adjacent areas north and south of the existing structure. The ROW acquisition will only impact roadside and riparian use on the properties, and will not cause any relocation of businesses or residences.

A search of local festivals, fairs, and events that could potentially be impacted by this project, or by the MOT plan associated with this project, was conducted on April 28, 2021, by SJCA Inc. The following sources were evaluated: The City of Bluffton website (<https://blufftonindiana.net/>) and the Wells County Tourism website (<http://visitwellscounty.com/>). No festivals, fairs, and events were identified within the project area. It was concluded that the project will not substantially impact community cohesion or adversely impact local community events.

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### Public Facilities and Services

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), the RFI report (Appendix E, pages 2 and 8), and the HPSR (Appendix D, pages 46 to 48), there is one (1) public facility within the 0.5 mile search radius. One (1) cemetery, the Rockford Society of Friends Cemetery (IHSSI 179-385-10048), is located within 100 feet east of the project area. This was confirmed by the site visit on August 4, 2020, by SJCA Inc. No work is planned to occur within 100 feet of the cemetery; therefore, no impacts are expected. If work occurs within 100 feet of the Rockford Society of Friends Cemetery, a cemetery development plan shall be completed prior to construction in accordance with IC 14-21-1-26.5. This is included as a firm commitment in the Environmental Commitments section at the end of this CE document. There are several above-ground utilities present within the project area, including electric and telephone lines. Coordination with the utility companies is ongoing. Access to all properties will be maintained during construction.

While there are no public airports within 20,000 feet (3.8 miles) of the project area, this project may include the use of a crane that will exceed 200 feet in height. The nearest airport is the Miller Airport C-40/Airfield, which is approximately 4.35 miles southwest of the project area. Through coordination between the designer and the Federal Aviation Administration (FAA), it was determined that an FAA permit will be required.

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.

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

During the development of the project were EJ issues identified?

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

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

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

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

Under FHWA Order 6640.23A, FHWA and the project sponsor, 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. This project will have no relocations and will require less than 0.5 acre of additional permanent right-of-way; therefore, an EJ analysis is not required per the current INDOT Categorical Exclusion Manual.

#### Relocation of People, Businesses or Farms

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

Is a BIS or CSRS required?

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

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

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

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

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

### SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

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

Red Flag Investigation (RFI)  
Phase I Environmental Site Assessment (Phase I ESA)  
Phase II Environmental Site Assessment (Phase II ESA)  
Design/Specifications for Remediation required?

#### Documentation

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

Date RFI concurrence by INDOT SAM (if applicable): August 24, 2020

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

Based on a review of GIS and available public records, an RFI was approved by INDOT SAM on August 24, 2020 (Appendix E, pages 4 and 11). One (1) state cleanup site, one (1) solid waste landfill, one (1) open dump waste site, one (1) National Pollutant Discharge Elimination System (NPDES) facility, two (2) NPDES pipes. None of the hazmat sites identified will impact the project. Further investigation for hazardous material concerns is not required at this time.

All applicable recommendations regarding impaired streams (refer to the Streams, Rivers, Watercourses and Other Jurisdictional Features Section of this document) are included as firm commitments in the Environmental Commitments section of this CE document.

## Part IV – Permits and Commitments

### PERMITS CHECKLIST

#### Permits (mark all that apply)

#### Likely Required

#### Army Corps of Engineers (404/Section10 Permit)

|                               |                          |
|-------------------------------|--------------------------|
| Nationwide Permit (NWP)       | <input type="checkbox"/> |
| Regional General Permit (RGP) | <input type="checkbox"/> |
| Individual Permit (IP)        | <input type="checkbox"/> |
| Other                         | <input type="checkbox"/> |

#### IN Department of Environmental Management (401/Rule 5)

|                               |                          |
|-------------------------------|--------------------------|
| Nationwide Permit (NWP)       | <input type="checkbox"/> |
| Regional General Permit (RGP) | <input type="checkbox"/> |
| Individual Permit (IP)        | <input type="checkbox"/> |
| Isolated Wetlands             | <input type="checkbox"/> |
| Rule 5                        | <input type="checkbox"/> |
| Other                         | <input type="checkbox"/> |

#### IN Department of Natural Resources

|                            |                                     |
|----------------------------|-------------------------------------|
| Construction in a Floodway | <input checked="" type="checkbox"/> |
| Navigable Waterway Permit  | <input type="checkbox"/>            |
| Other                      | <input type="checkbox"/>            |

#### Mitigation Required

#### US Coast Guard Section 9 Bridge Permit

|                                                 |                                     |
|-------------------------------------------------|-------------------------------------|
| Others (Please discuss in the discussion below) | <input checked="" type="checkbox"/> |
|-------------------------------------------------|-------------------------------------|

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

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

A Section 404 permit from the USACE and a Section 401 permit from IDEM are not anticipated to be required due to no work occurring within the OHWM of Rock Creek. A Construction in a Floodway (CIF) Permit from IDNR will be required under the Flood Control Act, IC 14-28-1, due to project construction occurring within the floodway of Rock Creek. An FAA airspace permit will be required for this project due to the use of a crane that will exceed 200 feet in height. An airspace permit determination should be submitted to the FAA for review; if it is determined that an FAA permit is required, the application should be submitted to FAA for approval prior to construction.

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

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

### ENVIRONMENTAL COMMITMENTS

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

#### Firm

- 1) If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT District)
- 2) It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
- 3) USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after August 7, 2022, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)
- 4) Wells County Bridge No. 90-00106 (NBI No. 900080) did not show evidence of use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA) during the August 7, 2020, by SJCA Inc.; however, due to the presence of Rock Creek, this structure provides suitable habitat for protected bird species. Avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP.
- 5) 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)
- 6) Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
- 7) Rock Creek is located within the project area and is listed as an IDEM 303d Listed Stream, impaired with *E.coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. (INDOT SAM)
- 8) Rock Creek is located within the project area and is listed as an IDEM 303d Listed Stream, containing impaired biotic communities (IBCs). Regarding IBCs, Best Management Practices (BMPs) will be used to avoid further degradation to the stream. (INDOT SAM)
- 9) Rock Creek is located within the project area and is listed as an IDEM 303d Listed Stream, impaired with PCBs in fish tissue. Regarding PCBs, exposure to PCBs in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. (INDOT SAM)
- 10) Alterations to the superstructure will not significantly change the character defining features of the existing bridge. (Indiana SHPO)
- 11) The new bridge rail will match the details of the existing bridge rail as closely as possible, while providing a crash test level of TL-2. (Indiana SHPO)
- 12) Photo documentation of the bridge is required and draft photos will be provided to the SHPO prior to Ready for Contracts (RFC). (Indiana SHPO)

## Indiana Department of Transportation

County Wells Route CR 100 N over Rock Creek Des. No. 1702735

- 13) Per [Secretary of Interior's Standards for Rehabilitation] Attachment B, rehabilitation plans will be provided to the Indiana SHPO when the design is approximately 30% complete, 60% complete, and when final design plans are complete. (Indiana SHPO)
- 14) If work occurs within 100 feet of the Rockford Society of Friends Cemetery, a cemetery development plan shall be completed prior to construction in accordance with IC 14-21-1-26.5. (INDOT CRO, SHPO)
- 15) An airspace permit determination should be submitted to the FAA for review; if it is determined that an FAA permit is required, the application should be submitted to FAA for approval prior to construction. (INDOT Office of Aviation)

### For Further Consideration

- 16) Do not cut any trees suitable for Indiana Bat or Northern Long-Eared Bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30). (IDNR)
- 17) Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR)
- 18) Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR)
- 19) Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR)
- 20) The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to current conditions. (IDNR)
- 21) Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one (1) acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five (5) trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees). (IDNR)

# Des 1702735 CE-4 Appendices

## Table of Contents

### Appendix A: CE Threshold Table

|                         |     |
|-------------------------|-----|
| CE Threshold Table..... | A-1 |
|-------------------------|-----|

### Appendix B: Graphics and Plan Sheets

|                                         |     |
|-----------------------------------------|-----|
| Project Location Map.....               | B-1 |
| Topographic Map.....                    | B-2 |
| Aerial Map.....                         | B-3 |
| Photo Location and Orientation Map..... | B-4 |
| Project Site Photos .....               | B-5 |
| 60% Plan Sheets.....                    | B-7 |

### Appendix C: Early Coordination

|                                       |      |
|---------------------------------------|------|
| Sample Early Coordination Letter..... | C-1  |
| Early Coordination Mailing List.....  | C-3  |
| USFWS Response Letter.....            | C-4  |
| NIRCC (MPO) Response Letter.....      | C-5  |
| USCG Response Letter.....             | C-7  |
| IDNR Response Letter.....             | C-8  |
| IGWS Automated Response Letter.....   | C-11 |
| IDEM Automated Response Letter.....   | C-14 |
| USFWS IPaC Species List.....          | C-21 |
| USFWS IPaC Concurrence Letter.....    | C-27 |
| August 2020 Bat Inspection.....       | C-38 |

### Appendix D: Section 106 of the NHPA

|                                                                           |      |
|---------------------------------------------------------------------------|------|
| 800.11 Documentation and Effects Finding.....                             | D-1  |
| INDOT Effects Finding Letter.....                                         | D-8  |
| NIRCC Effects Finding Response Letter.....                                | D-12 |
| SHPO Effects Finding Response Letter.....                                 | D-13 |
| Effects Finding Public Notice.....                                        | D-15 |
| Publisher's Affidavit.....                                                | D-16 |
| Public Response Letter to Public Notice.....                              | D-18 |
| INDOT Early Coordination Letter.....                                      | D-20 |
| Early Coordination Mailing List.....                                      | D-23 |
| NIRCC Early Coordination Response Letter.....                             | D-24 |
| Miami Tribe of Oklahoma Early Coordination Response Letter.....           | D-26 |
| SHPO Early Coordination Response Letter.....                              | D-27 |
| Indiana Historic Spans Task Force Early Coordination Response Letter..... | D-29 |

|                                                                                      |      |
|--------------------------------------------------------------------------------------|------|
| INDOT HBAA and 30% Plans Letter.....                                                 | D-30 |
| NIRCC HBAA and 30% Plans Response Letter.....                                        | D-34 |
| SHPO HBAA and 30% Plans Response Letter.....                                         | D-35 |
| INDOT Historic Properties Report and Archaeology Report Letter.....                  | D-37 |
| NIRCC Historic Properties Report and Archaeology Report Response Letter.....         | D-40 |
| SHPO Historic Properties Report and Archaeology Report Response Letter.....          | D-41 |
| Shawnee Tribe Historic Properties Report and Archaeology Report Response Letter..... | D-43 |
| Historic Properties Short Report Excerpt.....                                        | D-44 |
| APE Map.....                                                                         | D-46 |
| Archaeology Report Excerpt.....                                                      | D-47 |

#### **Appendix E: Red Flag Investigation**

|                                                               |      |
|---------------------------------------------------------------|------|
| Red Flag Investigation Report Text.....                       | E-1  |
| Site Location Map.....                                        | E-7  |
| Infrastructure Map.....                                       | E-8  |
| Water Resources Map.....                                      | E-9  |
| Mining/Mineral Resources Map.....                             | E-10 |
| Hazardous Material Concerns Map.....                          | E-11 |
| Endangered, Threatened, and Rare Species in Wells County..... | E-12 |

#### **Appendix F: Water Resources**

|                                                    |      |
|----------------------------------------------------|------|
| Waters of the U.S. Report.....                     | F-1  |
| Preliminary Jurisdictional Determination Form..... | F-22 |
| IDNR Floodplain Map.....                           | F-26 |

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

|                             |     |
|-----------------------------|-----|
| Notice of Entry Letter..... | G-1 |
|-----------------------------|-----|

#### **Appendix H: Air Quality**

|                                        |     |
|----------------------------------------|-----|
| Project Listing in 2020-2024 STIP..... | H-1 |
|----------------------------------------|-----|

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

|                                                |     |
|------------------------------------------------|-----|
| LWCF Properties in Wells County.....           | I-1 |
| October 8, 2020, Bridge Inspection Report..... | I-2 |
| Approved HBAA Excerpt.....                     | I-7 |

**Des 1702735 CE-4**

**Appendix A**

**CE Threshold Chart**

## 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<sup>3</sup></b>                                                                                                              | No construction in waterways or water bodies                                   | < 300 linear feet of stream impacts                             | ≥ 300 linear feet of stream impacts | -                            | USACE Individual 404 Permit <sup>4</sup>                               |
| <b>Wetland Impacts<sup>3</sup></b>                                                                                                             | No adverse impacts to wetlands                                                 | < 0.1 acre                                                      | -                                   | < 1.0 acre                   | ≥ 1.0 acre                                                             |
| <b>Right-of-way<sup>5</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” (With select AMMs <sup>6</sup> ) | “Not likely to Adversely Affect” (With any AMMs or commitments) | -                                   | “Likely to Adversely Affect” | Project does not fall under Species Specific Programmatic <sup>7</sup> |
| <b>Threatened/Endangered Species (Any other species)*</b>                                                                                      | Falls within guidelines of USFWS 2013 Interim Policy or “No Effect”            | “Not likely to Adversely Affect”                                | -                                   | -                            | “Likely to Adversely Affect”                                           |
| <b>Environmental Justice</b>                                                                                                                   | No disproportionately high and adverse impacts                                 | -                                                               | -                                   | -                            | Potential <sup>8</sup>                                                 |
| <b>Sole Source Aquifer</b>                                                                                                                     | No Detailed Groundwater Assessment                                             | -                                                               | -                                   | -                            | Detailed Groundwater Assessment                                        |
| <b>Floodplain</b>                                                                                                                              | No Substantial Impacts                                                         | -                                                               | -                                   | -                            | Substantial Impacts                                                    |
| <b>Section 4(f) Impacts</b>                                                                                                                    | None                                                                           | -                                                               | -                                   | -                            | Any <sup>9</sup>                                                       |
| <b>Section 6(f) Impacts</b>                                                                                                                    | None                                                                           | -                                                               | -                                   | -                            | Any                                                                    |
| <b>Permanent Traffic Alteration</b>                                                                                                            | None                                                                           | -                                                               | -                                   | -                            | Any                                                                    |
| <b>Noise Analysis Required</b>                                                                                                                 | No                                                                             | -                                                               | -                                   | -                            | Yes                                                                    |
| <b>Air Quality Analysis Required</b>                                                                                                           | No                                                                             | -                                                               | -                                   | -                            | Yes <sup>10</sup>                                                      |
| <b>Approval Level</b><br><br><ul style="list-style-type: none"> <li>District Env. (DE)</li> <li>Env. Serv. Div. (ESD)</li> <li>FHWA</li> </ul> | Concurrence by DE or ESD                                                       | DE or ESD                                                       | DE or ESD                           | DE and/or ESD                | DE and/or ESD; and FHWA                                                |

<sup>1</sup> Coordinate with INDOT Environmental Services Division. 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> Total permanent impacts to streams (linear feet) and wetlands (acres).

<sup>4</sup> US Army Corps of Engineers Individual 404 Permit

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

<sup>6</sup> Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

<sup>7</sup> Projects that do not fall under a Species Specific Programmatic and results in a “Likely to Adversely Affect”. Other findings can be processed as a lower level CE.

<sup>8</sup> Potential for causing a disproportionately high and adverse impact.

<sup>9</sup> Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

<sup>10</sup> Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

\* Includes the threatened/endangered species critical habitat

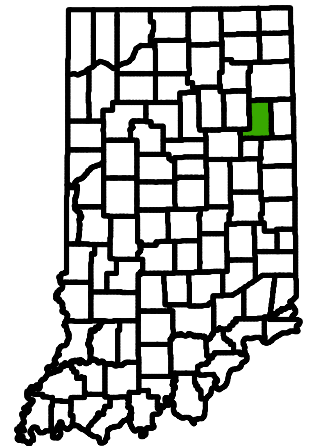
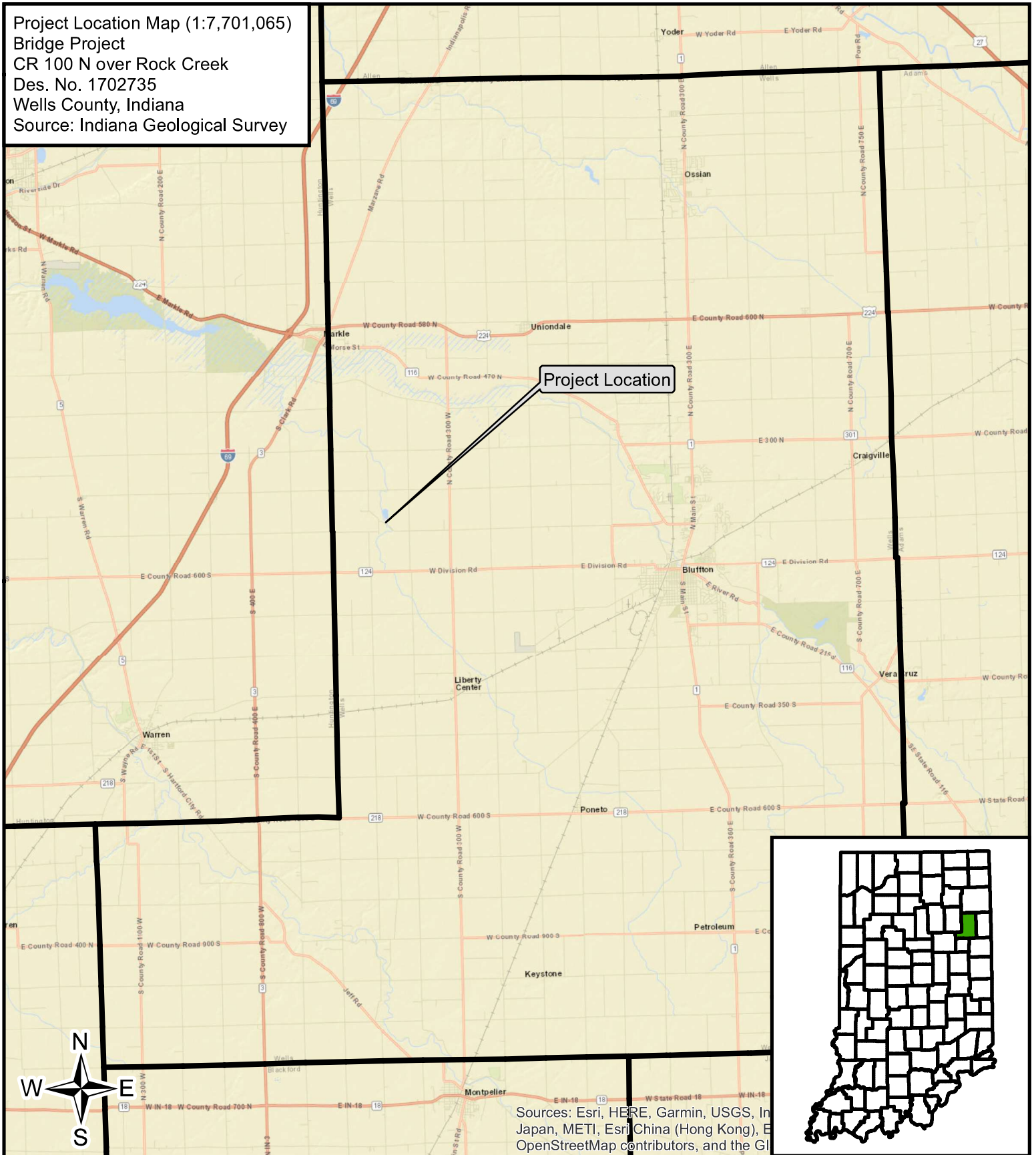
Note: Substantial public or agency controversy may require a higher-level NEPA document.

**Des 1702735 CE-4**

**Appendix B**

**Graphics and Plan Sheets**

Project Location Map (1:7,701,065)  
 Bridge Project  
 CR 100 N over Rock Creek  
 Des. No. 1702735  
 Wells County, Indiana  
 Source: Indiana Geological Survey



Sources: Esri, HERE, Garmin, USGS, In Japan, METI, Esri China (Hong Kong), E OpenStreetMap contributors, and the GI

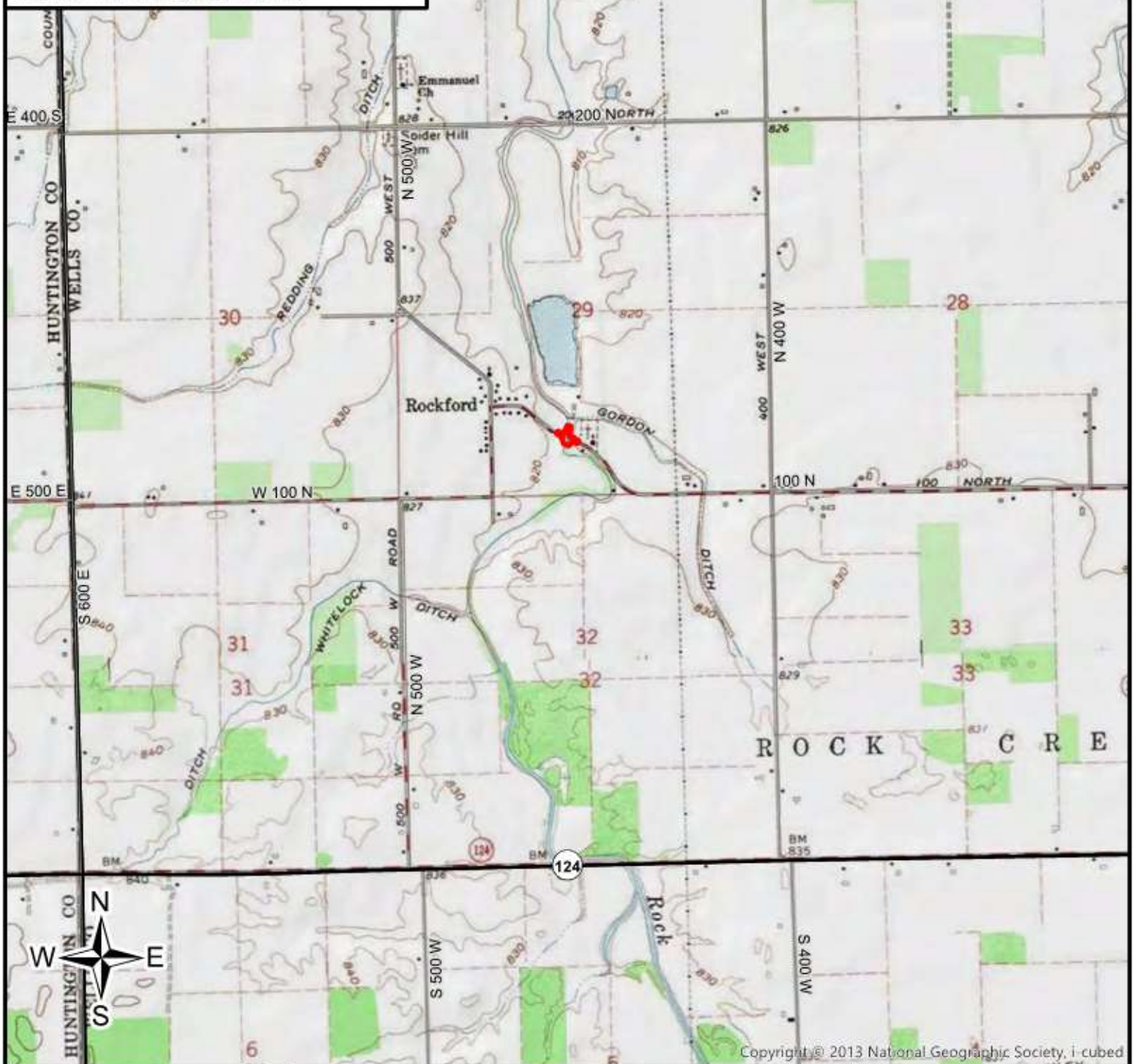
0 2 4  
 Miles

County Boundary  
 Project County



6/24/2021

Topographic Map (1:24,000)  
 Bridge Project  
 CR 100 N over Rock Creek  
 Des. No. 1702735  
 Wells County, Indiana  
 Markle Quadrangle  
 Source: US Geological Survey



Copyright © 2013 National Geographic Society. i-cubed

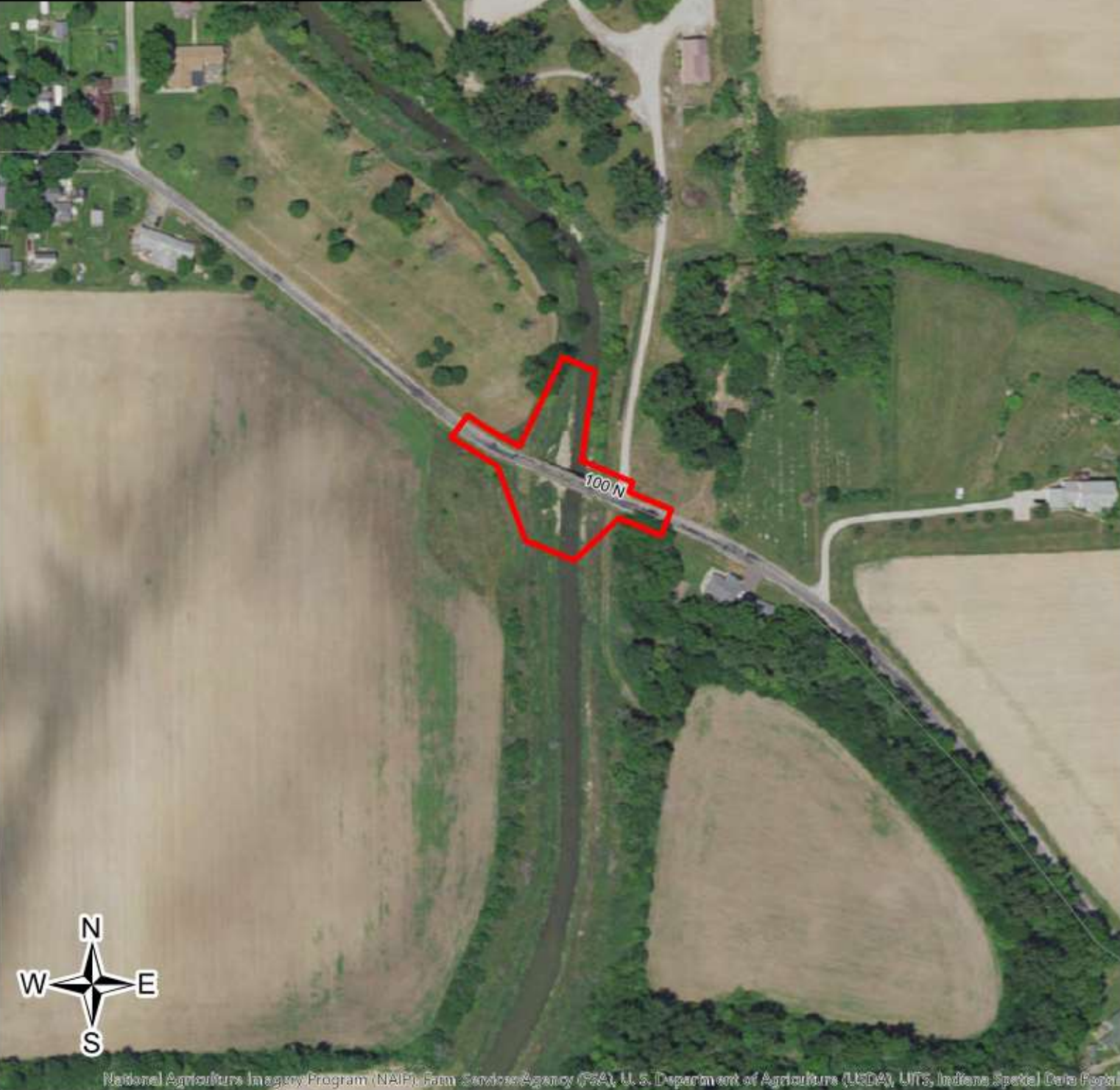
0 1,250 2,500  
 Feet

 Project Location



11/12/2020

Aerial Map (1:2,400)  
Bridge Project  
CR 100 N over Rock Creek  
Des. No. 1702735  
Wells County, Indiana  
Source: NAIP 2016 Imagery



National Agriculture Imagery Program (NAIP), Farm Service Agency (FSA), U.S. Department of Agriculture (USDA), UTS, Indiana Statewide Data Portal

0 140 280  
Feet

 Project Location



11/12/2020

Photo Location and Orientation Map (1:1,200)

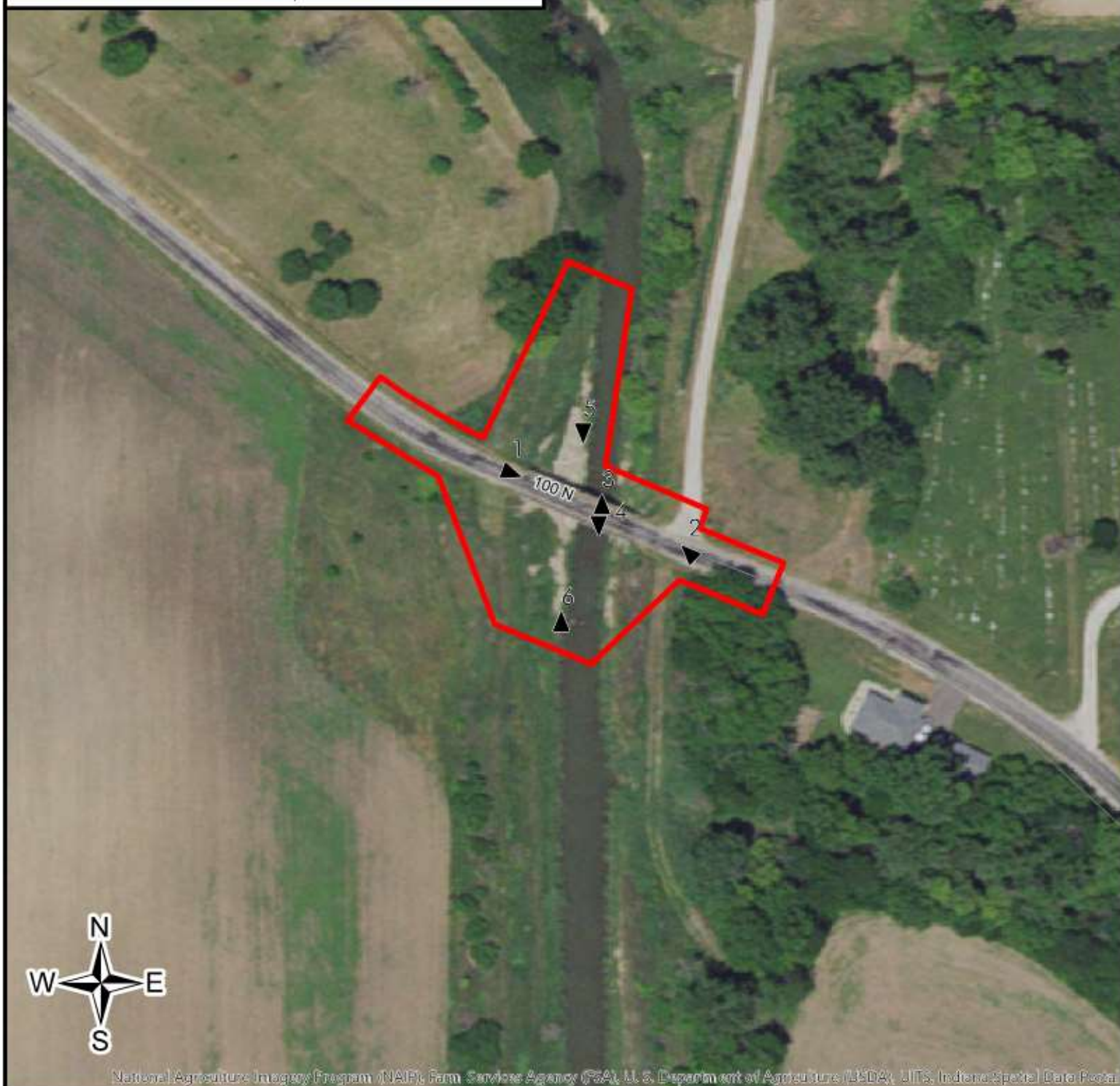
Bridge Project

CR 100 N over Rock Creek

Des. No. 1702735

Wells County, Indiana

Source: SJCA Inc Field Survey



National Agriculture Imagery Program (NAIP), Farm Service Agency (FSA), U.S. Department of Agriculture (USDA), GIS, Indiana Spatial Data Portal

0 70 140  
Feet

 Project Location  
 Photo Location



11/12/2020



Photo 1: West Side Project Bridge Facing Southeast



Photo 2: East Side Project Bridge Facing Northwest



Photo 3: Rock Creek From Project Bridge Facing North



Photo 4: Rock Creek From Project Bridge Facing South



Photo 5: Project Bridge Facing South



Photo 6: Project Bridge Facing North

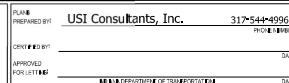
| STRUCTURE INFORMATION |                                  |                              |            |
|-----------------------|----------------------------------|------------------------------|------------|
| STRUCTURE             | TYPE                             | SPAN AND SKEW                | OVER       |
| 90*00106              | Reinforced Concrete Arch Under F | 2 Spans: 43*9', 43*9' Square | Rock Creek |



COUNTY ROAD 100 NORTH OVER  
ROCK CREEK

BRIDGE DECK RECONSTRUCTION, BRIDGE RAILING, SPANDREL WALL, AND CURB  
REPLACEMENT, AND REPAIR OF A PORTION OF THE ARCH RING FROM THE COPING  
INWARD UNTIL DETERIORATED PORTIONS ARE REMOVED.  
WELLS COUNTY ROAD 100 NORTH OVER ROCK CREEK,  
LOCATED 0.5 MILES WEST OF C.R. 400 W. IN  
SECTION 29, T27N, R11E, ROCK CREEK TOWNSHIP, WELLS COUNTY, INDIANA

NATE RUNSCHLAG, P.E., MCM, & LEED-AP • COUNTY HIGHWAY ENGINEER



HUC: 05120101080060

INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 2020  
TO BE USED WITH THESE PLANS

|          |           |  |
|----------|-----------|--|
|          | BRIDGE #  |  |
|          | 90-00106  |  |
|          | CRS       |  |
|          | 1702735   |  |
|          | SHEETS    |  |
|          | 1 of 32   |  |
| CONTRACT | PROJECT # |  |
| B-41155  | 1702735   |  |

AMERICAN ELECTRIC POWER  
(DISTRIBUTION)

CITIZENS TELEPHONE CO.

AMERICAN ELECTRIC POWER-TX

REVISIONS

[illegible]

1-800-382-5544  
CALL BEFORE YOU DIG

**CAUTION !**

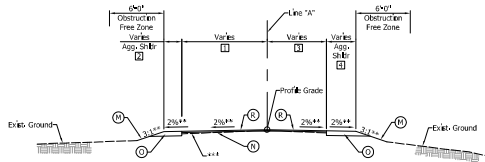
THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

## SHEET NO.

|    |                                         |
|----|-----------------------------------------|
| 1  | TITLE SHEET                             |
| 2  | INDEX                                   |
| 3  | TYPICAL CROSS SECTIONS AND MISC DETAILS |
| 4  | LOCATION ROUTE MAP/FFL PLAN             |
| 5  | ROUTE ELEVATIONS                        |
| 6  | CONSTRUCTION DETAIL                     |
| 7  | 2. TYPICAL CONTRA                       |
| 8  | 2.0. RAMPING                            |
| 9  | BRIDGE LAYOUT                           |
| 10 | GENERAL PLAN • EXISTING                 |
| 11 | GENERAL PLAN • PROPOSED                 |
| 12 | BRIDGE ELEVATION DETAILS                |
| 13 | BRIDGE SUMMARY                          |
| 14 | CROSS SECTION • LINE "A"                |
| 15 | CROSS SECTION • LINE "B"                |

NOT FOR  
CONSTRUCTION

|             |  |     |  |                                         |  |                  |  |             |  |
|-------------|--|-----|--|-----------------------------------------|--|------------------|--|-------------|--|
|             |  |     |  | INDIANA<br>DEPARTMENT OF TRANSPORTATION |  | HORIZONTAL SCALE |  | BRIDGE FILE |  |
|             |  |     |  |                                         |  | NONE             |  | 9070306     |  |
|             |  |     |  | INDEX                                   |  | VERTICAL SCALE   |  | DESIGNATION |  |
|             |  |     |  |                                         |  | NONE             |  | 170775      |  |
| DESIGNED BY |  | JWH |  | DRAWN BY                                |  | RDC              |  | SURVEY BOOK |  |
| CHECKED BY  |  | RPH |  | CHECKED BY                              |  | JWH              |  | SHEETS      |  |
|             |  |     |  |                                         |  |                  |  | 2 of 32     |  |
|             |  |     |  |                                         |  | CONTRACT         |  | PROJECT     |  |
|             |  |     |  |                                         |  | B-4155           |  | 170775      |  |



\*\*Unless Noted on the cross sections

**TYPICAL SECTION  
RESURFACE**  
Scale: 1" = 4'

Sta. 18+00.00 to Sta. 19+08.24 "A"  
Sta. 20+36.74 to Sta. 21+25.00 "A"

Varies from 8.88' at Sta. 18+00.00 to 7.38' at Sta. 19+08.24 "A", Lt.  
Varies from 7.88' at Sta. 20+36.74 to 11.00' at Sta. 21+25.00 "A", Lt.

Varies from 1.0' from Sta. 18+00.00 to Sta. 19+81.00 "A", Lt.  
Varies from 1.0' at Sta. 18+81.00 to 3.44' at Sta. 19+08.24 "A", Lt.  
Varies from 3.00' at Sta. 20+36.74 to 2.81' at Sta. 20+50.00 "A", Lt.  
Varies from 2.81' at Sta. 20+50.00 to 2.07' at Sta. 20+72.00 "A", Lt.  
Varies from 2.07' at Sta. 20+72.00 to Sta. 21+00.00 "A", Lt.  
Varies from 2.07' at Sta. 21+00.00 to 1.07' at Sta. 21+25.00 "A", Lt.

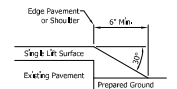
Varies from 7.88' at Sta. 18+00.00 to 6.67' at Sta. 19+08.24 "A", Rt.  
Varies from 6.75' at Sta. 20+36.74 to 6.19' at Sta. 21+25.00 "A", Rt.

Varies from 1.0' from Sta. 18+00.00 to Sta. 18+83.00 "A", Rt.  
Varies from 1.0' at Sta. 18+83.00 to 4.31' at Sta. 19+08.24 "A", Rt.  
Varies from 4.13' at Sta. 20+36.74 to 4.30' at Sta. 20+50.00 "A", Rt.  
Varies from 4.30' at Sta. 20+50.00 to 2.67' at Sta. 21+00.00 "A", Rt.  
Varies from 2.67' at Sta. 21+00.00 to 1.07' at Sta. 21+25.00 "A", Rt.

Assumed Pavement Design  
Pavement Design to be  
provided by BDCIT

**LEGEND**

- 1 1/2" HMA Milling and Place  
105 #/Syd. Q/Q/MHMA 2, 64, Surface  
(Sta. 18+00.00 to Sta. 18+75.00 "A")  
(Sta. 21+00.00 to Sta. 21+25.00 "A")  
1/2" HMA Milling and Place  
105 #/Syd. Q/Q/MHMA 2, 64, Surface on  
Variable Q/Q/MHMA 2, 64, Base  
(Sta. 18+75.00 to Sta. 19+08.24 "A")  
(Sta. 20+36.74 to Sta. 21+00.00 "A")
- Mulchbed Seeding "R"
- Tack Coat
- 6 in. Compacted Aggregate No. 53 for Shoulder



**Safety Edge on HMA Pavement Detail**  
No Scale

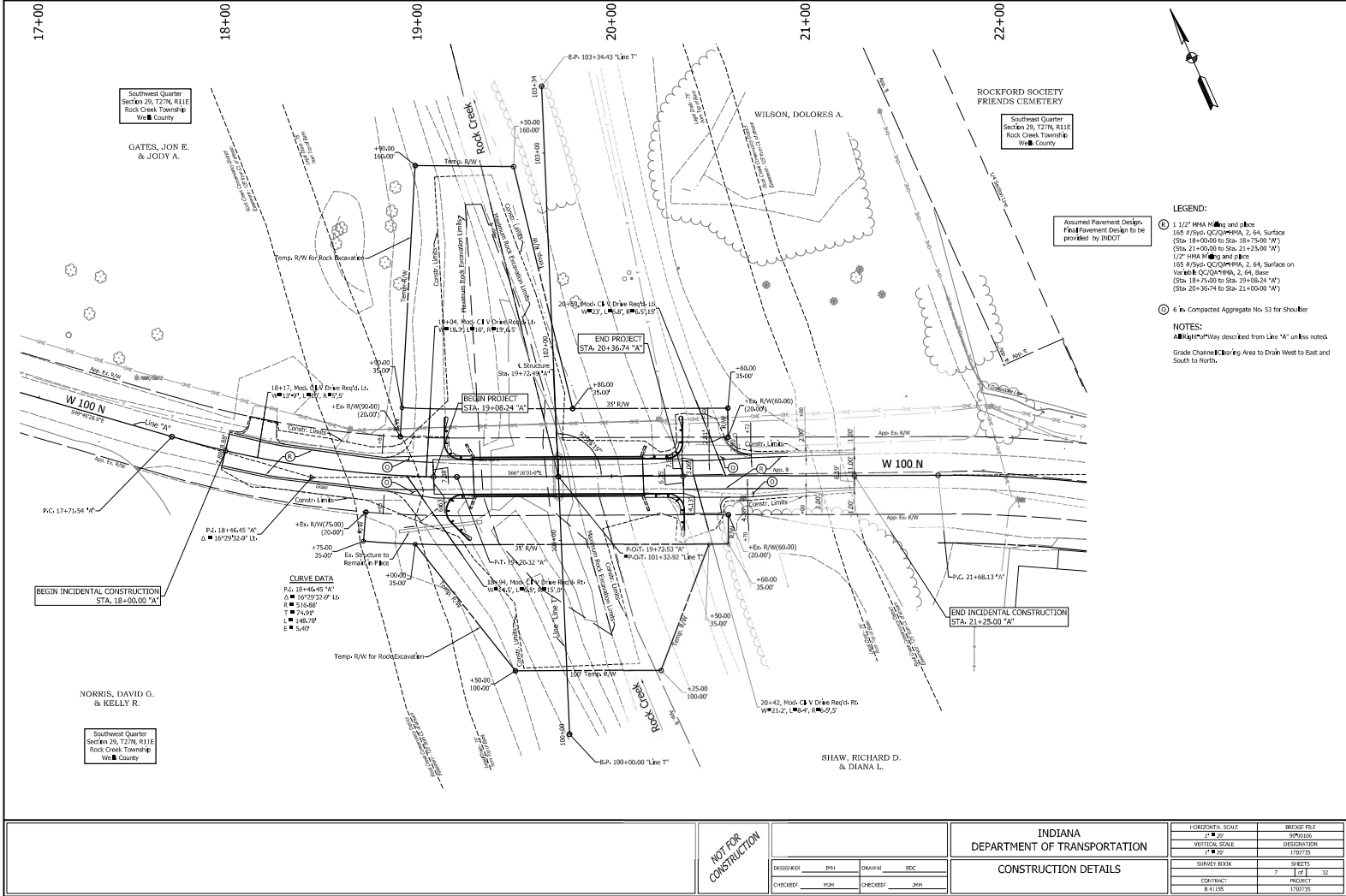
NOT FOR  
CONSTRUCTION

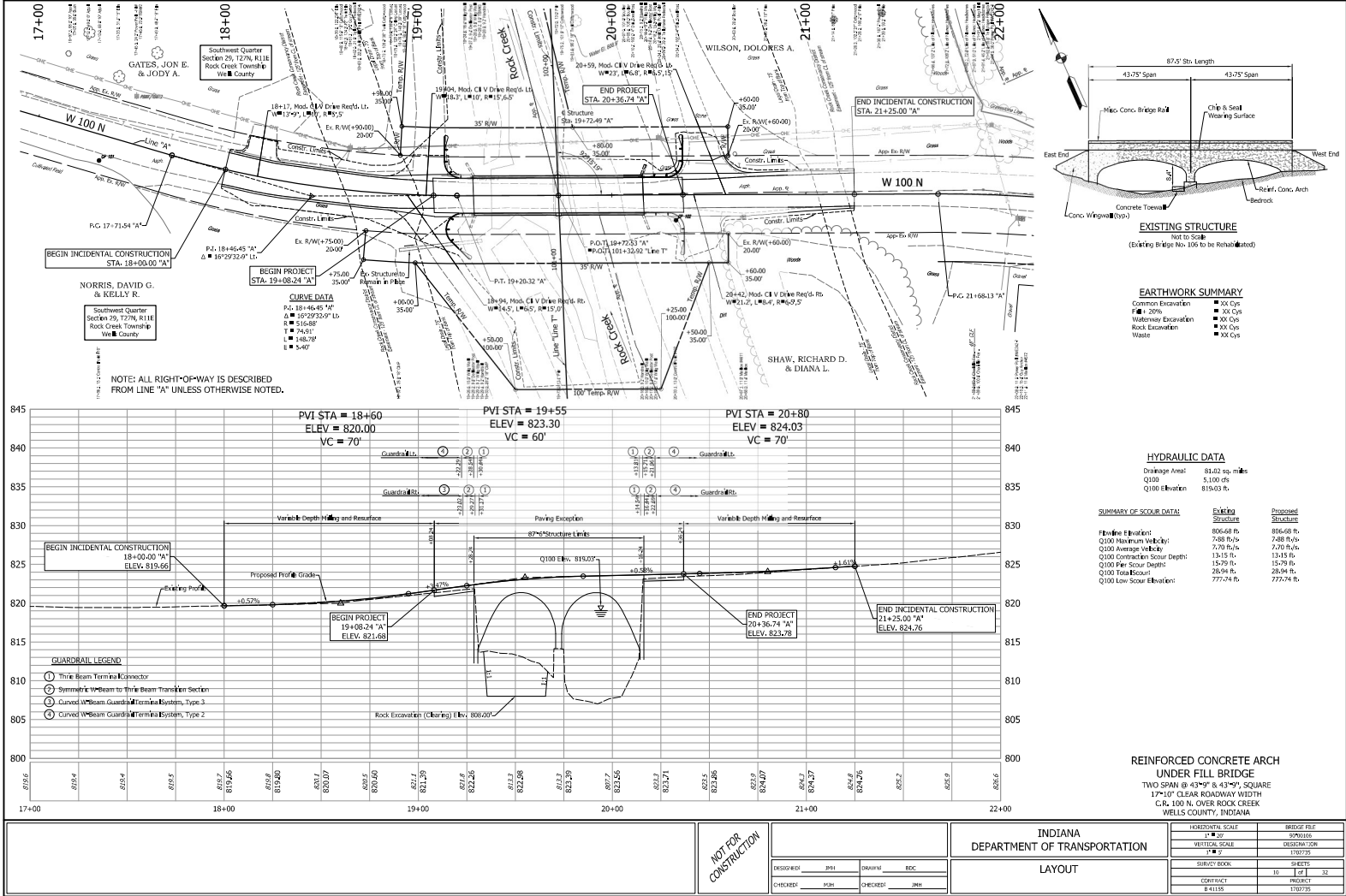
|          |     |         |     |
|----------|-----|---------|-----|
| DESIGNER | JML | DRAWN   | BDC |
| CHECKED  | MH  | CHECKED | JML |

INDIANA  
DEPARTMENT OF TRANSPORTATION  
TYPICAL CROSS SECTIONS

|                  |          |             |         |
|------------------|----------|-------------|---------|
| HORIZONTAL SCALE | AS NOTED | BRIDGE FILE | 1780735 |
| VERTICAL SCALE   | AS NOTED | CONTRACT    | 1780735 |
| SURVEY BOOK      | 3        | SHEETS      | 32      |
| CONTRACT         | 1780735  | PROJECT     | 1780735 |











(R) 1 1/2" HMA HMA and place  
 165 #/yd<sup>3</sup>, QC/QMA+H, 2, 64, Surface  
 (Sta: 18+00.00 to Sta: 18+75.00 "A")  
 (Sta: 21+00.00 to Sta: 21+25.00 "A")  
 1/2" HMA HMA and place  
 165 #/yd<sup>3</sup>, QC/QMA+H, 2, 64, Surface on  
 Variants QC/QMA+H, 2, 64, Base  
 (Sta: 18+75.00 to Sta: 19+08.24 "A")  
 (Sta: 20+36.74 to Sta: 21+00.00 "A")

(D) 6 in. Compacted Aggregate No. 53 for Shoulder

1 •Tribe Beam Terminal Connector, 1•Symmetric W-Beam to  
 1•Tribe Beam Transition Section, 1•Curved W-Beam to  
 Guardrail Terminal System, Type 3

1 •Tribe Beam Terminal Connector, 1•Symmetric W-Beam to  
 1•Tribe Beam Transition Section, 1•Curved W-Beam to  
 Guardrail Terminal System, Type 2

New Structure Built to a 50' Vertical Curve

8'x10' Out to Out Structure Limits  
86'x10' Out to Out Bridge Rail

4'

New Concrete Deck  
New Concrete Bridge Rail  
New Concrete Curb

Q100 Elev. 819.03'

New Spanned (typ.)  
to be Constructed (typ.)

xx s/s of Ex. Barrel  
to be Patched (Span "A")  
Portion of Ex. Barrel to be  
Replaced (Span "A" and "B")

3'x10' Berm

Rock/Channel Excavation

Clearing Elev. 808.00'

3'x10' Berm

xx s/s of Ex. Barrel  
to be Patched (Span "B")  
Construct New Bridge Abutment  
(Est. Quantity as shd.)

Ex. Bedrock

ABUTMENT NO. 1

SPAN "A"

PIER NO. 2

SPAN "B"

ABUTMENT NO. 2

Reinforcing steel covering shall be 2 1/2" in top and 1" min. bottom in floor slab and approach slabs and 2" in all other parts, unless noted.

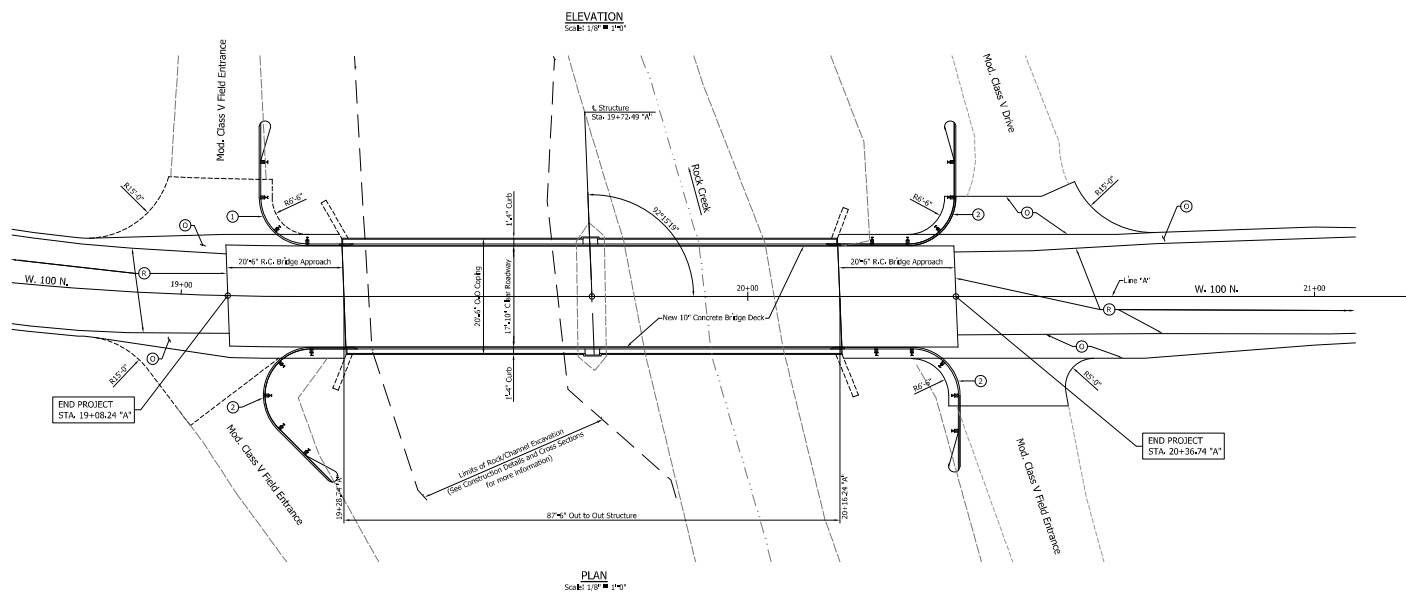
Surface Seal exposed surfaces of spandrel walls, face coping, bridge deck, all faces of concrete barrier railing curbs, and approach slabs.

Estimated Quantity = xxx sq. ft.

Dimensions are based off of field measurements and survey data. The contractor shall check all dimensions and conditions in the field and report any discrepancies to the Engineer and assume responsibility for the fit of the new part to the old.

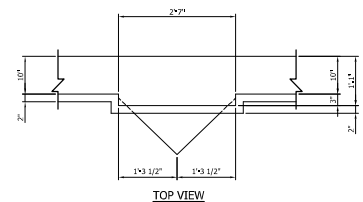
**DESIGN DATA:**

UNIT STRESSES:  
 Class "C" Concrete  $F_c = 4000 \text{ p.s.i.}$   
 Class "A" Concrete  $F_c = 3500 \text{ p.s.i.}$   
 Class "B" Concrete  $F_c = 3000 \text{ p.s.i.}$   
 Reinforcing Steel (Grade 60)  $F_y = 60,000 \text{ p.s.i.}$



REINFORCED CONCRETE ARCH  
UNDER FILL BRIDGE  
TWO SPAN @ 43'-9" & 43'-9", SQUARE  
17'-10" CLEAR ROADWAY WIDTH  
C.R. 100 N. OVER ROCK CREEK  
WELLS COUNTY, INDIANA

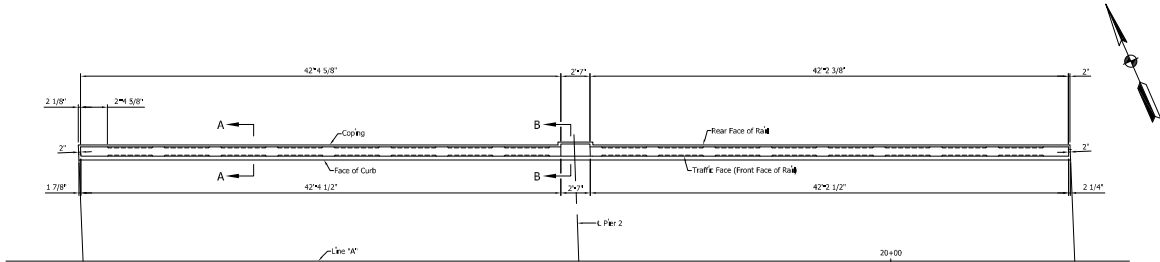
|                         |             |     |                                         |     |                                                                                                                         |  |
|-------------------------|-------------|-----|-----------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------|--|
| NOT FOR<br>CONSTRUCTION |             |     | INDIANA<br>DEPARTMENT OF TRANSPORTATION |     | HORIZONTAL SCALE      SHEETS FILE<br>1" = 100'      00000005<br>VERTICAL SCALE      OBSERVATION<br>1" = 10'      170775 |  |
|                         |             |     | GENERAL PLAN<br>PROPOSED                |     | SURVEY BOOK      SHEETS<br>13      14      15      16      17      18      19      20      21      22                   |  |
|                         | DESIGNED BY | JMH | DRAWN BY                                | BOC |                                                                                                                         |  |
|                         | CHECKED BY  | JMH | CHECKED BY                              | JMH |                                                                                                                         |  |
|                         |             |     |                                         |     | CONTRACT NO.      AGENCY<br>E 41115      170775                                                                         |  |



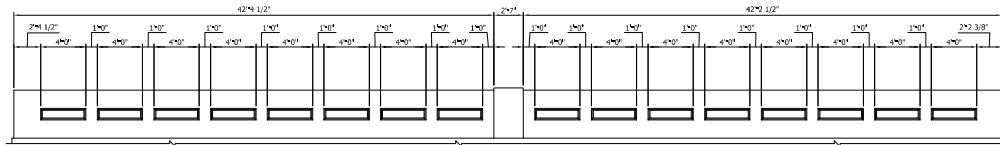
PROPOSED PILASTER DETAIL  
Scale: 1" = 1'-0"

REINFORCED CONCRETE ARCH  
UNDER FILL BRIDGE  
TWO SPAN @ 43'-9" & 43'-9", SQUARE  
17'-10" CLEAR ROADWAY WIDTH  
C.R. 100 N. OVER ROCK CREEK  
WELLS COUNTY, INDIANA

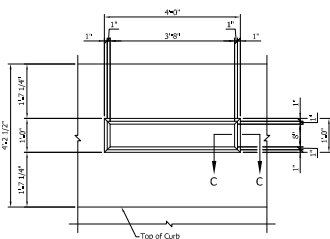
|                         |  |                |  |  |                                         |         |                  |             |
|-------------------------|--|----------------|--|--|-----------------------------------------|---------|------------------|-------------|
| NOT FOR<br>CONSTRUCTION |  |                |  |  | INDIANA<br>DEPARTMENT OF TRANSPORTATION |         | HORIZONTAL SCALE | BRIDGE FILE |
|                         |  |                |  |  |                                         |         | 1" = 10'         | 1" = 10'    |
|                         |  |                |  |  |                                         |         | VERTICAL SCALE   | DESIGNATION |
|                         |  |                |  |  |                                         |         | 1" = 10'         | 170719      |
|                         |  |                |  |  | GENERAL PLAN<br>PROPOSED                |         | SURVEY BOOK      | SHEETS      |
|                         |  |                |  |  |                                         |         |                  | 14      32  |
| DESIGNED BY JMF         |  | DRAWN BY BOC   |  |  |                                         | CONTACT | PROJECT          |             |
| CHECKED BY MGH          |  | CHECKED BY JMF |  |  |                                         | E-81125 | 81125            |             |



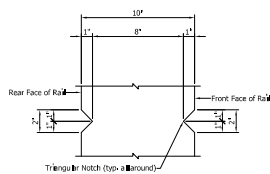
NORTH BRIDGE RAIL PLAN  
Scale: 1/4" = 1'-0"



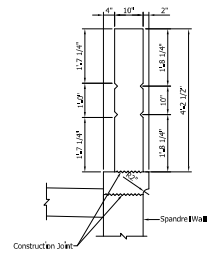
NORTH BRIDGE RAIL ELEVATION  
(FRONT FACE)  
Scale: 1/4" = 1'-0"



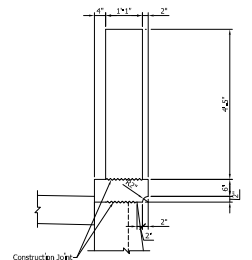
WINDOW DETAIL (TYPICAL)  
Scale: 3/4" = 1'-0"



SECTION C-C  
Scale: 3/4" = 1'-0"



SECTION A-A  
Scale: 3/4" = 1'-0"



SECTION B-B  
Scale: 3/4" = 1'-0"

NOTES:

1. All dimensions to be field verified.
2. All reinforcing to be Epoxy Coated.
3. For South Bridge Plan and Elevation see Sheet 16.

NOT FOR  
CONSTRUCTION

|          |     |         |     |
|----------|-----|---------|-----|
| DESIGNER | JHL | DRAWN   | BDC |
| CHECKED  | MKH | CHECKED | JHL |

INDIANA  
DEPARTMENT OF TRANSPORTATION

RAILING DETAILS

|                  |          |             |         |
|------------------|----------|-------------|---------|
| HORIZONTAL SCALE | AS NOTED | BRIDGE FILE | 1780735 |
| VERTICAL SCALE   | AS NOTED | PROJECT     | 1780735 |
| SURVEY BOOK      | 13       | SHEETS      | 12      |
| CONTRACT         | 41155    | PROJECT     | 1780735 |

