

### Martin County Emergency Management Agency Loogootee, Indiana Cameron L Wolf, Director

July 17, 2019

### To whom it may concern:

The infrastructure of our county is vital to the safety and productivity of our community. The roads, and more specifically bridges, play a major role in the day to day activities of our citizens. As the director of the Martin County Emergency Management Agency, my job is to work with the county commissioners to ensure that the people of our community are provided with emergency medical, rescue, and fire services as quickly and efficiently as possible. Martin County Bridge #58 is crucial in providing the above services and must be replaced to ensure timely response during an emergency. This structure has served the community well, but is in dire need of replacement. Temporary repairs of this bridge will only band aid the problems and continue the risk to citizens in the future.

Of particular interest to the county Emergency Management, we operate a Fire and Rescue unit, which while only half a mile from this bridge, cannot safely use the existing bridge for major equipment. As a result, responses in the area north of US 50 near this bridge requires a trip several miles out of our way and through the Loogootee city streets. This detour adds significant time to our responses.

Finally, the proximity of this one lane bridge to US 50 creates a concern for traffic occasionally backing up to very close to US 50 while waiting for oncoming traffic. An improved bridge and approaches would significantly decrease the potential for traffic accidents.

Thank you for your time and consideration in replacing Martin County Bridge #58.

Respectfully,

Cameron Wolf

MCEMA Chief

Director, Martin County Emergency Management Agency

July 16, 2019

To Whom It May Concern,

Hello, my name is Jameson Hibbs and I am the Daviess Martin Joint County Parks & Recreation Superintendent along with the President of the Martin County Tourism Board. The intent of this letter is to raise my concern over Bridge 58 located in Martin County of Boggs Creek along Brickyard Road. My department and specific area of interest is tourism in Martin County and above all the safety of those tourists as they wander throughout Martin County. The deteriorating infrastructure on Bridge 58 raises concern over the future safety of not only these visitors, but also the local residents that rely on this bridge for everyday life. It would be in the best interest for a replacement of this bridge so that we may best serve our guests and keep the Martin County residents safe.

Thank you for your time.

Regards,

Jameson Hibbs, CPRP

Daviess Martin Joint County Parks & Recreation Supt.



2664 U.S.Hwy 50 Loogootee, IN 47553 812.295.4800

July 18, 2019

Martin County Commissioners, Martin County Highway Dept., and To Whom It May Concern

I am writing to express the full support for the total replacement of Bridge 58 on Brickyard Road over Boggs Creek that will ultimately provide a safe, cost effective, and reliable bridge structure for our residents, farmers, businesses, and visitors.

It was brought to our attention that Bridge 58 is in critical, and dire, need for replacement. Brickyard Road is often utilized by area residents for daily travel to their various life activities, but also a critical roadway during flooding events. We want our residents to have safe passage on our roadways to and from their daily destinations, and a total replacement of Bridge 58 will accomplish that goal.

Our farmers and businesses also utilize, and heavily rely upon, Brickyard Road for access to their respective properties for various agricultural functions throughout the year as well as for commerce purposes. It is absolutely critical for our farmers and businesses to be able to safely and efficiently reach their markets without additional expenses or safety hazards. These farmers and businesses are critical to our local and regional economy. Given the hardship that farmers are already facing this year, we want to ensure that we do our part in making sure they have access to their farmland during peak season without any undue obstacles. A total Bridge 58 replacement would be extremely beneficial to our farmers and businesses as well as their suppliers.

Another aspect in favor of a Bridge 58 total replacement is for our visitors and tourism purposes. I have personally seen many photos from visitors who travel Brickyard Road in which they will post a photo on social media. Martin County is a scenic and beautiful place that many people visit and Brickyard Road is a roadway that many visitors will travel while exploring Martin County. We want to make sure our visitors have safe roadways to travel on while they are visiting, so I support a total bridge replacement for this reason as well.

Hopefully, I have conveyed the critical importance of a total replacement for Bridge 58 from the various aspects of that I have aforementioned. If you have any questions, please do not hesitate to contact me.

Very Respectfully,

Tim Kinder Executive Director Martin County Alliance





Division of Historic Preservation & Archaeology · 402 W. Washington Street, W274 · Indianapolis, IN 46204-2739 Phone 317-232-1646 · Fax 317-232-0693 · dhpa@dnr.IN.gov · www.IN.gov/dnr/historic



April 1, 2021

Candy Hudziak Metric Environmental, LLC 6971 Hillsdale Court Indianapolis, Indiana 46250

> Federal Agency: Indiana Department of Transportation ("INDOT"), on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Historic Bridge Alternatives Analysis for the Martin County Bridge No. 58 carrying Brickyard Road over Boggs Creek, Perry Township, Martin County, Indiana (Des. No. 1902785; DHPA No. 26743)

### Dear Ms. Hudziak:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), implementing regulations at 36 C.F.R. Part 800, the "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges" ("Indiana Historic Bridges PA"), and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has reviewed your March 11, 2021 submission, which enclosed the historic bridge alternatives analysis ("HBAA") received by our office the same day for this project.

Per the terms of the Indiana Historic Bridges PA, FHWA will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process. Martin County Bridge No. 58 is a "Non-Select" bridge previously determined eligible for inclusion in the National Register of Historic Places, so the procedures outlined in Stipulation III.B of the Indiana Historic Bridges PA will be followed.

Given the results of the calculations made for the alternatives and the standards required pursuant to the Indiana Design Manual, we can agree that Alternative E: Relocation of Historic Bridge & Build New Structure and Alternative F: Demolition of Existing Bridge & Building New Structure are both feasible and prudent, meeting the project's purpose and need. We note that Alternative E is only feasible and prudent if a responsible party steps forward to claim ownership of the bridge. If no responsible party steps forward, then Alternative F will become the sole preferred alternative.

Pursuant to the Indiana Historic Bridges PA, We request that this bridge be documented according to the "Indiana DNR – Division of Historic Preservation and Archaeology Minimum Architectural Documentation Standards." We have enclosed a copy of those state standards for your reference. Specifically, we request digital, color photographs, a photo log that corresponds to the photographs, a photo key, and an overview thumbnail sheet. Any additional drawings or historic bridge

Candy Hudziak April 1, 2021 Page 2

plans will be accepted. Please ensure that the photographs provide overviews of the resource from all directions, as well as any character-defining features, including the stone arch approach spans. Please submit a draft copy of this documentation on CD, thumb drive, or other previously approved storage device for our review and approval. Upon approval, this documentation should be provided to a public or not-for-profit organization that is willing to accept a copy of this documentation and make it available to the public. Please inform us which local or not-for-profit organization is willing to accept this documentation.

We look forward to reviewing the proposed area of potential effects and the reports on investigations of above-ground cultural resources and archaeological resources that INDOT's March 11 letter indicated will be forthcoming.

The Indiana SHPO staff's archaeological reviewer for this project is Beth McCord, and the structures reviewer is Danielle Kauffmann. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

In all future correspondence about the Martin County Bridge No. 58 carrying Brickyard Road over Boggs Creek in Perry Township, Martin County (Des. No. 1902785), please refer to DHPA No. 26743.

Very truly yours,

Beth K. McCord

Deputy State Historic Preservation Officer

BKM:DMK:dmk

Enclosure: Minimum Architectural Documentation Standards

W Shin

emc: Kari Carmany-George, FHWA Anuradha Kumar, INDOT Shaun Miller, INDOT Susan Branigin, INDOT Mary Kennedy, INDOT

Candy Hudziak, Metric Environmental, LLC

Nathan Holth, Historicbridges.org Miami Tribe of Oklahoma Beth McCord, DNR-DHPA Danielle Kauffmann, DNR-DHPA

### APPENDIX E: Red Flag and Hazardous Materials



Date: March 17, 2022

To: Site Assessment & Management (SAM)

Environmental Policy Office - Environmental Services Division (ESD)

Indiana Department of Transportation (INDOT)

100 N Senate Avenue, Room N758-ES

Indianapolis, IN 46204

From: Colin Keith

Metric Environmental, LLC 6958 Hillsdale Court Indianapolis, IN 46250 colink@metricenv.com

Re: RED FLAG INVESTIGATION

DES #1902785, Local Project Bridge Replacement Project

Brickyard Road over Boggs Creek, 0.04 Mile North of US 50

Martin County, Indiana

### **PROJECT DESCRIPTION**

Brief Description of Project: The proposed project will include full replacement of the existing bridge crossing over Boggs Creek (Bridge No. 51-00058), located along Brickyard Road/SR 13, approximately 0.04 mile north of US 50. The existing bridge is a three-span structure on stone abutments and stone piers, consisting of stone arch approach spans and a steel deck truss in the middle span. The bridge was constructed in 1848 and reconstructed after a severe flood in 1913 destroyed most of the bridge, with additional rehabilitation work performed in 1996 and 2018. The bridge is 150.4 feet long with a roadway width of 11.7 feet. The structure is eligible for the National Register of Historic Places, but it is classified as a "Non-Select" bridge in the 2010 *Indiana Historic Bridge Inventory*. The preferred alternative is a full replacement of the bridge. The project would extend along Brickyard Road for approximately 200 feet south and 750 feet north beyond the respective ends of the existing structure to accommodate approach work. The design of the replacement bridge has not been finalized but is anticipated to be a similar-length, wider structure that would meet current design and safety standards.

similar length, wider structure that would meet carrent design and surety standards.
Bridge and/or Culvert Project: Yes ⊠ No □ Structure # _51-00058
If this is a bridge project, is the bridge Historical? Yes $oxtimes$ No $oxdot$ , Select $oxdot$ Non-Select $oxdot$
(Note: If the project involves a historical bridge, please include the bridge information in the
Recommendations Section of the report).
Proposed right of way: Temporary $\boxtimes$ #Acres $\leq$ 0.5 Permanent $\boxtimes$ #Acres $\leq$ 0.5 Not Applicable $\square$
Type and proposed depth of excavation: Maximum depth of 15 feet below grade for removal of existing
abutments and piers and installation of new substructure elements.
Maintenance of traffic: MOT development is underway. Anticipated to be a full closure of the road at
the bridge with a detour that will use county-maintained roads.
Work in waterway: Yes $oxtimes$ No $oxtimes$ Below ordinary high water mark: Yes $oxtimes$ No $oxtimes$
State Project: ☐ LPA: ⊠

### **INFRASTRUCTURE TABLE AND SUMMARY**

### Infrastructure

Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

Religious Facilities	N/A	Recreational Facilities	N/A
Airports <sup>1</sup>	N/A	Pipelines	1
Cemeteries	N/A	Railroads	1
Hospitals	N/A	Trails	N/A
Schools	N/A	Managed Lands	N/A

<sup>&</sup>lt;sup>1</sup>In order to complete the required airport review, a review of public-use airports within 3.8 miles (20,000 feet) was conducted.

### Explanation:

<u>Pipelines</u>: One (1) pipeline segment is located within the 0.5 mile search radius. The pipeline, owned by Marathon Pipe Line Co., crosses the project area northwest of the bridge. Coordination with Marathon Pipe Line Co. will occur.

<u>Railroads</u>: One (1) railroad segment is located within the 0.5 mile search radius. CSX Railroad is approximately 0.12 mile southwest of the project area. No impact is expected.

### WATER RESOURCES TABLE AND SUMMARY

### Water Resources

Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

NWI Points	5	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI Wetlands	44
Canal Structures – Historic	N/A	Lakes	6
NPS NRI Listed	N/A	Floodplain - DFIRM	2
NWI Lines	42*	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	5	Sinkhole Areas	N/A
Rivers and Streams	8	Sinking-Stream Basins	N/A

### Explanation:

<u>NWI Points</u>: Five (5) NWI points are located within the 0.5 mile search radius. The nearest is approximately 0.03 mile west of the project area. No impact is expected.

<u>NWI Lines</u>: Forty-two (42) NWI line segments are located within the 0.5 mile search radius. Two (2), associated with Boggs Creek, flow through the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

<u>IDEM 303d Listed Streams and Lakes (Impaired)</u>: Five (5) 303d Listed Rivers and Streams are located within the 0.5 mile search radius. Boggs Creek is within the project area. Boggs Creek is listed as

impaired for *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

Rivers and Streams: Eight (8) stream line segments are located within the 0.5 mile search radius. One (1), associated with Boggs Creek, flows through the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

<u>NWI Wetlands</u>: Forty-four (44) NWI wetlands are located within the 0.5 mile search radius. Four (4) are within the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

<u>Lakes</u>: Six (6) lakes are located within the 0.5 mile search radius. The nearest is approximately 0.08 mile northeast of the project area. No impact is expected.

<u>Floodplains</u>: Two (2) floodplain polygons are located within the 0.5 mile search radius. The project area is located within one of the floodplain polygons. Coordination with the appropriate agency will occur.

### MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration							
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items,							
please indicate N/A:							
Petroleum Wells	Petroleum Wells 8 Mineral Resources N/A						
Mines – Surface N/A Mines – Underground N/A							

### Explanation:

<u>Petroleum Wells</u>: Eight (8) petroleum wells are located within the 0.5 mile search radius. Two (2) wells are adjacent to the project area. Coordination with IDNR Oil and Gas Division will occur.

### **HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY**

Hazardous Material Concerns Indicate the number of items of conceplease indicate N/A:	cern found with	in the 0.5 mile search radius. If there	e are no items,
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	N/A	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	N/A

Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	N/A	Notice of Contamination Sites	N/A

### Explanation:

There are no hazardous material concern sites located within the 0.5 mile search radius.

### **ECOLOGICAL INFORMATION SUMMARY**

The Martin County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high-quality natural communities is provided at <a href="https://www.in.gov/dnr/naturepreserve/files/np">https://www.in.gov/dnr/naturepreserve/files/np</a> martin.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did not indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project is located in a rural area surrounded by woods and farm fields. The November 17, 2021 inspection report for Bridge #51-00058 states that no evidence of bats was seen or heard under the bridge. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

### **RECOMMENDATIONS SECTION**

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

CULTURAL RESOURCES: Bridge #51-00058 was evaluated as Eligible for Listing in the National Register under Criterion C and designated a Non-Select bridge. Coordination with INDOT Cultural Resources will occur.

### **INFRASTRUCTURE:**

<u>Pipelines</u>: One (1) pipeline segment, owned by Marathon Pipe Line Co., crosses the project area. Coordination with Marathon Pipe Line Co. will occur.

### WATER RESOURCES:

A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur for the following features:

- Boggs Creek (and its associated NWI and stream lines) flows through the project area.
- Four (4) wetlands are within the project area.
- The project area is located within a floodplain (coordination with the appropriate agency only).

<u>IDEM 303d Listed Streams and Lakes (Impaired)</u>: Boggs Creek is listed as impaired for *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.

### MINING/MINERAL EXPLORATION:

<u>Petroleum Wells</u>: Two (2) petroleum wells are adjacent to the project area. Coordination with IDNR Oil and Gas Division will occur.

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation INDOT Projects".

Nicole Fohey Digitally signed by Nicole Fohey-Breting

Breting Date: 2022.03.17
14:53:19 -04'00'

INDOT ESD concurrence:

Prepared by: Colin Keith Project Scientist Metric Environmental, LLC

### **Graphics**:

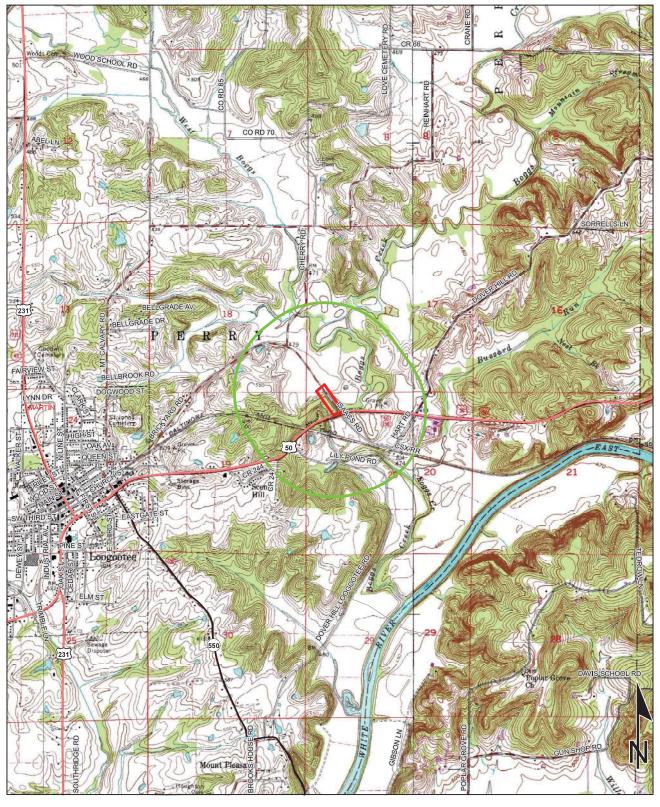
A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: YES INFRASTRUCTURE: YES WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES HAZARDOUS MATERIAL CONCERNS: N/A

(Signature)

### Red Flag Investigation - Site Location Brickyard Road over Boggs Creek, 0.04 Mile North of US 50 Des. No. 1902785, Bridge Project Martin County, Indiana



0.5 ■ Miles 0.5 0.25 Non Orthophotography

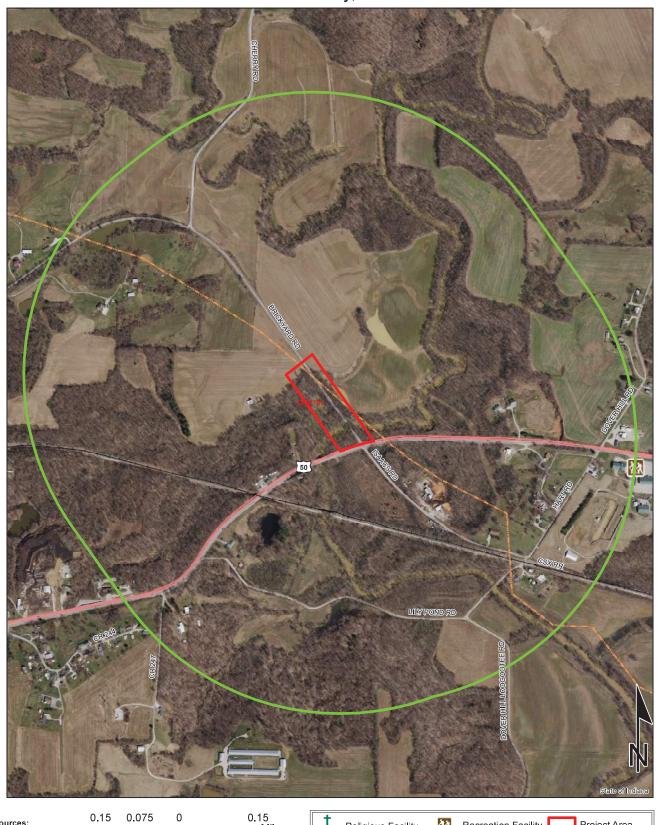
Data - Obtained from the State of Indiana Geographical
Information Office Library Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

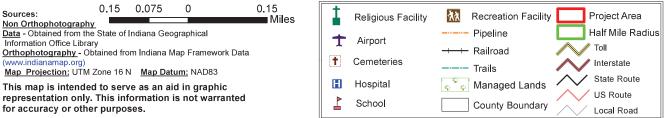
Map Projection: UTM Zone 16 N Map Datum: NAD83

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

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

## Red Flag Investigation - Infrastructure Brickyard Road over Boggs Creek, 0.04 Mile North of US 50 Des. No. 1902785, Bridge Project Martin County, Indiana

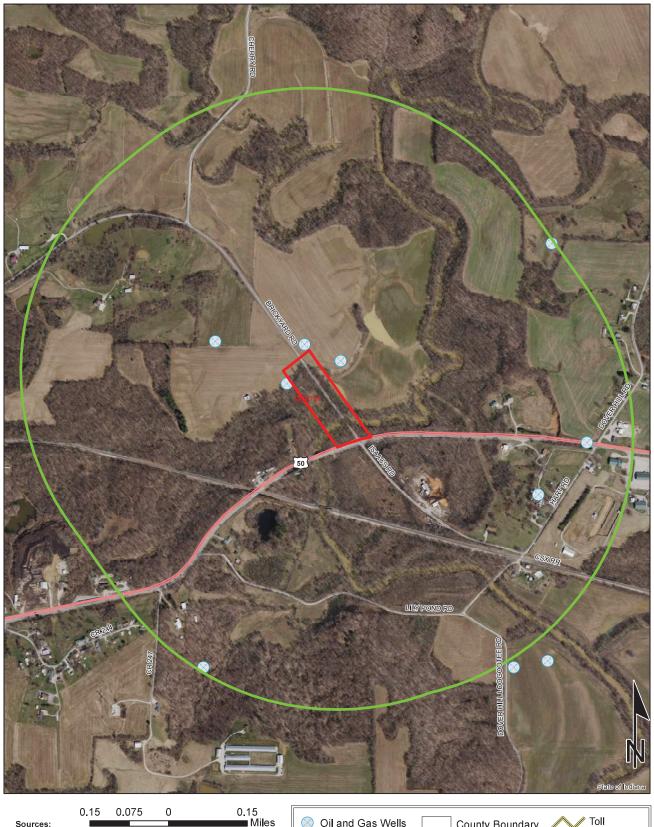




# Red Flag Investigation - Water Resources Brickyard Road over Boggs Creek, 0.04 Mile North of US 50 Des. No. 1902785, Bridge Project Martin County, Indiana



### Red Flag Investigation - Mining and Mineral Exploration Brickyard Road over Boggs Creek, 0.04 Mile North of US 50 Des. No. 1902785, Bridge Project Martin County, Indiana



Oil and Gas Wells County Boundary Non Orthophotography

<u>Data</u> - Obtained from the State of Indiana Geographical Information Office Library Interstate Mineral Resources Project Area State Route <u>Orthophotography</u> - Obtained from Indiana Map Framework Data Half Mile Radius Mine - Surface (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83 **US Route** Mine -Local Road This map is intended to serve as an aid in graphic Underground representation only. This information is not warranted for accuracy or other purposes.

### **APPENDIX F:** Water Resources

### **WATERS DETERMINATION REPORT**

# BRICKYARD ROAD OVER BOGGS CREEK BRIDGE REPLACEMENT DES. NO. 1902785 PERRY TOWNSHIP, MARTIN COUNTY, INDIANA

**Prepared for:** 

**HWC Engineering** 

February 2, 2021



Prepared by:

**Metric Environmental, LLC** 

**Complex Environment. Creative Solutions.** 

6971 Hillsdale Court Indianapolis, IN 46256 Telephone: 317.207.4286 www.metricenv.com

### WATERS OF THE U.S. DETERMINATION REPORT

### Brickyard Road over Boggs Creek Bridge Replacement

Perry Township, Martin County, Indiana Des. No. 1902785

Prepared By: Zachary Root, Metric Environmental, LLC February 2, 2021

Date of Waters Field Investigation: September 15<sup>th</sup>, 2020

### Location:

Section 20; Township 3 North; Range 4 West

Loogootee, IN 7.5 minute USGS Topographic Quadrangles (Exhibit 2)

Perry Township, Martin County, Indiana

12-Digit HUC Watershed: 051202081103, Seed Tick Creek-Boggs Creek

Latitude: 38.6855812 Longitude: -86.8843752 (Exhibit 1)

### Soils:

According to the Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Martin County, Indiana, the project study limits (PSL) contained five mapped soil units, listed in Table 1 below. The NRCS soil survey map is provided as **Exhibit 3**.

**Table 1: NRCS Soil Summary Table** 

Map Unit Symbol	Man Unit Name					
HcgAH	Haymond silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Not Hydric (0)				
MdvC3Q	Markland silty clay loam, 6 to 15 percent slopes, severely eroded, rarely flooded	Not Hydric (0)				
MikAQ	McGary silt loam, 0 to 2 percent slopes, rarely flooded	Hydric (3)				
NprAH	Nolin silt loam, 0 to 2 percent slopes, frequently flooded	Hydric (3)				
WaaAH	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Hydric (10)				

### FEMA Flood Insurance Rate Map (FIRM):

One mapped floodplain is located within the PSL. This floodplain was identified as Zone A, an area subject to inundation by the 1 percent annual chance of flood. This floodplain was associated with Boggs Creek. An Indiana DNR Approximate Floodway was also present within the

Brickyard Road over Boggs Creek Bridge Replacement Des. No. 1902785 Perry Township, Martin County, Indiana

Metric Project No. 20-0077

METRIC

PSL. This floodway was also associated with Boggs Creek. The FIRM and Indiana DNR Floodway map for this area is provided as **Exhibit 4**.

### National Wetlands Inventory (NWI) Information:

Six mapped NWI polygons are located within the PSL, listed in the table below. Several NWI wetlands (Three PFO1As, PFO1C, and R2UBH) extend beyond the PSL. The NWI map is provided as **Exhibit 4**.

**Table 2: NWI Summary Table** 

Symbol	Wetland Type	Location Within PSL	Corresponding Feature
PFO1A	Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded	Northwest and Central	Wetland A and Wetland B
PFO1C	Palustrine, Forested, Broad-Leaved Deciduous, Seasonally	Central	Wetland A and Wetland B
R2UBH	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	South	Boggs Creek
PFO1A	Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded	Southwest	None
R5UBH	Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded	South Central	Boggs Creek
PFO1A	Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded	Southeast	None

### **USGS National Hydrography Dataset (NHD) Information:**

One mapped NHD flowline is located within the PSL, listed in the PSL in the table below. The NHD map is provided in **Exhibit 4**.

**Table 3: USGS NHD Summary Table** 

Corresponding Feature	NHD Flowline Classification	Photo Nos.	USGS Blue-line	
Boggs Creek	Artificial Path	29-37, 50-54	Yes	

### **Karst Feature Information:**

No mapped karst features are located within the PSL. However, four mapped karst features, specifically sinkholes, are located within 0.5 mile of the PSL. The Karst Sinkhole map is provided in **Exhibit 5**.

### **Attached Documents:**

Maps of the project area (Exhibits 1-7)
Photo Location Map (Exhibit 8)
Site Photographs



Wetland Determination Data Form(s)
Preliminary Jurisdictional Determination Form

### **Project Description:**

The proposed project (Des. 1902785) includes the rehabilitation or removal and replacement of the existing bridge, (Martin County Bridge No. 58), which carries Brickyard Road (Queen Street) over Boggs Creek in Perry Township, Martin County, Indiana. Martin County Bridge No. 58 is a three-span structure consisting of stone arch approach spans and a steel Warren deck truss. In 1996 a new open grid metal deck and railings were installed, and abutment repairs were made. In 2018 the stone masonry arches were patched with a thin layer of concrete. The bridge length is 150.4 ft. long with a roadway width of 11.7 ft. The bridge is supported on stone abutments and stone piers. The purpose of the project is to provide a crossing with railings that meets current load bearing and safety standards over Boggs Creek. Riprap will likely be placed around the abutments and/or piers of the structure for scour protection.

### Field Reconnaissance:

The wetland determination field visit was conducted on September 15, 2020 by Zachary Root and Jason Damm of Metric Environmental, LLC. The PSL consists of the area that has the potential to be impacted, based on the provided design scenario. This area was evaluated for the presence of wetlands and Waters of the United States. This investigation was conducted in accordance with the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the April 2012 Eastern Mountains and Piedmont Region (version 2.0) Manual.

A Location Map showing the project location is provided as **Exhibit 1**. The proposed project is located in the west central portion of Martin County, Indiana, on Brickyard Road (Queen Street). The PSL extends along Brickyard Rd. for approximately 1,320 ft. and approximately 165 ft. northeast and southwest from Brickyard Road centerline. An aerial map of sampling points and water features is provided as **Exhibit 7**. A photo location map is provided as **Exhibit 8** and site photographs are attached.

The site was investigated for evidence of hydrophytic vegetation, hydric soil, and wetland hydrology to determine if the project impacts wetlands and other Waters of U.S. The sampling point (SP) locations were chosen in possible wetland areas within the PSL. Upland areas where sampling points were not taken, were investigated and determined to be upland due to upward sloping topography and/or presence of dominant upland vegetation. Dominant upland species observed within these upland areas included common hackberry (*Celtis occidentalis, FACU*), pignut hickory (*Carya glabra*, FACU), and Indian wood-oats (*Chasmanthium latifolium, FACU*). One erosional feature, with no bed and bank characteristics or continuous OHWM, was observed within the PSL. The erosional feature was surrounded by upland rowcrop and forest in the northwestern portion of the PSL. The upland areas consisted of rowcrop and upland forest. Seven



sampling points were taken and are identified as SP-A1, SP-A2 and B2, SP-B1, SP-C1, SP-C2, SP-1 and SP-2. The sampling points, recorded on the USACE Wetland Determination Data Forms and shown on **Exhibit 6**, provided the following information shown in Table 4:

**Table 4: Sampling Plot Data Summary Table** 

	rable 4. Sampling Flot Bata Samilary Table							
Plot #	Photo #s	Lat/Long	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within Wetland		
SP-A1	13-15	38.686062 -86.885232	Yes	Yes	Yes	Yes, Wetland A		
SP-A2 and B2	67-69	38.686013 -86.88475	Yes	No	No	No		
SP-B1	19-21	38.685747 -86.884802	Yes	Yes	Yes	Yes, Wetland B		
SP-C1	59-61	38.685714 -86.883908	Yes	Yes	Yes	Yes, Wetland C		
SP-C2	62-64	38.685966 -86.884017	No	No	No	No		
SP-1	38-40	38.684608 -86.883637	Yes	No	No	No		
SP-2	47-49	38.684865 -86.883077	Yes	No	No	No		

### **Streams:**

One stream, Unnamed Tributary (UNT) 1, was observed within the PSL during the field reconnaissance. A description of the stream is provided in Table 5 below.

**Table 5: Stream Summary Table** 

Stream Name	Photos	Lat/Long	OHWM Width	OHWM Depth	USGS Blue- line	Functional Riffles Pools	Quality	Likely Water of the	Dominant Substrate	Potential Stream Impact
			ft.	ft.				U.S.		ft.
Boggs Creek	29-37, 50-54	38.684958, -86.883776	68	6	Yes (Perennial)	Riffles & Pools	Average	Yes	Cobble, Gravel	375

### Boggs Creek (375 LFT)

Boggs Creek flows from northeast to southwest and is approximately 375 linear feet (LFT) (0.585 ac.) long within the PSL. Boggs Creek flows south into the East Fork White River, which flows into the White River, a Section 10 TNW. Boggs Creek is associated with a solid blue line on the USGS topographic map, indicating it is likely perennial. Boggs Creek was associated with a mapped Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded (R2UBH) and a

Brickyard Road over Boggs Creek Bridge Replacement Des. No. 1902785 Perry Township, Martin County, Indiana Metric Project No. 20-0077



Page **5** of **11** 

Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded (R5UBH) NWI polygon. Since Boggs Creek is a perennial stream, exhibiting connection to a TNW, it should be considered a jurisdictional Water of the U.S. The ordinary high water mark (OHWM) was 68 ft. wide and 6 ft. deep within the PSL. Measurements of the OHWM were taken outside the influence of the structure. The dominant stream substrate was cobble and gravel. Functional riffles and pools were observed within the stream. Moderate to extensive amounts of instream cover was observed, which included overhanging vegetation, woody debris, and undercut banks. Moderate sinuosity and moderate current velocity were observed. Streambanks exhibited little erosion and the floodplain area was composed of deciduous forest on both sides of the stream. Fish and macroinvertebrates were observed within the stream during the field reconnaissance. Vegetation observed along the streambanks included common button bush (*Cephalanthus occidentalis*, OBL), American elm (*Ulmus americana*, FACW), and Virginia wild rye (*Elymus virginicus*, FACW). According to USGS *Indiana StreamStats*, the drainage area upstream of Boggs Creek at the PSL is 85.997 square miles. Qualities of the stream listed above contribute to Boggs Creek being classified as average quality.

### Wetlands:

Three wetlands were observed within the PSL. Descriptions of the wetland and corresponding sampling points are provided in Table 6 below.

**Table 6: Wetland Summary Table** 

1								
Wetland Name	Photo #s	Lat/Long	Cowardin Class	Total Area	Quality	Likely Water of		
Ivaille			Class	ac.		the U.S.?		
Wetland A	13-17, 22	38.68595 <i>,</i> -86.885124	PFO1A	0.596	Average	Yes		
Wetland B	17-21, 23- 26, 29, 35	38.685365 <i>,</i> -86.88457	PSS1A	1.204	Average	Yes		
Wetland C	57-61, 64- 66, 72	38.686039, -86.884213	PFO1A	0.384	Average	Yes		

### Wetland A (0.596 ac.) - PFO1A

Wetland A was classified as a PFO1A wetland. This wetland is located within the floodplain of Boggs Creek. Approximately 0.596 ac. of Wetland A was contained within the PSL and the wetland continued west beyond the PSL. The northwestern and northeastern boundaries of Wetland A were delineated by lack of wetland vegetation and increased elevation, and the southeastern boundary was delineated due to the transition from forested to scrub/shrub (see photo 17). Due to its location within the floodplain of Boggs Creek, Wetland A likely receives flood waters and drainage on a consistent basis during rain events. Based on topography, it can be deduced that water drains south into Wetland B, which flows into Boggs Creek, a jurisdictional Water of the U.S. Therefore, Wetland A should be considered a jurisdictional Water of the U.S.



The wetland was associated with a PFO1A NWI polygon and was formed within the HcgAH mapped soil unit, which is listed as 0 percent hydric. The wetland is located adjacent to Brickyard Road, row crop, and forest, and likely receives run-off from the adjacent paved roads and agricultural fields. However, the wetland exhibited good plant species diversity and was forested. These factors contribute to the conclusion the wetland can support an average amount of wildlife or aquatic habitat, and therefore should be considered of average quality.

### Sampling Point A1 (SP-A1) – Wetland A

SP-A1 was located within the floodplain of Boggs Creek, east of Brickyard Road. The dominant vegetation at this sampling point was silver maple (*Acer saccharinum*, FACW) and red maple (*Acer rubrum*, FAC) in the tree stratum, trumpet-creeper (*Campsis radicans*, FAC) and green ash (*Fraxinus pennsylvanica*, FACW) in the sapling/shrub stratum, and lamp rush (*Juncus effusus*, OBL) and trumpet-creeper (*Campsis radicans*, FAC) in the herb stratum. This passed the hydrophytic vegetation indicators of dominance test (100 percent) and prevalence index (2.48). To a depth of 20 inches (in.), the soils in the test pit were silty clay loam. From 0 to 6 in., the soil in the test pit exhibited a matrix color of 10YR 4/1 (75 percent) with 5YR 3/3 (25 percent) prominent redox concentrations in the matrix and pore linings. From 6 to 20 in., the soil exhibited mixed matrix colors of 10YR 4/2 (50 percent) and 10YR 5/6 (50 percent). This met the hydric soil indicator of depleted matrix (F3). Indicators of wetland hydrology observed included water marks (B1), oxidized rhizospheres on living roots (C3), crayfish burrows (C8), geomorphic position (D2), and FAC-neutral test (D5). Since all three required wetland criteria were met, this area qualified as a wetland.

### Sampling Point A2 and B2 (SP-A2 and SP-B2) – Wetland A and B upland

SP-A2 and B2 was located on a hillslope east of Wetland A and Wetland B. The dominant vegetation at this sampling point was black walnut (*Juglans nigra*, FACU) in the tree stratum; stinging nettle (*Urtica dioica*, FACU), pale touch-me-not (*Impatiens pallida*, FACW), and lesser clearweed (*Pilea fontana*, FACW) in the herb stratum; and eastern poison ivy (*Toxicondendron radicans*, FAC) in the woody vine stratum. This met the hydrophytic vegetation indicator of dominance test (60 percent). The soil in the test pit was a silt loam to a depth of 20 in. From 0 to 20 in., the soil exhibited mixed matrix colors of 10YR 6/4 (50 percent) and 10YR 4/1 (50 percent). This did not meet any hydric soil indicators. No indicators of wetland hydrology were observed. Since two of the three required wetland criteria were met, this area did not qualify as a wetland.

### Wetland B (1.204 ac.) - PSS1C

This wetland is located within the floodplain of Boggs Creek, east of Brickyard Road. This wetland did contain unknown species of snags, but due to the dominant vegetation being a native, scrubshrub species of buttonbush (*Cephalanthus occidentalis*, OBL), Wetland B was classified as a



Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded (PSS1C) wetland. Approximately 1.204 ac. of Wetland B was contained within the PSL, and the wetland continued southwest beyond the PSL. Northwest of the the wetland transitioned to Wetland A where trees dominated (see photos 17 and 25). The northeastern boundary of Wetland B was delineated by lack of wetland vegetation and increased elevation, and the southeastern boundary abutted the OHWM of Boggs Creek. Due to its location within a floodplain, Wetland B likely receives flood waters and drainage on a consistent basis during rain events. Based on topography, it can be deduced that water drains south into Boggs Creek, a jurisdictional Water of the U.S. Therefore, Wetland B should be considered a jurisdictional Water of the U.S. The wetland was associated with PFO1A and PFO1C NWI polygons and was formed within the HcgAH mapped soil unit, which is listed as 0 percent hydric. The wetland is located adjacent to Brickyard Road and forested wetland, and likely receives run-off from the adjacent paved roads. These factors contribute to the conclusion that Wetland B can support a moderate amount of wildlife or aquatic habitat, and therefore should be considered to be of average quality.

### Sampling Point B1 (SP-B1) – Wetland B

SP-B1 was located southeast of SP-A1, west of Brickyard Road. The dominant vegetation at this sampling point was silver maple (*Acer saccharinum*, FACW) in the tree stratum and common buttonbush (*Cephalanthus occidentalis*, OBL) in the sapling/shrub stratum. This passed the hydrophytic vegetation indicators of rapid test for hydrophytic vegetation, dominance test (100 percent) and prevalence index (1.1). To a depth of 20 in., the soils in the test pit were silt loam. From 0 to 10 in., the soil in the test pit exhibited a matrix color of 10YR 4/1 (80 percent) with 5YR 3/4 (20 percent) prominent redox concentrations along pore linings and in the matrix. From 10 to 20 in., the soil exhibited a matrix color of 10YR 4/1 (85 percent) with 5YR 3/4 pominent redox concentrations in the matrix. This met the hydric soil indicator of depleted matrix (F3). Indicators of wetland hydrology observed included high water table (A2), saturation (A4), water marks (B1), oxidized rhizospheres on living roots (C3), crayfish burrows (C8), geomorphic position (D2), and FAC-neutral trst (D5). Since all three required wetland criteria were met, this area qualified as a wetland.

### Wetland C (0.383 ac.) - PFO1A

This wetland is located within the floodplain of Boggs Creek, adjacent to Brickyard Road. Wetland C was classified as a PFO1A wetland. A small patch of area without trees was located in the northern portion of the wetlands, but was still surrounded by trees and had canopy. Since this area was still mostly shaded by canopy, it was included within the PFO1A portin of the wetland. Approximately 0.383 ac. of Wetland C was contained within the PSL and the wetland continued east beyond the PSL. The boundaries of Wetland C were delineated by lack of wetland vegetation and increased elevation. Due to its location within a floodplain, Wetland C likely receives flood waters and drainage on a consistent basis during rain events. Based on topography, it can be deduced that water drains south via RSD 4 into Boggs Creek, a jurisdictional waterway. Therefore,



Wetland C should be considered a jurisdictional Water of the U.S. The wetland was not associated with an NWI polygon and was formed within the HcgAH (0 percent hydric) and NprAH (3 percent hydric) mapped soil units. The wetland is located adjacent to Brickyard Road, forest, and row crop, and likely receives run-off. However, the wetland exhibited good plant species diversity and was forested. These factors contribute to the conclusion the wetland can support an average amount of wildlife or aquatic habitat, and therefore should be considered of average quality.

### Sampling Point C1 (SP-C1) – Wetland C

SP-C1 was located east of Brickyard Road. The dominant vegetation at this sampling point was sweet gum (*Liquidambar styraciflua*, FAC), eastern cottonwood (*Populus deltoides*, FAC), and common hackberry (*Celtis occidentalis*, FACU) in the tree stratum; common buttonbush (*cephalanthus occidentalis*, OBL) in the sapling/shrub stratum; and climbing nightshade (*Solanum dulcamara*, FAC) in the herb stratum. This passed the hydrophytic vegetation indicators of dominance test (80 percent) and prevalence index (3.00). To a depth of 20 inches (in.), the soils in the test pit were silty clay loam. From 0 to 20 in., the soil in the test pit exhibited a matrix color of 10YR 4/2 (90 percent) with 7.5YR 3/4 (10 percent) prominent redox concentrations in the matrix. This met the hydric soil indicator of depleted matrix (F3). Indicators of wetland hydrology observed included sediment deposits (B2), and geomorphic position (D2). Since all three required wetland criteria were met, this area qualified as a wetland.

### Sampling Point C2 (SP-C2) – Wetland C upland

SP-C2 was located in a floodplain of Boggs Creek east of Wetland C. The dominant vegetation at this sampling point was common panic grass (*Panicum capillare*, FAC) and spiny cocklebur (*Xanthium spinosum*, FACU) in the herb stratum. This did not meet any of the hydrophytic vegetation indicators. The soil in the test pit was a clay loam to a depth of 20 in. From 0 to 20 in., the soil exhibited a matrix color of 10YR 4/3 (98 percent) with 10YR 4/6 distinct redox concentrations in the matrix. This did not meet any hydric soil indicators. No primary indicators of wetland hydrology were observed. One secondary indicator of wetland hydrology, geomorphic position (D2), was observed. This was not enough to satisfy the criteria for wetland hydrology. Since none of the three required wetland criteria were met, this area did not qualify as a wetland.

### Additional Sampling Point(s):

Two additional sampling points were taken in areas where wetlands were suspected but did not meet the three required wetland criteria. A description of this sampling point is included below.



### Sampling Point 1 (SP-1)

SP-1 was located in a flooplain of Boggs Creek west of Brickyard Road and north of U.S. 50. The dominant vegetation at this sampling point was American elm (Ulmus americana, FACW), eastern cottonwood (Populus deltoides, FAC), and common hackberry (Celtis occidentalis, FACU) in the tree stratum; common pawpaw (Asiminia triloba, FAC) in the sapling/shrub stratum; Indian wood-oats (Chasmanthium latidolium, FACU) and white oldfield (Symphyotrichum pilosum, FAC) in the herb stratum; and eastern poison ivy (Toxicodendron radicans, FAC) in the woody vine stratum. This met the hydrophytic vegetation indicators of dominance test (71 percent). To a depth of 20 in., the soil in the test pit was a silty clay loam. From 0 to 3 in. the soil exhibited a matrix color of 10YR 2/1 (100 percent). From 3 to 20 in. the soil exhibited mixed matrix colors of 10YR 4/2 (50 percent) and 10YR 5/6 (50 percent). This did not meet any of the hydric soil indicators. No primary indicators of wetland hydrology were observed. One secondary indicator of wetland hydrology, geomorphic position (D2), was observed. This was not enough to satisfy the criteria for wetland hydrology. Since only one of the three required wetland criteria was met, this area did not qualify as a wetland.

### Sampling Point 2 (SP-2)

SP-2 was located in the floodplain of Boggs Creek west of Brickyard Road and north of U.S. 50. The dominant vegetation at this sampling point was common hackberry (*Celtis occidentalis*, FACU), eastern cottonwood (*Populus deltoides*, FAC), and pignut hickory (*Carya glabra*, FACU) in the tree stratum; redbud (*Cercis canadensis*, FACU) and American hornbeam (*Carpinus caroliniana*, FAC) in the sapling/shrub stratum; Virginia wild rye (*Elymus virginicus*, FACW) and eastern woodland sedge and (*Carex blanda*, FAC) in the herb stratum; and eastern poison ivy (*Toxicodendron radicans*, FAC) in the woody vine stratum. This met the hydrophytic vegetation indicators of dominance test (63 percent). To a depth of 20 in., the soil in the test pit was a sandy clay loam and exhibited a matrix color of 10YR 6/4 (60 percent) and 10YR 4/4 (40 percent). This did not meet any of the hydric soil indicators. No primary indicators of wetland hydrology were observed. One secondary indicator of wetland hydrology, geomorphic position (D2), was observed. This was not enough to satisfy the criteria for wetland hydrology. Therefore, the criteria for hydrophytic vegetation was also not met. Since only one of the three required wetland criteria were met, this area did not qualify as a wetland.

### **Roadside Ditches:**

Four roadside ditches (RSD) were identified within the PSL. These features consisted of riprap and vegetated drainage swales consisting of field brome (*Bromus arvensis*, FACU) and black walnut (*Juglans nigra*, FACU). No OHWM was observed in these features, so they are likely non-jurisdictional.



### **Culverts and Drains:**

Two culverts were identified within the PSL. The culverts consisted of corrugated metal pipe (CMP). These culverts aid in roadside drainage and stormwater conveyance in the northern portion of the PSL. These culverts did not carry jurisdictional waters, due to a lack of an OHWM, bed and bank characteristics. Locations of these culverts are shown on **Exhibits 6** and **7**, and attached photosheet.

### **Conclusion:**

Three wetlands (two PFO1A and one PSS1C), totaling 2.184 ac., and one stream, Boggs Creek, totaling 375 LFT, were identified within the PSL during the field reconnaissance. These waterways are likely Waters of the U.S. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the Corps.

### **Acknowledgements:**

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

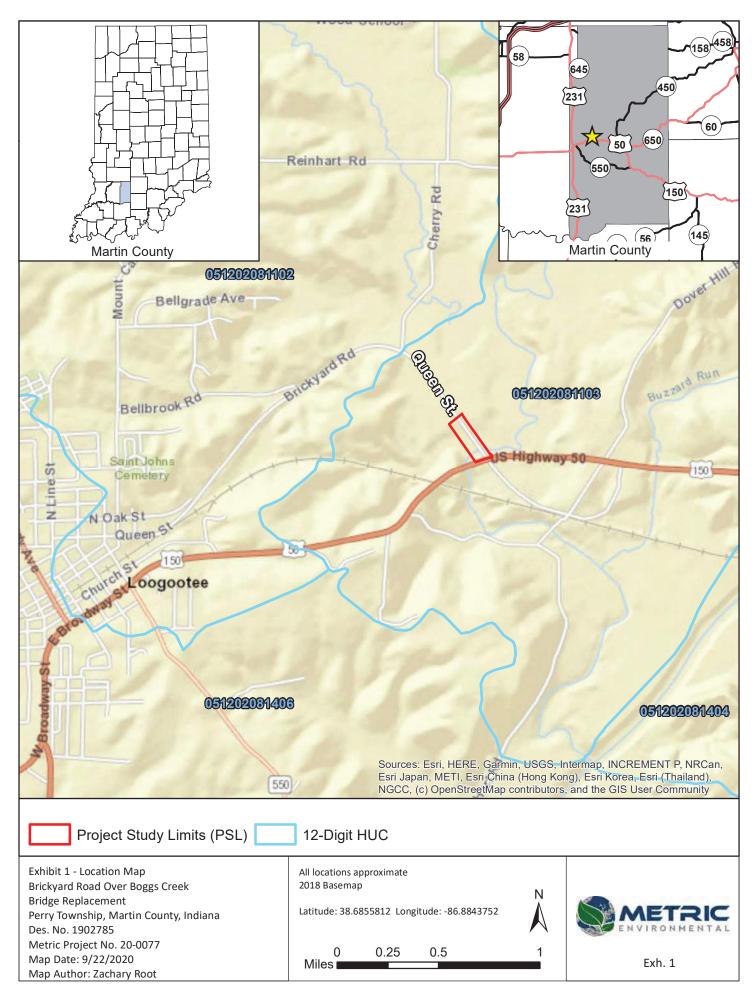
**Table 7: Acknowledgements** 

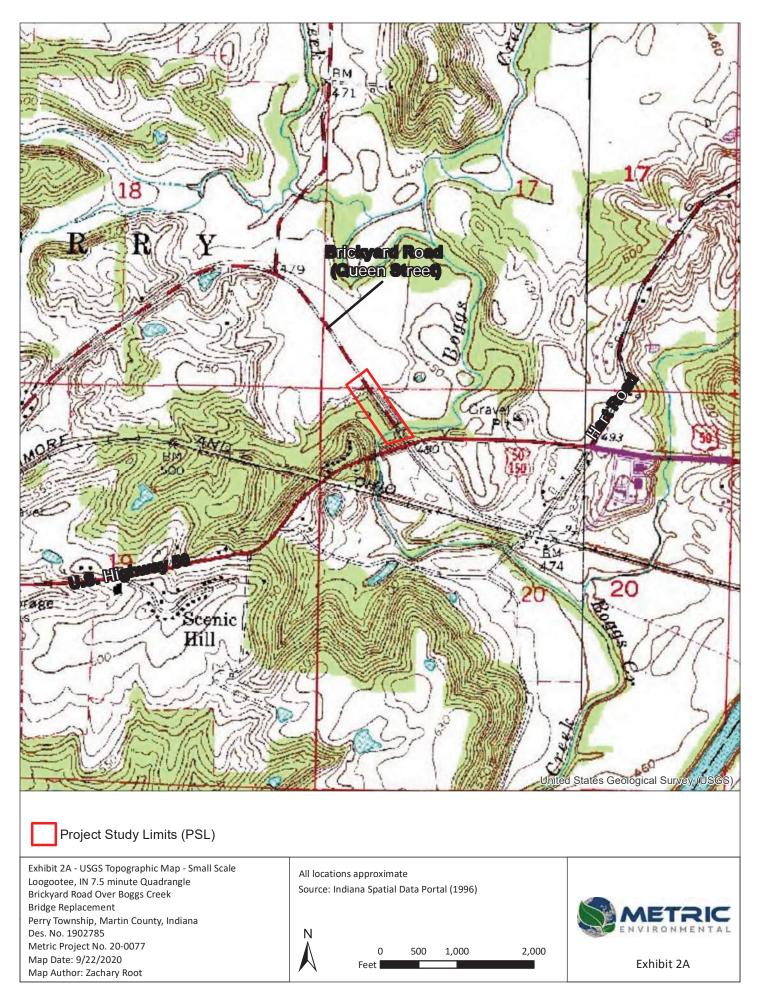
Metric Environmental Staff	Position	Contributing Effort	Signature/Date
Alex Gray	Natural Resources Project Manager I	QAQC	alex m. Gray 2/2/2021
Tony Miller	Senior Scientist I	QAQC	100 Mela 2/2/2021
Zachary Root	Environmental Scientist 2	Field Data Collection, Report Preparation	July Proof
Jason Damm	Natural Resources Project Manager II	Field Data Collection	Julan 12/2/2021

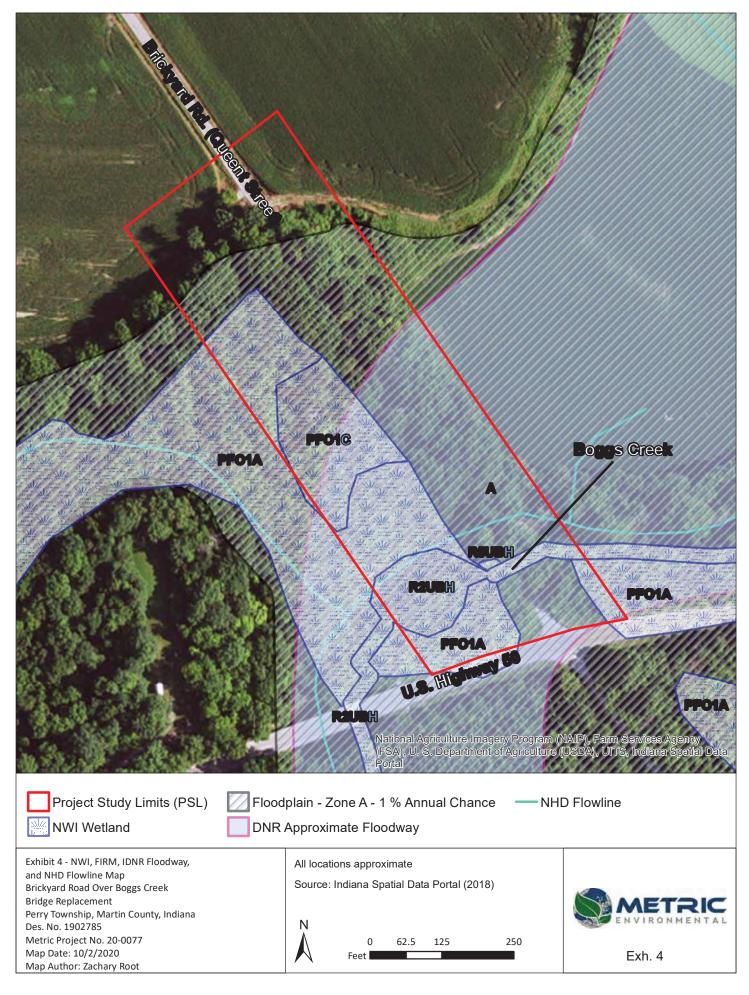
Brickyard Road over Boggs Creek Bridge Replacement Des. No. 1902785 Perry Township, Martin County, Indiana

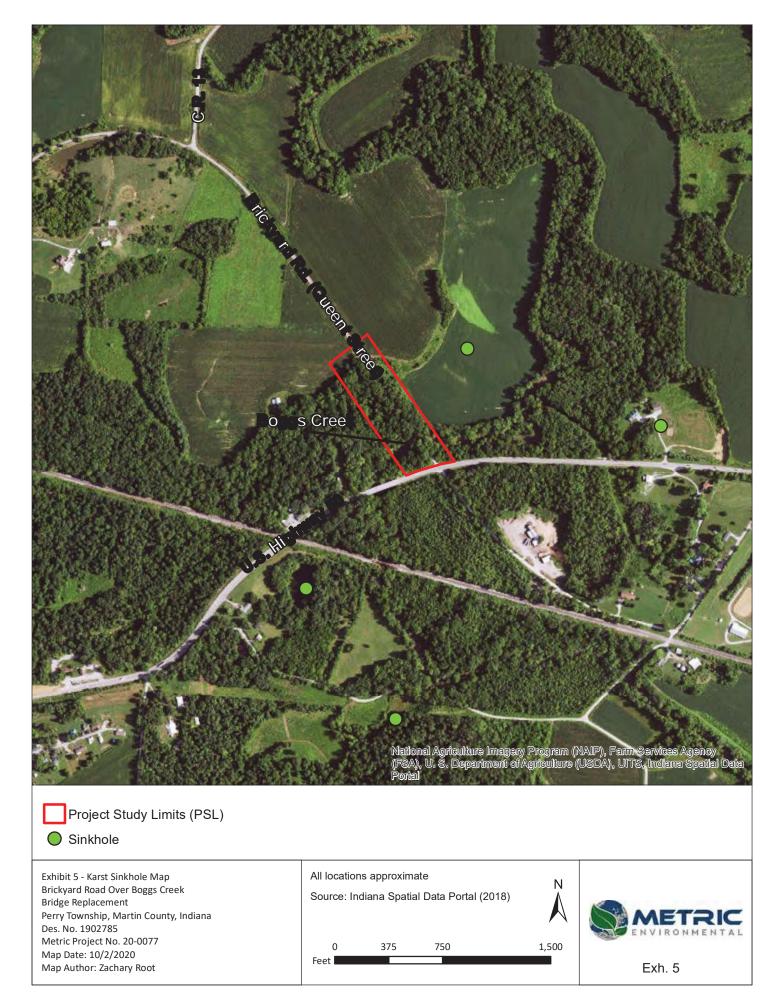
Metric Project No. 20-0077

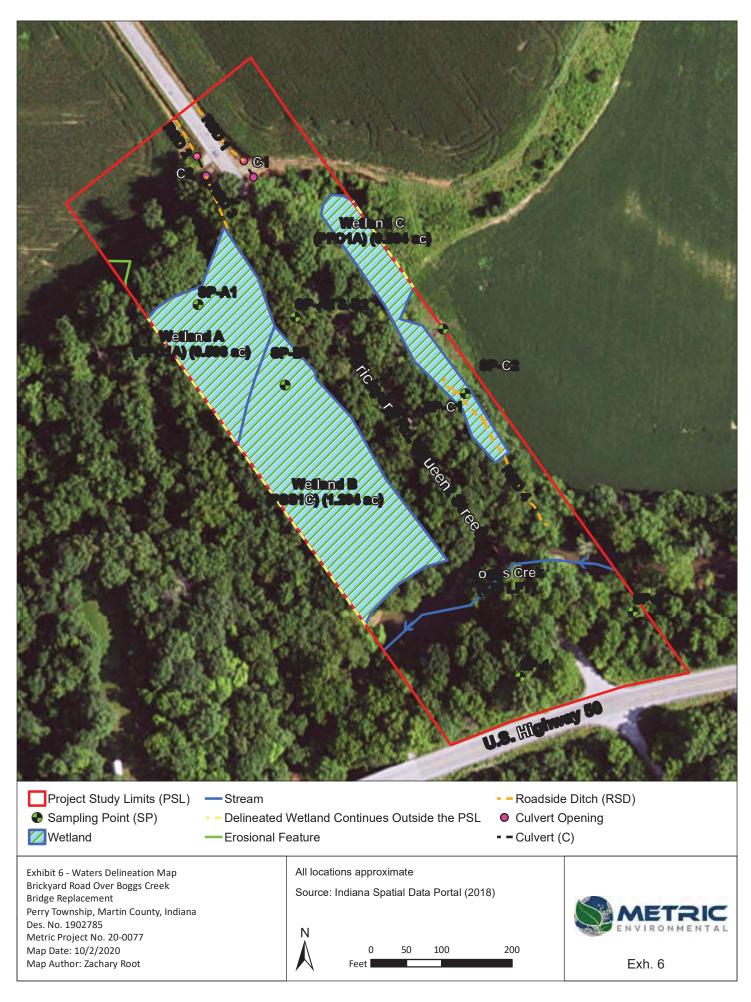


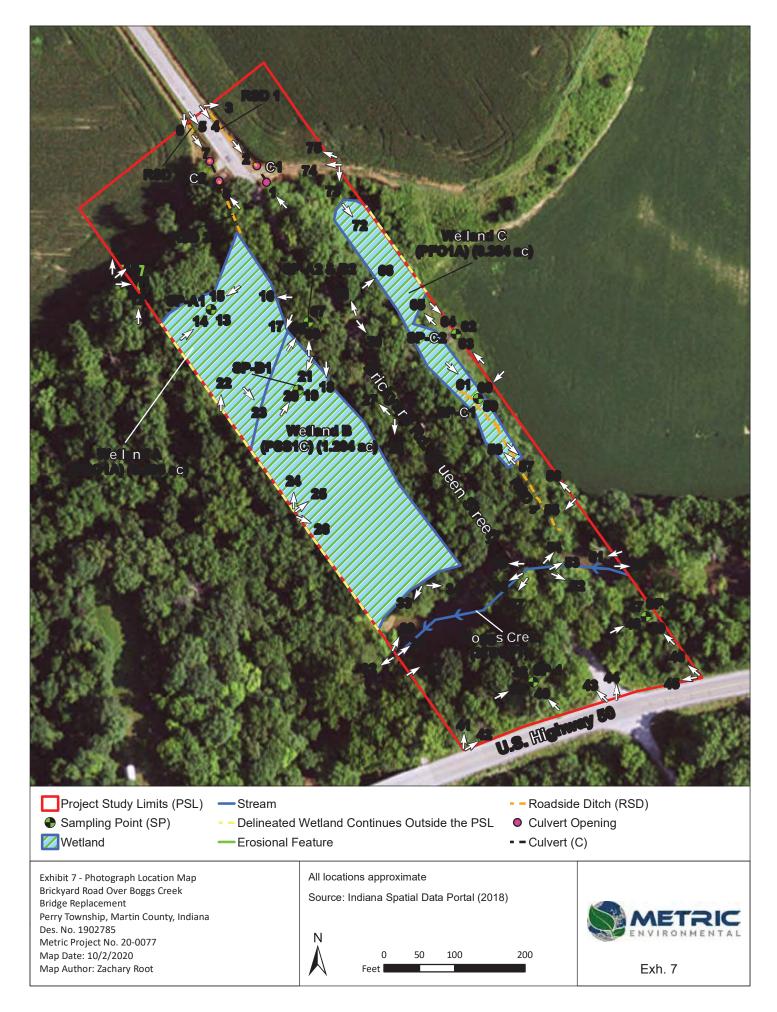














1. View of Culvert (C) 1 - outlet, looking northwest.



3. View of RSD 1 from the northwestern Project Study Limits (PSL), looking east.



2. View of C 1 - inlet and RSD 1, looking southeast.



4. View of RSD 1 and Brickyard Rd. right-of-way (ROW) from the northwestern PSL, looking southeast.

### SITE PHOTOGRAPHS—9/15/2020

Brickyard Road over Boggs Creek Bridge Replacement Perry Township, Martin County, Indiana Des. No. 1902785





5. View of RSD 2 and Brickyard Rd. ROW from the northeastern PSL, looking southeast.



7. View of RSD 2 and C 2, looking southeast.



6. View of RSD 2 from the northwestern PSL, looking south.



8. View of C 2 and RSD 3, looking northwest.

### SITE PHOTOGRAPHS—9/15/2020

Brickyard Road over Boggs Creek Bridge Replacement Perry Township, Martin County, Indiana Des. No. 1902785





9. View of row crop, from the southwest PSL, looking north.



11. View of upland area from the southwestern PSL, looking east.



10. View of erosional feature, looking northeast.



12. View of erosional feature from the southwestern PSL, looking north.

### SITE PHOTOGRAPHS—9/15/2020

Brickyard Road over Boggs Creek Bridge Replacement Perry Township, Martin County, Indiana Des. No. 1902785





13. View of SP-A1, Wetland A Sampling Point, soil profile.



15. View of SP-A1 and Wetland A, looking southwest.



14. View of RSD 3, Wetland A, and SP-A1, looking northeast.



16. View of Wetland A, looking west.







17. View of transition from Wetland A (PFO1A) to Wetland B (PSS1C), looking southwest.



19. View of SP-B1, Wetland B Sampling Point, soil profile.



18. View of Wetland A and Wetland B, looking south.



20. View of SP-B1 and Wetland B, looking northeast.





21. View of SP-B1 and Wetland B, looking southwest.



23. View of Wetland B, looking southeast.



22. View of Wetland A from the southwestern PSL, looking north.



24. View of Wetland B from the southwestern PSL, looking north.





 $25. \ \mbox{View of Wetland B}$  from the southwestern PSL, looking northeast.



27. View of Brickyard Rd. ROW, looking northwest.



26. View of Wetland B from the southwestern PSL, looking southeast.



28. View of Brickyard Rd. ROW, looking south.





29. View of Wetland B and Boggs Creek from the southwestern PSL, looking northeast.



31. View of Boggs Creek from the southwestern PSL, looking northeast.



30. View of Boggs Creek from the southwestern PSL, looking northeast (upstream).



32. View of Boggs Creek from the southwestern PSL, looking southwest (downstream).





33. View of Boggs Creek, looking southwest (downstream).



35. View of Boggs Creek and Wetland B, looking west.



34. View of Boggs Creek, looking east (upstream).



36. View of Boggs Creek, looking southwest (downstream).







37. View of the south bank of Boggs Creek, looking southwest.



39. View of SP-1, looking northeast.



38. View of SP-1, Sampling Point 1, soil profile.



40. View of SP-1, looking northwest.







41. View of upland area from the southwest corner of the PSL, looking north.



 $43.\ \mbox{\sc View of Brickyard Rd.}$  ROW from the southwestern PSL, looking northwest.



42. View of U.S. 50 ROW from the southwest corner of the PSL, looking northeast.



44. View of Brickyard Rd. ROW from the southeastern PSL, looking north.





45. View of U.S. 50 ROW from the southwestern corner of the PSL, looking southwest.



47. View of SP-2, Sampling Point 2, soil profiled.



46. View of upland area from the southwestern corner of the PSL, looking northwest.



48. View of SP-2, looking northeast.





49. View of SP-2, looking northwest.



51. View of Boggs Creek from the northwestern PSL, looking southwest (downstream).



50. View of Boggs Creek from the northeastern PSL, looking east (upstream).

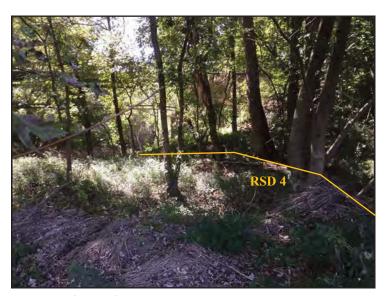


52. View of Boggs Creek, looking southeast.





53. View of Boggs Creek, looking northeast (upstream).



55. View of RSD 4 from the northeastern PSL, looking southwest.



54. View of RSD 4 and Boggs Creek, looking northeast.



56. View of upland area from the northeastern PSL, looking northwest.

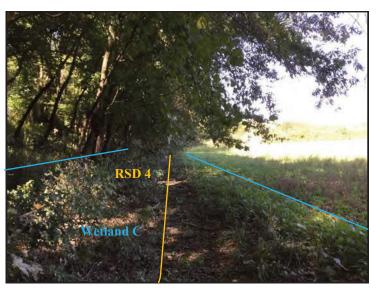




57. View of Wetland C and RSD 4, looking southeast.



59. View of SP-C1, Wetland C Sampling Point, soil profile.



58. View of Wetland C and RSD 4, looking northwest.



60. View of SP-C1 and Wetland C, looking southwest.



## Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

#### **BACKGROUND INFORMATION**

A. REPORT COMPLETION DATE FOR PJD: February 2, 2021

#### **B. NAME AND ADDRESS OF PERSON REQUESTING PJD:**

Zachary Root Metric Environmental, LLC 6971 Hillsdale Court Indianapolis, IN 46250 317-350-4896 zacharyr@metricenv.com

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

## D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

The proposed project (Des. 1902785) includes the rehabilitation or removal and replacement of the existing bridge, (Martin County Bridge No. 58), which carries Brickyard Road (Queen Street) over Boggs Creek in Perry Township, Martin County, Indiana. Martin County Bridge No. 58 is a three-span structure consisting of stone arch approach spans and a steel Warren deck truss. In 1996 a new open grid metal deck and railings were installed, and abutment repairs were made. In 2018 the stone masonry arches were patched with a thin layer of concrete. The bridge length is 150.4 ft. long with a roadway width of 11.7 ft. The bridge is supported on stone abutments and stone piers. The purpose of the project is to provide a crossing with railings that meets current load bearing and safety standards over Boggs Creek. Riprap will likely be placed around the abutments and/or piers of the structure for scour protection.

# (USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: IN County/parish/borough: Martin County City: Loogootee Center coordinates of site (lat/long in degree decimal format):

Lat.: 38.6855812° Long.: -86.8843752°

Universal Transverse Mercator: 16 S 510056.33 E 4281892.45 N

Name of nearest waterbodyBoggs Creek

E.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY)
	Office (Desk) Determination. Date:
	Field Determination. Date(s):

# TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wetland A	38.68595	-86.885124	0.596 acres	Wetland	Section 404
Wetland B	38.685365	-86.88457	1.204 acres	Wetland	Section 404
Wetland C	38.686039	-86.884213	0.384 acres	Wetland	Section 404
Boggs Creek	38.684958	-86.883776	375 feet (0.858 ac)	Non-Wetland Waters	Section 404

- The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds waters of the U.S. and/or that there navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

## SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources

below where indicated for all checked items: Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: ■ Map: \_\_\_\_ Dated 10/21/2020 Data sheets prepared/submitted by or on behalf of the PJD requestor. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Rationale: Data sheets prepared by the Corps: □ Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas:\_\_\_\_\_\_ ☐ USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Loogootee, IN 7.5 min, 1980 Natural Resources Conservation Service Soil Survey. Citation: SSURGO Martin County National wetlands inventory map(s). Cite name: <a href="http://www.fws.gov/wetlands/">http://www.fws.gov/wetlands/</a> State/local wetland inventory map(s): FEMA/FIRM maps: ; Effective— 100-year Floodplain Elevation is: .(National Geodetic Vertical Datum of 1929) Photographs: Aerial (Name & Date): Indiana Aerial Photograph, 2018 Other (Name & Date): Site Photographs, 9/15/2020 Previous determination(s). File no. and date of response letter: Other information (please specify): IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations. Signature and date of Regulatory staff member person requesting PJD (REQUIRED, unless obtaining completing PJD the signature is impracticable)1

<sup>&</sup>lt;sup>1</sup> Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

# **APPENDIX G:** Public Involvement



#### Confidence in the built environment.

135 N. Pennsylvania, Suite 2800 Indianapolis, Indiana 46204

www.hwcengineering.com

September 9, 2020

#### NOTICE OF SURVEY

RE: Rehabilitation/Replacement of Martin County Bridge 58

Dear Property Owner:

Martin County is in the planning stages of a rehabilitation/replacement project of Martin County Bridge 58 on Brickyard Road over Boggs Creek. Our information indicates that you own or occupy property near the proposed project. Our employees and/or subcontractors will be performing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is permitted by law per Indiana Code IC 25-21.5-9-7. They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

At this stage, we generally do not know what effect, if any, the project can eventually have on your property. If it is determined later that your property is involved, you will be contacted with additional information.

The survey work will include mapping the location of features such as trees, buildings, fences and drives, and obtaining ground elevations. The survey work may also include the identification and mapping of wetlands, archaeological investigations (which may include excavation of small shovel test probes), geotechnical (soil borings), and various other environmental studies. The survey is needed for the proper planning and design of this bridge project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey.

If you have any questions or concerns regarding our proposed survey work or schedule, please contact one of the following listed below. This contact information is as follows:

General Questions: Jacob Isenburg, PE Structural Department Manager HWC Engineering, Inc. Indianapolis, IN (317) 981-1254 Survey Questions: Austin Yake, PS Survey Project Manager HWC Engineering, Inc. Indianapolis, IN (812) 787-0969

Sincerely,

austin X Yoke

Austin K. Yake, PS Land Surveyor HWC Engineering, Inc. (812) 787-0969 ayake@hwcengineering.com

# PROOF OF PUBLICATION

State of Indiana, Martin County, SS:

# The Shoals News

Stephen A. Deckard, Publisher P.O. Box 240 Shoals, Indiana 47581-0240

Stephen A. Deckard, being duly sworn, upon his oath, says that he is Publisher of THE SHOALS NEWS, a newspaper of general circulation, printed and published at Shoals, in the State and County aforesaid, and that the annexed notice was published in the said newspaper on the following dates, to-wit:

January 27	. 200/ 2.)_
	,200
	,200
	, 200
Stylen a Dacke	,200
Subscribed and sworn	to before me this
27 day of Day 402	000/01

My Commission Expires September 30, 2025 County: Martin

Joyanne Deckard, Notary Public

#### PUBLIC NOTICE **DESIGNATION NO. 1902785**

Martin County is announcing the potential availability of Bridge 58 carrying Brickyard Road over Boggs Creek near Loogootee to interested responsible parties. The bridge is eligible for the National Register of Historic Places and has been determined "Non-Select" per the Programmatic Agreement Regarding the Management and Preservation of Indiana's Historic Bridges (https://www.in. gov/indot/files/Historic\_Bridge\_ProgrammaticAgreement.pdf). The status of this bridge is currently "pending," which means that its future is currently unknown as the Section 106 historic review process is on-going. Depending on the outcome of Section 106 consultation, interested parties may be able to acquire the bridge.

The bridge is a three-span structure and is 150 feet 4 inches long with a clear roadway width of 11'-8". The bridge consists of an 86' long Steel Warren Deck Truss main span and 2 - 32' long stone arch approach spans. The deck is in satisfactory condition. The superstructure (truss and stone arches) is in fair condition with minor section loss and corrosion. The substructure (stone foundations) is in fair condition with deteriorated stones and section loss. A photo and general information about the bridge can be viewed at the following website: http: //www.in.gov/indot/2532.htm.

Additional information about the bridge is available for review by contacting

the person listed below.

Martin County is now accepting proposals for the rehabilitation and reuse, or the storage and future reuse of the bridge. Proposals will also be accepted for the salvage of elements of the bridge. Any proposals should be received within the next six months. Funding of any rehabilitation, reuse, storage, dismantling, reconstruction, salvage, etc., of this bridge would be the responsibility of the new owner. Interested parties should sub-

COS mit a written proposal for reuse to the address below as soon as possible:

Name: Jacob Isenburg Organization: HWC Engineering Address: 135 N. Pennsylvania Street, Suite 2800, Indianapolis, IN 46204

E-mail: jisenburg@hwcengineering.

Phone: 317-347-3663 hspaxip

## The Indianapolis Star

130 South Meridian Street Indianapolis, IN 46225 Marion County, Indiana

Federal Id: 06-1032273

#### **HWC ENGINEERING**

Account #:INI-46397 Order #:0004568020 # of Affidavits: 2 Total Amount of Claim:\$78,22 This is not an invoice

HWC ENGINEERING ATTN lisa 135 N PENNSYLVANIA ST STE 2800 INDIANAPOLIS, IN 46204

# **PUBLISHER'S AFFIDAVIT**

# STATE OF WISCONSIN, County Of Brown } SS

Personally appeared before me, a notary public in and for said county and state, the undersigned

I, being duly sworn, say that I am a clerk for THE INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation printed and published in the English language in the city of INDIANAPOLIS in the state of INDIANA and county of MARION, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 times., the dates of publication being as follows:

The insertion being on the

01/26/2021

Newspaper has a website and this public notice was posted in the same day as it was published in the newspaper.

Pursuant to the provisions and penalties of Ch. 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

marthe Steinhart

Date: Jam. 26 , 20 2 Title: Clerk

Subscribed and sworn to before me this 26 day of January, 2021

Notary Expires: 8 95-23

otary Public

SHELLY HORA Notary Public State of Wisconsin

#### Public Notice

#### Designation No. 1902785

Martin County is announcing the potential avallability of Bridge 58 carrying Brickyard Road over Boggs Creek near Loogootee to Interested responsible parties. The bridge is eligible for the National Register of Historic Places and has been determined "Non-Select" per the Programmatic Agreement Regarding the Management and Preservation of Indiana's Historic Bridges (https://www.in.gov/indot/files/Historic, Bridge\_ProgrammaticAgreement.pdf). The status of this bridge is currently "pending," which means that its future is currently unknown as the Section 106 historic review process is ongoing. Depending on the outcome of Section 106 consultation, interested parties may be able to acquire the bridge.

The bridge is a three-span structure and is 150 feet 4 inches long with a clear roadway width of 11'-8". The bridge consists of an 86' long Steel Warren Deck Truss main span and 2 - 32' long stone arch approach spans. The deck is in satisfactory condition. The super-structure (truss and stone arches) is in fair condition with minor section loss and corrosion. The substructure (stone foundations) is in fair condition with deteriorated stones and section loss. A photo and general information about the bridge can be viewed at the following website: http://www.in.gov/indot/2532.htm. Additional information about the bridge is available for review by contacting the person listed below.

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Name: Jacob Isenburg Organization: HWC Englneering Address: 135 N. Pennsylvania Street, Suite 2800, Indianapolis, IN 46204 E-mail: jisenburg@hwcengineering.com Phone: 317-347-3663

INI - 1/26/2021 - 0004568020

hspaxip

# APPENDIX H: Air Quality

State Preservation and Local Initiated Projects FY 2022 - 2026

$\overline{}$	LEAD DES	NAME					MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2022	2023	2024	2025	2026
	42807 / 1902785	(Init.	IR 5280	Bridge Replacement	Bridge #58 Brickyard Road over Boggs Creek	Vincennes	.177	STBG	\$4,675,405.00	Local Funds	CN	\$0.00	\$832,725.00				\$832,725.00	
		l	l							Local Funds	RW	\$0.00	\$14,400.00		\$14,400.00			
										Local Bridge Program	RW	\$57,600.00	\$0.00		\$57,600.00			
										Local Bridge Program	CN	\$3,330,900.00	\$0.00				\$3,330,900.00	
Performance Measure I			ondition									1	ļ.					
ndiana Department	43233 / 2001936		US 231	Small Structure Replacement	over UNT, 2+43 N N JCT SR 56	Vincennes	0	NHPP	\$742,400.00	Bridge Construction	CN	\$465,120.00	\$116,280.00				\$581,400.00	
			l							Bridge ROW	RW	\$9,600.00	\$2,400.00			\$12,000.00		
										Bridge Consulting	PE	\$119,200.00	\$29,800.00	\$149,000.00				
Performance Measure I			ondition													I		

**Martin County Total** 

Federal: \$13,119,460.80 Match: \$3,279,865.20

2022: \$4,593,093.00

593,093.00 2023: \$226,681.00

2024: \$6,810,143.00

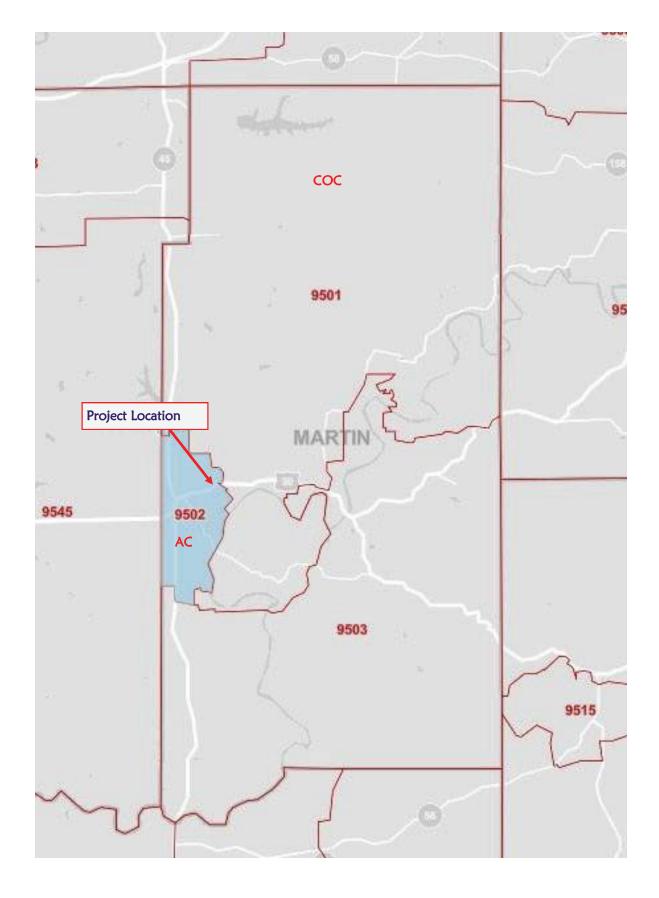
2025: \$4,769,409.00

2026:

# **APPENDIX I: Additional Studies**

# Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated July 2020)

ProjectNumb	od County	Property
1800042 1800042	Martin	West Boggs Park and Lakeview Golf Course
1800215 1800215	Martin	West Boggs Park and Lakeview Golf Course
1800293 1800293	Martin	Loogootee City Park
1800363 1800363Q	Martin	Martin State Forest
1800637 1800637	Martin	West Boggs Park



Source: U.S. Census Bureau

Environmental Justice
Bridge Project
Des. No. 1902785

Brickyard Road over Boggs Creek

Brickyard Road over Boggs Cree Martin County, Indiana



#### B03002 | HISPANIC OR LATINO ORIGIN BY RACE

2019: ACS 5-Year Estimates Detailed Tables 🗸 Universe: Total population

ØΞ 123 93 Margin of Error Notes 2 Geos Surveys Hide Transpose Excel Download Print Мар Years Topics Codes Restore

	Martin County, Indiana		Census Tract 9502, Martin County, Indiana			
Label	Estimate	Margin of Error	Estimate	Margin of Error		
➤ Total:	10,212	****	3,716	±161		
➤ Not Hispanic or Latino:	10,095	±75	3,709	±162		
White alone	9,910	±19	3,672	±172		
Black or African American alone	77	±93	11	±18		
American Indian and Alaska Native alone	33	±50	9	±21		
Asian alone	18	±36	10	±24		
Native Hawaiian and Other Pacific Islander alone	0	±19	0	±12		
Some other race alone	0	±19	0	±12		
➤ Two or more races:	57	±81	7	±17		
Two races including Some other race	0.	±19	0	±12		
Two races excluding Some other race, and three or more races	57	±81	7	±17		
Hispanic or Latino:	117	±75	7	±12		
Marine V	1.2		_	114.40		

American Community Survey

# B17001 | POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

2019: ACS 5-Year Estimates Detailed Tables V Universe: Population for whom poverty status is determined

(0) 123

90

Topics Surveys Notes 2 Geos Years Codes Hide Transpose Margin of Error Restore Excel Download Print Мар Martin County, Indiana Census Tract 9502, Martin County, Indiana Label Estimate Margin of Error Estimate Margin of Error ▼ Total: 9,884 ±57 3,659 ±162 Income in the past 12 months below poverty level: 1,156 ±272 446 ±163

Source: U.S. Census Bureau

**Environmental Justice** Bridge Project

Des. No. 1902785

Brickyard Road over Boggs Creek

Martin County, Indiana



XΞ

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