

Des 1700185 CE-2

Appendix F

Water Resources



Waters Report  
State Road 62 Over Laughery Creek  
Ripley County, Indiana  
Bridge Project  
Des. No. 1700185

Report Completed on: May 27, 2020

Prepared for:  
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**Site Location:**

Section 14, Township 6 N, Range 12 E  
Cross Plains 1:24,000 Quadrangle  
Ripley County, Indiana  
Raccoon Creek-Laughery Creek, 12-Digit HUC: 050902030601  
Latitude: 38.971483°      Longitude: -85.152485°

**Field Investigation Date:** April 14, 2020

**Project Description**

This project is planned to perform a bridge rehabilitation project carrying SR 62 over Laughery Creek (062-69-05860A). The structure is located approximately 3.91 miles east of SR 129. The existing structure is a 3 span continuous steel beam bridge. The preferred alternative consists of a superstructure replacement with widened piers to accommodate the structure. Riprap will be placed on the spillslopes for scour protection.

**Methodology**

The delineation of wetlands and other “waters of the U.S.” on the site was based on the methodology described in the *Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987)* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Environmental Laboratory, 2012)* as required by current U.S. Army Corps of Engineers (USACE) policy.

Prior to the field work, background information, including USGS topographic maps, aerial photographs, the U.S. Geological Survey’s (USGS) National Hydrography Dataset (NHD) layer on the Indiana Geological Society’s (IGS) Indiana Map website, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, and the Natural Resources Conservation Service (NRCS) Web Soil Survey for Ripley County were reviewed to establish the probability and potential location of water resources on the site. Next, a general reconnaissance of the project area was conducted to determine site conditions. Sample points were established at locations within the project area to inspect for any possible wetland areas and to document soil characteristics, evidence of hydrology, and dominant vegetation. Soils were examined to a depth of at least 16-20 inches, when no restrictive layer was encountered, to assess soil characteristics and site hydrology.



## Results/Discussion

### Site Description and Conditions

- **Topography:** The topography around the project includes low floodplain areas and steep hills.
- **Existing Land-Use:** Adjacent land use is mostly agricultural areas with a volunteer fire department to the northeast, as well as a residential area to the southwest.
- **Plant Communities:** Vegetation within the roadside right-of-way was characterized as upland grasses and weeds. Vegetation within the floodplain west of Laughery Creek was dominated by reed canarygrass and stinging nettle, with tree coverage of American sycamore and box elder. Vegetation within the floodplain east of Laughery Creek was dominated by reed canarygrass, and ground ivy, with shrub coverage of honeysuckle and tree coverage of hackberry and cottonwood.
- **Soils:** According to the Ripley County Soil Survey, soils mapped within the investigated area include:

**Table 1.**

**Soil Types Within the Investigated Area**

Soil abbreviation	Soil Unit Name	Hydric Rating
Wr	<i>Wirt silt loam, flaggy clay substratum, frequently flooded</i>	Contains 0% Hydric Inclusions
W	<i>Water</i>	Contains 0% Hydric Inclusions
No	<i>Nolin silt loam, frequently flooded</i>	Contains 0% Hydric Inclusions
Wt	<i>Wirt silt loam, frequently flooded</i>	Contains 0% Hydric Inclusions

- **Hydrology:** According to the FEMA Flood Rate Insurance Map (FIRM) dataset (see attached Floodplain Map), the project area is mapped within the floodway. Hydrology in the area is influenced by Laughery Creek and runoff from SR 62 and near by agricultural fields.
- **National Wetland Inventory (NWI) Data:** According to the NWI map, Laughery Creek is mapped as riverine (R2UBH) through the project area. The closest mapped wetland is a freshwater emergent wetland (PUBG) approximately 0.16 mile northwest of the project area.
- **Site Conditions:** Site conditions were typical for early spring, with 1.39 inches of precipitation occurring on the previous day, 04/13/20 (Weather Underground). Temperatures were in the mid-fifties (° F).

## Findings

### Soil Sample Points (SP)

Table 2.

Sample Point Summary Table State Road 62 Over Laughery Creek Ripley County, Indiana						
Data Point	Photos	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland	Date
1	1-4	Yes	No	Yes	No	4.14.2020
2	5-8	Yes	No	Yes	No	4.14.2020

### Site Analysis

The investigated area included roadside right-of-way and slopes around SR 62, and contains **Laughery Creek**. Laughery Creek shows up as a solid blue-line water feature on the USGS Topographic Map and NWI map. According to the NWI map, Laughery Creek is mapped as riverine (R2UBH) through the project area. Based upon observation in the field, it appears that Laughery Creek is a perennial stream throughout the investigated area. The upstream drainage area of Laughery Creek is 198.335 square miles (USGS Stream Stats, Version 4.0). Approximately 60 linear feet of this tributary is within the investigated area. The stream data was taken on the north side of SR 62 to ensure the data was outside the influence of the structure. The stream has a bank full width of approximately 180 feet and is characterized by silt and rock substrate, moderate flow, and an average ordinary high water mark (OHWM) of 150 feet wide and approximately 3 feet deep. The stream has high sinuosity and contains riffle and run complexes. The banks of Laughery Creek on the west side of SR 62 are heavily vegetated and has a riprap and silt substrate. The quality of the stream is rated average due to riffle/run development, moderate overall erosion, high vegetative cover along the slopes, and moderate in-stream cover. Laughery Creek receives drainage from the surrounding fields and runoff from SR 62. Laughery Creek starts at the northwest side of the structure, and runs southeast under SR 62, and then eventually east towards the Ohio River, where it connects. The Ohio River is approximately 5.7 miles east of the project area. The Ohio River is a navigable waterway and jurisdictional under the USACE. Due to the presence of an OHWM and eventual connectivity to the Ohio River, Laughery Creek is likely a Waters of the U.S.

**UNT 1 to Laughery Creek** is not shown on the USGS Topographic Map or NWI map. Based upon observation in the field, it appears that UNT 1 to Laughery Creek is an ephemeral stream throughout the investigated area. Approximately 30 linear feet of this tributary is within the investigated area. The stream has a bank full width of approximately 3 feet and is characterized by silt and detritus substrate, no flow at time of investigation, and an average ordinary high water mark (OHWM) of 3 feet wide and approximately 6 inches deep. The stream has no to low sinuosity and contains no riffle and run complexes. There is moderate vegetation. The quality of the stream is rated low due to no riffle/run development, moderate overall erosion, moderate vegetative

cover along the slopes, and moderate in-stream cover. UNT 1 to Laughery Creek receives drainage from the surrounding fields, and runoff from SR 62. UNT 1 to Laughery Creek starts at the northwest side of the structure and runs southeast to Laughery Creek. Laughery Creek eventually connects to the Ohio River. The Ohio River is approximately 5.7 miles east of the project area. The Ohio River is a navigable waterway and jurisdictional under the USACE. Due to the presence of an OHWM and eventual connectivity to the Ohio River, UNT 1 to Laughery Creek is likely a Waters of the U.S.

**UNT 2 to Laughery Creek** shows up as a solid blue-line water feature on the USGS Topographic Map and NWI map. UNT 2 to Laughery Creek is mapped as riverine (R2UBH) through the project area. Based upon observation in the field, it appears that UNT 2 to Laughery Creek is an intermittent stream throughout the investigated area. Approximately 220 linear feet of this tributary is within the investigated area. The stream has a bank full width of approximately 3 feet and is characterized by silt and detritus substrate, no flow at time of investigation, and an average ordinary high water mark (OHWM) of 3 feet wide and approximately 6 inches deep. The stream has no to low sinuosity and contains no riffle and run complexes. There is moderate vegetation. The quality of the stream is rated low due to no riffle/run development, moderate overall erosion, moderate vegetative cover along the slopes, and moderate in-stream cover. UNT 2 to Laughery Creek receives drainage from the surrounding fields and runoff from SR 62. UNT 2 to Laughery Creek starts at the northwest side of the structure and runs northeast to UNT 1 to Laughery Creek. UNT 1 to Laughery Creek flows into Laughery Creek, which eventually connects to the Ohio River. The Ohio River is approximately 5.7 miles east of the project area. The Ohio River is a navigable waterway and jurisdictional under the USACE. Due to the presence of an OHWM and eventual connectivity to the Ohio River, UNT 2 to Laughery Creek is likely a Waters of the U.S.

**UNT 3 to Laughery Creek** is not shown on the USGS Topographic Map or NWI map. Based upon observation in the field, it appears that UNT 3 to Laughery Creek is an intermittent stream throughout the investigated area. UNT 3 is carried by a culvert under SR 62. Approximately 135 linear feet of this tributary is within the investigated area. The stream has a bank full width of approximately 25 feet and is characterized by silt and detritus substrate, low flow at time of investigation, and an average ordinary high water mark (OHWM) of 10 feet wide and approximately 4 inches deep. The stream has low sinuosity and contains no riffle and run complexes. There is moderate vegetation. The quality of the stream is rated low due to no riffle/run development, moderate overall erosion, moderate vegetative cover along the slopes, and low in-stream cover. UNT 3 to Laughery Creek receives drainage from the surrounding fields and runoff from SR 62. UNT 3 to Laughery Creek starts at the northeast side of the structure and runs southeast to Laughery Creek. Laughery Creek eventually connects to the Ohio River. The Ohio River is approximately 5.7 miles east of the project area. The Ohio River is a navigable waterway and jurisdictional under the USACE. Due to the presence of an OHWM and eventual connectivity to the Ohio River, UNT 3 to Laughery Creek is likely a Waters of the U.S.

**Sample Point 1 (SP 1)** was taken on the northwest side of the structure within the low lying floodplain of Laughery Creek. SP 1 was dominated American sycamore, *Platanus occidentalis* (FACW) and Boxelder, *Acer negundo* (FAC) in the tree stratum. The herb stratum was dominated

by reed canarygrass, *Phalaris arundinacea* (FACW) and stinging nettle, *Urtica dioica* (FACU). This community did not pass the rapid test for hydrophytic vegetation, but it did pass the dominance test and prevalence index. The soil did not meet any indicators for hydric soils with a layer of 10 YR 3/3 matrix (100%) from 0-12 inches, 10 YR 4/3 (85%) with concentrations in the pore lining of 10 YR 2/1 (5%) and concentrations in the matrix of 10 YR 4/6 (10%) from 12-14 inches. The soil from 0-14 inches had a texture of silt loam. From 14-16 inches, the soil is 10 YR 5/1 (95%) with concentrations in the matrix of 10 YR 4/6 (5%). The soil texture was silty clay loam. A water table was found at 14 inches and saturation was present at 13 inches. Wetland hydrology indicators including drift deposits and the FAC-Neutral test were identified. While wetland hydrology and hydrophytic vegetation were present, the sample point lacked hydric soil. Therefore, SP 1 is not within a wetland.

**Sample Point 2 (SP 2)** was taken on the northeast side of the structure within the low lying floodplain of Laughery Creek. SP 2 was dominated by Hackberry, *Celtis occidentalis* (FAC) and Cottonwood, *Populus deltoides* (FAC), in the tree stratum. The shrub stratum was dominated by honey suckle, *Lonicera maackii* (NI). The herb stratum was dominated by reed canarygrass, *Phalaris arundinacea* (FACW) and ground ivy, *Glechoma hederacea* (FAC). This community did not pass the rapid test for hydrophytic vegetation, but it did pass the dominance test and prevalence index. The soil did not meet any indicators for hydric soils with a layer of 10 YR 4/3 matrix (100%) from 0-16 inches. The soil texture was silty clay loam. Wetland hydrology was found with surface soil cracks and passed the FAC-Neutral Test. While hydrophytic vegetation and wetland hydrology was present, the sample point lacked hydric soil. Therefore, SP 2 is not within a wetland.

The project area was reviewed for the presence of other water features such as open water, areas that do not have an OHWM but have concentrated flow, all roadside ditches, historic drainage, and unusual circumstances. Roadside ditches are considered jurisdictional if they have a significant nexus to other potentially jurisdictional water features and feature an OHWM. No open water or other water features were identified in the review area.

## Aquatic Resources

Table 3.

Stream Summary Table State Road 62 over Laughery Creek Ripley County, Indiana									
Stream Name	Photos	Lat/Long	OHWM Width (ft)	OHWM Depth	USGS Blue-line?	Riffles? Pools?	Substrate	Quality	Likely Water of U.S.?
Laughery Creek	9-12	38.9724913°, -85.1530955°	150 ft	3 ft	Yes	Yes	Silt, Rock	Average	Yes
UNT 1 to Laughery Creek	13-16	38.9724431°, -85.1532797°	3 ft	6 inches	No	No	Silt, Detritus	Poor	Yes
UNT 2 to Laughery Creek	17-20	38.9723901°, -85.1534447°	3 ft	6 inches	Yes	No	Silt, Detritus	Poor	Yes

UNT 3 to Laughery Creek	21-24	38.9724562°, -85.1525861°	10 ft	4 inches	No	No	Silt, Detritus	Poor	Yes
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## Conclusions

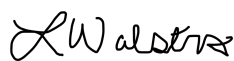
No wetlands were identified during the site investigation. Vegetation in the investigated area was mostly consistent with upland lawn grasses. The project area was sloped due to SR 62 and appears to drain quickly, preventing the development of hydric soils. Four streams were identified during the site investigation, Laughery Creek, UNT 1 to Laughery Creek, UNT 2 to Laughery Creek, and UNT 3 to Laughery Creek. It is likely that Laughery Creek is jurisdictional due to the presence of an OHWM, its connectivity to a navigable waterway, the Ohio River, and its relatively permanent water flow. It is likely that UNT 1 to Laughery Creek, UNT 2 to Laughery Creek, and UNT 3 to Laughery Creek are all jurisdictional due to the presence of an OHWM and its eventual connectivity to a navigable waterway, the Ohio River.

Every effort should be taken to avoid and minimize impacts to these waterways. If impacts are necessary, then mitigation may be required. The Indiana Department of Transportation (INDOT) Environmental Services Division should be contacted immediately if impacts occur. The final determination of jurisdictional waters is ultimately made by the appropriate regulatory staff of the USACE. This report is our best judgment based on the guidelines set forth by the Corps.

## Acknowledgement

This waters determination has been prepared based on the best available information, interpreted in the 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.

Laney Walstra



Ecologist  
Green 3 LLC  
Date: May 27, 2020

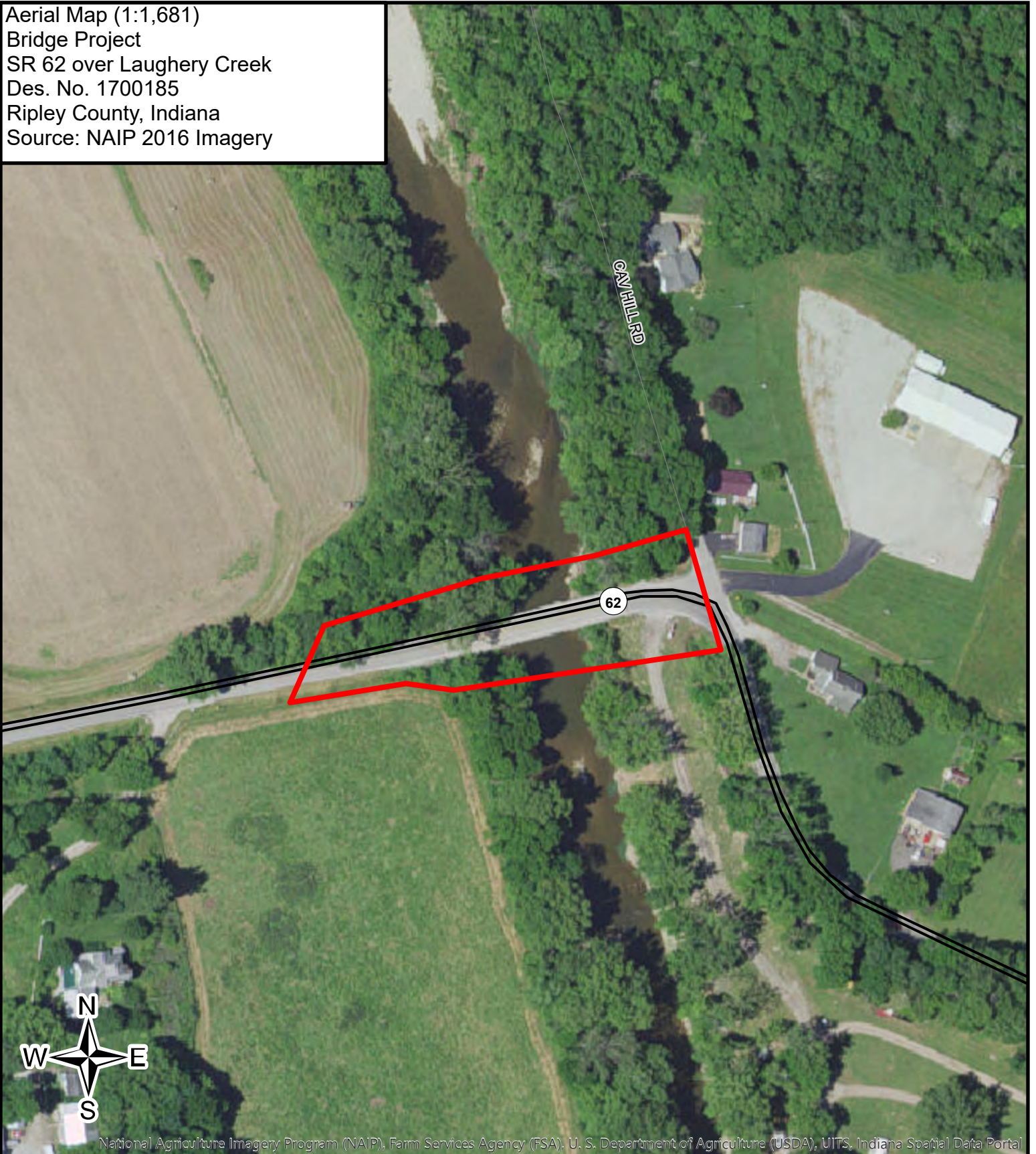
## Supporting Documentation

- Site Location Map
- USGS Topographic Map
- FEMA Floodplain Map

- LiDAR Map
- USFWS NWI Map
- NRCS Hydric Soil Map
- Water Resources Map
- Photograph Location Map
- Site Photographs
- Sample Point Data Sheets
- Preliminary Jurisdictional Determination Form



Aerial Map (1:1,681)  
Bridge Project  
SR 62 over Laughery Creek  
Des. No. 1700185  
Ripley County, Indiana  
Source: NAIP 2016 Imagery



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

0 95 190  
Feet

 Investigated Area

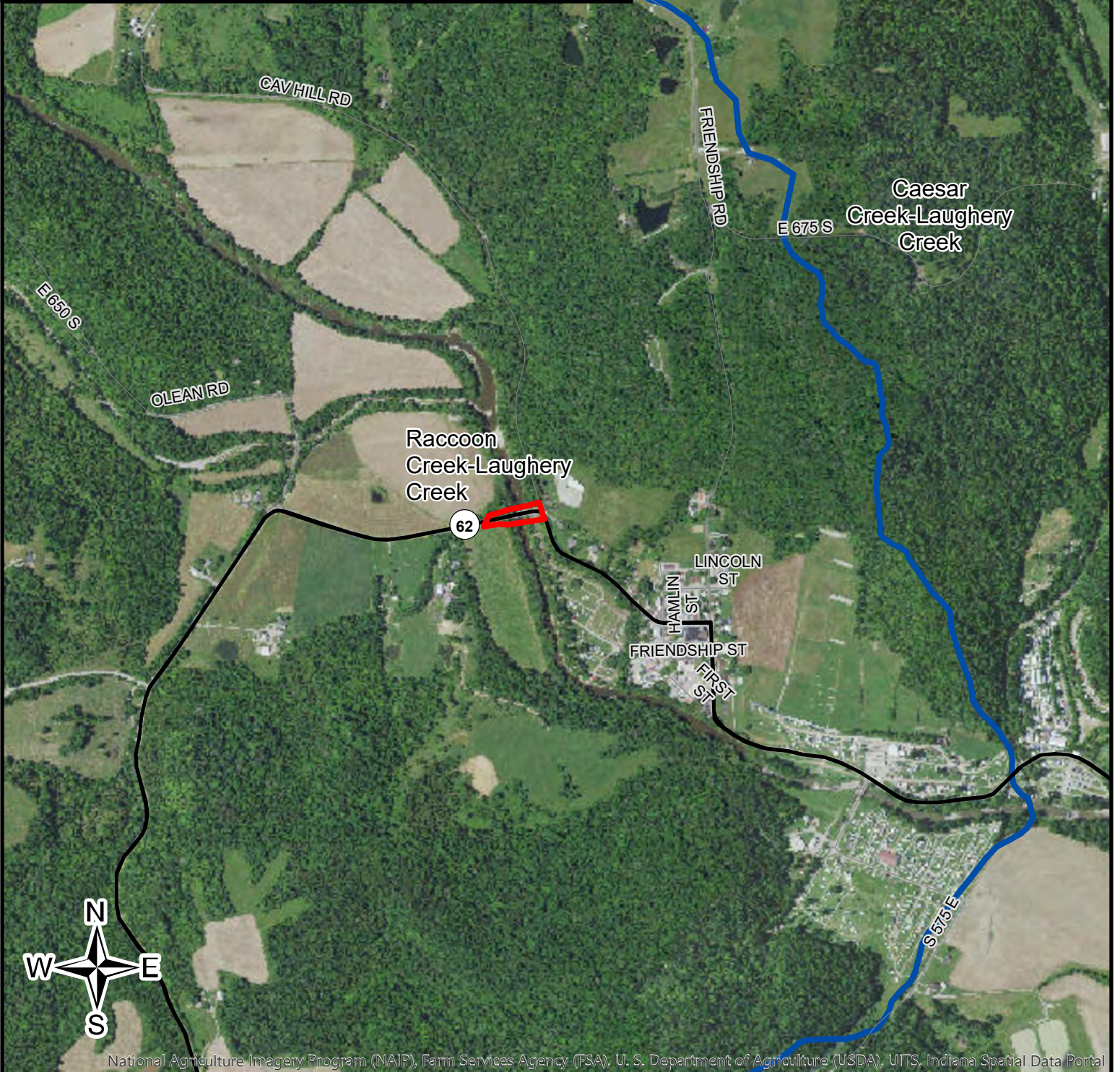
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4/17/2020





Watershed Map (1:12,970)  
Bridge Project  
SR 62 over Laughery Creek  
Des. No. 1700185  
Ripley County, Indiana  
Source: Indiana Department of Environmental Management



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

0 0.13 0.25  
Miles

 Investigated Area  
 HUC - 12

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5/26/2020



LiDAR Map (1:10,000)  
Bridge Project  
SR 62 over Laughery Creek  
Des. No. 1700185  
Ripley County, Indiana  
Source: Indiana Geological Survey



IGIC, IOT, UITS, IGS, Woodport

0 500 1,000  
Feet

 Investigated Area

green • 3



4/8/2020

F-12

Hydric Rating by Map Unit—Ripley County, Indiana




Soil Map may not be valid at this scale.

Map Scale: 1:1,400 if printed on A landscape (11" x 8.5") sheet.  
0 20 40 80 120 Meters  
0 50 100 200 300 Feet  
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84









### MAP LEGEND

**Area of Interest (AOI)**







 Area of Interest (AOI)

**Soils**







**Soil Rating Polygons**

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

**Soil Rating Lines**

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






**Soil Rating Points**

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available



**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

-  Aerial Photography
-  Investigated Area

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ripley County, Indiana  
 Survey Area Data: Version 19, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

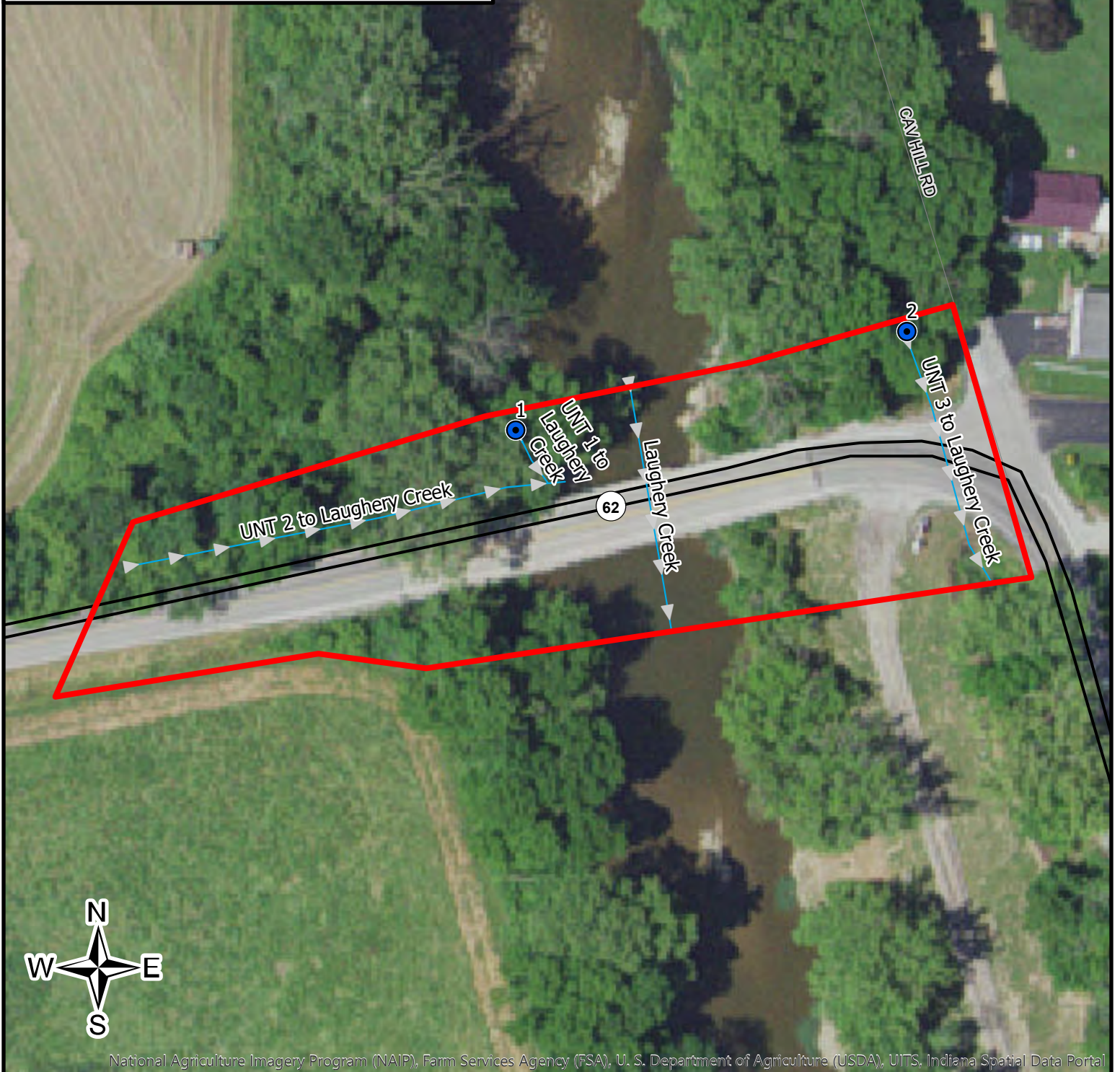
Date(s) aerial images were photographed: Oct 1, 2011—Feb 14, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydric Rating by Map Unit




Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Dr	Dearborn fine sandy loam, frequently flooded	0	0.0	0.0%
EkB	Elkinsville silt loam, 2 to 6 percent slopes	0	0.8	8.4%
EkC2	Elkinsville silt loam, 6 to 12 percent slopes, eroded	0	0.5	5.4%
No	Nolin silt loam, frequently flooded	0	1.0	10.3%
PeB2	Pekin silt loam, 2 to 6 percent slopes, eroded	0	0.4	4.0%
W	Water	0	1.3	13.7%
Wr	Wirt loam, flaggy clay substratum, frequently flooded	0	3.5	36.6%
Wt	Wirt silt loam, frequently flooded	0	2.1	21.5%
<b>Totals for Area of Interest</b>			<b>9.5</b>	<b>100.0%</b>

Water Resources Map (1:800)  
Bridge Project  
SR 62 over Laughery Creek  
Des. No. 1700185  
Ripley County, Indiana  
Source: Green 3, LLC Field Survey



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

0 45 90  
Feet

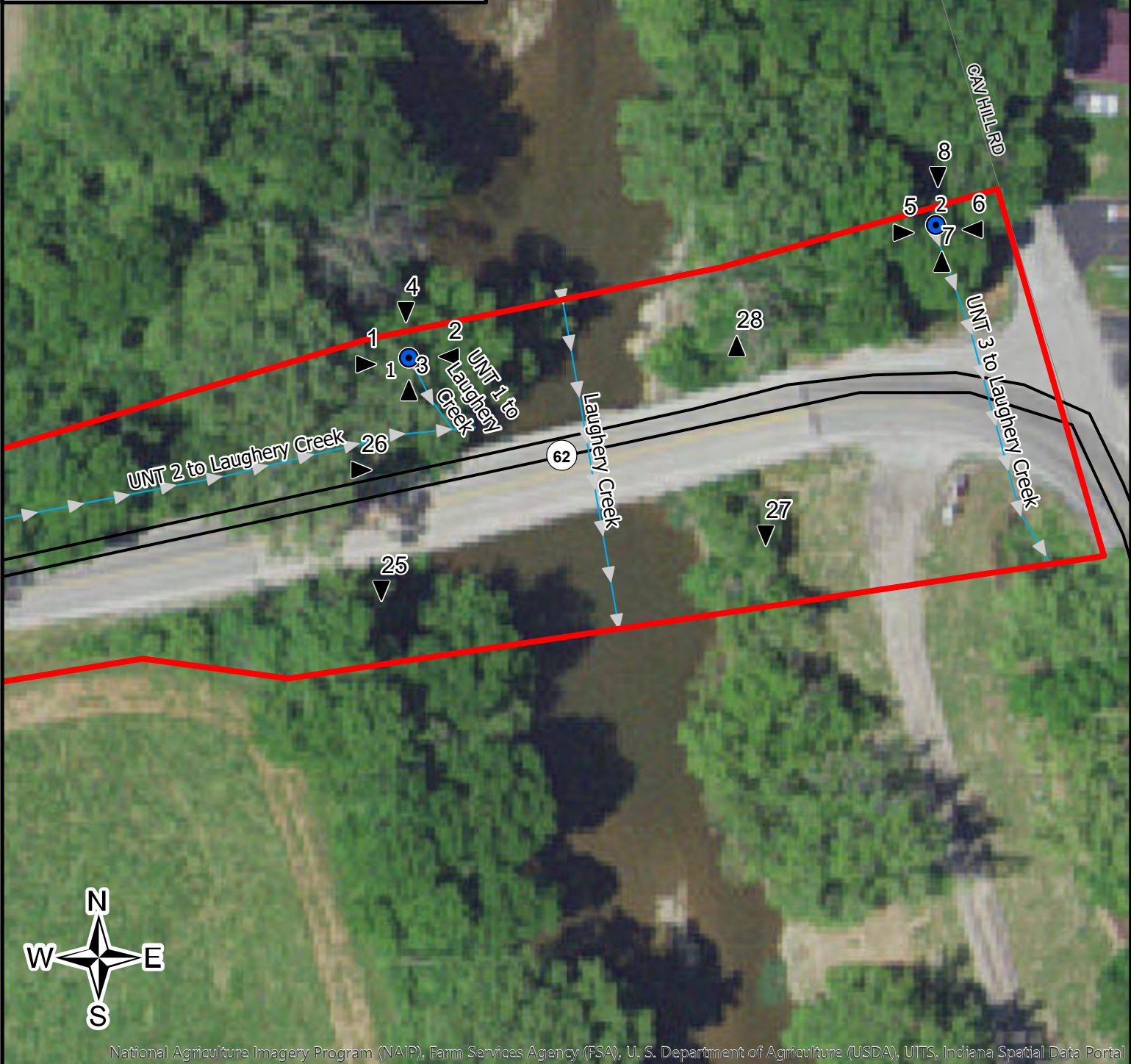
-  Investigated Area
-  Stream
-  Sample Point



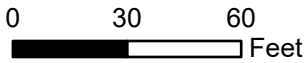
4/17/2020



Photo Location and Orientation Map:  
 SP and ROW (1:605)  
 Bridge Project  
 SR 62 Over Laughery Creek  
 Des. No. 1700185  
 Ripley County, Indiana  
 Source: Green 3, LLC Field Survey



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



- Investigated Area
- ▶ Stream
- Sample Point
- ▲ Photo Location



4/18/2020







Photo Location and Orientation Map:  
 Laughery Creek and UNT 1 (1:218)  
 Bridge Project  
 SR 62 Over Laughery Creek  
 Des. No. 1700185  
 Ripley County, Indiana  
 Source: Green 3, LLC Field Survey



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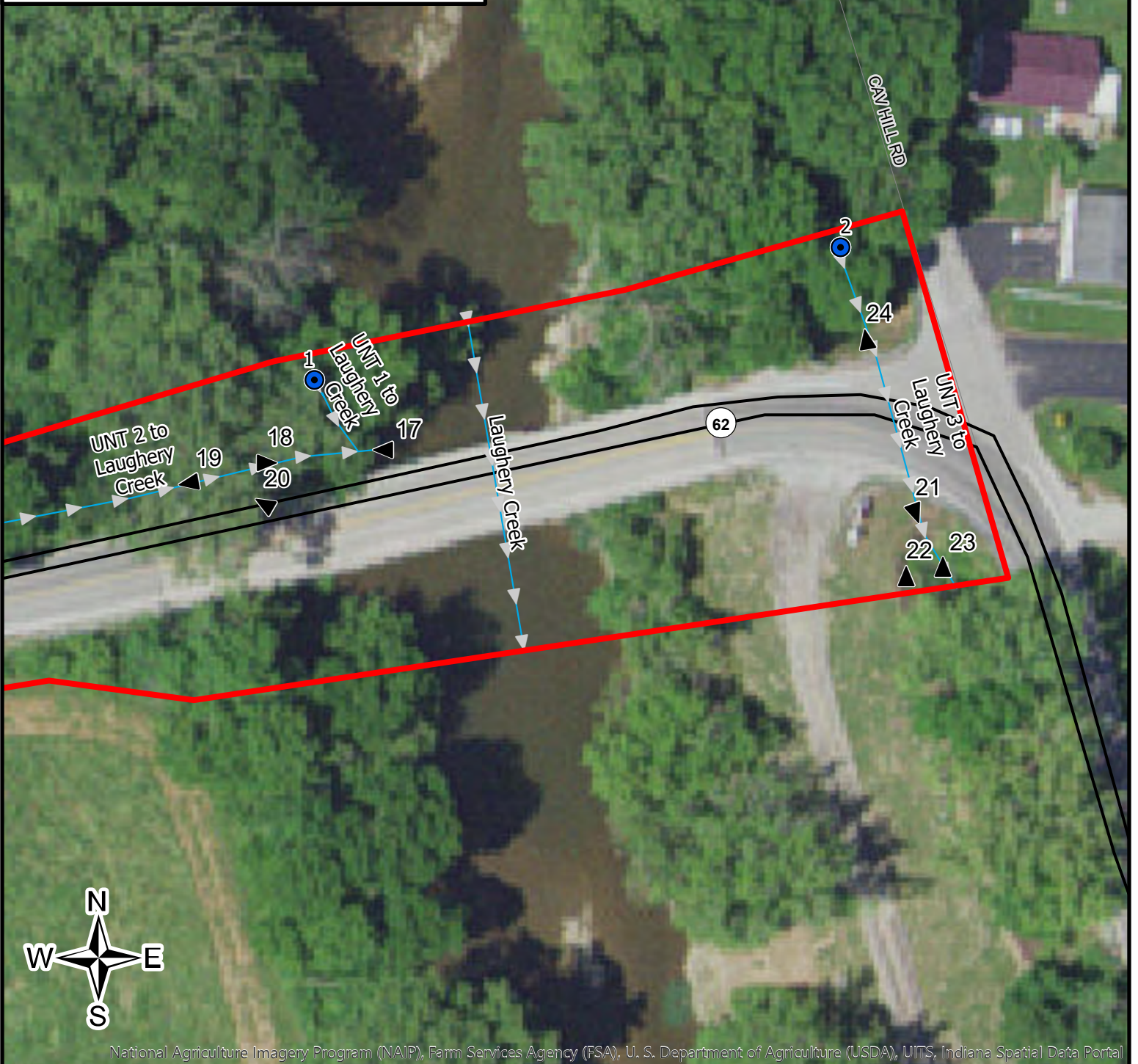
	Investigated Area
	Stream
	Sample Point
	Photo Location
4/17/2020	

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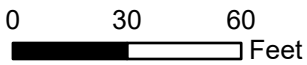




Photo Location and Orientation Map: UNT 2  
 and 3 to Laughery Creek (1:605)  
 Bridge Project  
 SR 62 Over Laughery Creek  
 Des. No. 1700185  
 Ripley County, Indiana  
 Source: Green 3, LLC Field Survey



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



- Investigated Area
- ▶ Stream
- Sample Point
- ▲ Photo Location

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4/17/2020





Photo 1: SP 1 Soil



Photo 2: SP 1 Pit



Photo 3: SP 1 Facing North



Photo 4: SP 1 Facing South





Photo 5: SP 2 Soil



Photo 6: SP 2 Pit



Photo 7: SP 2 Facing North



Photo 8: SP 2 Facing South





Photo 9: Laughery Creek Facing North from Northside of Structure



Photo 10: Laughery Creek Facing Southeast from Northside of Structure



Photo 11: Laughery Creek Facing Southeast from South Side of Structure



Photo 12: Laughery Creek Facing Northeast from South Side of Structure





Photo 13: UNT 1 to Laughery Creek Facing Southeast



Photo 14: UNT 1 to Laughery Creek Facing Northwest



Photo 15: UNT 1 to Laughery Creek Facing Northwest



Photo 16: UNT 1 to Laughery Creek Facing Southeast





Photo 17: UNT 2 to Laughery Creek Facing West



Photo 18: UNT 2 to Laughery Creek Facing East



Photo 19: UNT 2 to Laughery Creek Facing Southwest



Photo 20: UNT 2 to Laughery Creek Facing Northwest





Photo 21: UNT 3 to Laughery Creek Facing Southeast



Photo 22: UNT 3 to Laughery Creek Facing North



Photo 23: UNT 3 to Laughery Creek Substrate



Photo 24: UNT 3 to Laughery Creek Facing Northwest





Photo 25: ROW of Structure On Southside Facing South



Photo 26: ROW of Structure On Northside Facing East



Photo 27: ROW of Structure On Southside Facing South



Photo 28: ROW of Structure On Northside Facing North



# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Des 1700185 City/County: Ripley Sampling Date: 4/14/2020  
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: 1  
 Investigator(s): Christian Radcliff, Laney Walsta Section, Township, Range: Section 14, Township 6 N, Range 12 E  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2  
 Subregion (LRR or MLRA): MLRA: East and Central Farming Lat: 38.9724830°N Long: 85.1533000°W Datum: WGS 84  
 Soil Map Unit Name: Wirt Loam, Flaggy Clay Substratum, Frequently Flooded NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks: Sample point taken in low floodplain area near beginning of UNT 1 to Laughery Creek.			

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
--	--

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>14</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>13</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Wetland hydrology present at sample point.



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 1

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Platanus occidentalis</i>	40	X	FACW
2. <i>Acer negundo</i>	20	X	FAC
3. <i>Populus deltoides</i>	10		FAC
4. _____			
5. _____			
6. _____			
	<u>70</u>	= Total Cover	
	50% of total cover: <u>35</u>	20% of total cover: <u>14</u>	

Sapling Stratum (Plot size: <u>15 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
	<u>0</u>	= Total Cover	
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>	

Shrub Stratum (Plot size: <u>15 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
	<u>0</u>	= Total Cover	
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>	

Herb Stratum (Plot size: <u>5 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Phalaris arundinacea</i>	30	X	FACW
2. <i>Urtica dioica</i>	30	X	FACU
3. <i>Daucus carota</i>	20		UPL
4. <i>Lamium purpureum</i>	10		UPL
5. <i>Galium aparine</i>	10		FACU
6. <i>Rudbeckia laciniata</i>	5		FACW
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
	<u>105</u>	= Total Cover	
	50% of total cover: <u>52.5</u>	20% of total cover: <u>21</u>	

Woody Vine Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
	<u>0</u>	= Total Cover	
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>75</u>	x 2 = <u>150</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>40</u>	x 4 = <u>160</u>
UPL species <u>30</u>	x 5 = <u>150</u>
Column Totals: <u>175</u> (A)	<u>550</u> (B)

Prevalence Index = B/A = 2.28

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (Include photo numbers here or on a separate sheet.)  
 Hydrophytic vegetation present at sample point.

**SOIL**

Sampling Point: 1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/3	100					Silt Loam	
12-14	10 YR 4/3	85	10 YR 2/1	5	C	PL	Silt Loam	
			10 YR 4/6	10	C	M		
14-16	10 YR 5/1	95	10 YR 4/6	5	C	M	SiCL	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10) **(LRR N)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)

- Dark Surface (S7)
- Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- Thin Dark Surface (S9) **(MLRA 147, 148)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- Umbric Surface (F13) **(MLRA 136, 122)**
- Piedmont Floodplain Soils (F19) **(MLRA 148)**
- Red Parent Material (F21) **(MLRA 127, 147)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) **(MLRA 147)**
- Coast Prairie Redox (A16) **(MLRA 147, 148)**
- Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: Hydric soil not present at sample point.

## WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Des 1700185 City/County: Ripley Sampling Date: 4/14/2020  
 Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: 2  
 Investigator(s): Christian Radcliff, Laney Walsta Section, Township, Range: Section 14, Township 6 N, Range 12 E  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2  
 Subregion (LRR or MLRA): MLRA: East and Central Farming Lat: 38.9726028°N Long: 85.1526343°W Datum: WGS 84  
 Soil Map Unit Name: Nolin Silt Loam, Frequently Flooded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks: Sample point taken in low floodplain area near beginning of UNT 3 to Laughery Creek.			

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) <input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
---	---

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 Wetland hydrology present at sample point.

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 2

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis occidentalis</u>	40	X	FAC
2. <u>Populus deltoides</u>	20	X	FAC
3. <u>Acer negundo</u>	10		FAC
4. _____			
5. _____			
6. _____			
	<u>70</u>	= Total Cover	
	50% of total cover: <u>35</u>	20% of total cover: <u>14</u>	

Sapling Stratum (Plot size: <u>15 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
	<u>0</u>	= Total Cover	
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>	

Shrub Stratum (Plot size: <u>15 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lonicera maackii</u>	10	X	NI
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
	<u>10</u>	= Total Cover	
	50% of total cover: <u>5</u>	20% of total cover: <u>2</u>	

Herb Stratum (Plot size: <u>5 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Phalaris arundinacea</u>	80	X	FACW
2. <u>Glechoma hederacea</u>	25	X	FACU
3. <u>Rosa multiflora</u>	5		FACU
4. <u>Rudbeckia laciniata</u>	2		FACW
5. <u>Galium aparine</u>	2		FACU
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
	<u>114</u>	= Total Cover	
	50% of total cover: <u>57</u>	20% of total cover: <u>22.8</u>	

Woody Vine Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
	<u>0</u>	= Total Cover	
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>82</u>	x 2 = <u>164</u>
FAC species <u>70</u>	x 3 = <u>210</u>
FACU species <u>32</u>	x 4 = <u>128</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>184</u> (A)	<u>502</u> (B)

Prevalence Index = B/A = 2.032

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**

Yes  No

Remarks: (Include photo numbers here or on a separate sheet.)

Hydrophytic vegetation present at sample point.

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10 YR 4/3	100					Si CL	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> (MLRA 147, 148)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (MLRA 136, 147)	
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	Hydric Soil Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Remarks: Hydric soil not present at sample point.

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

**BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR PJD:** 5/27/2020

**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Laney Walstra, 1104 Prospect Street, Indianapolis, Indiana 46203

**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

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

This project is planned to perform a bridge rehabilitation project carrying SR 62 over Laughery Creek (062-69-05860A). The structure is located approximately 3.91 miles east of SR 129. The existing structure is a 3 span continuous steel beam bridge. The preferred alternative consists of a superstructure replacement with widened piers to accommodate the structure. Riprap will be placed on the spillslopes for scour protection.

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

State: Indiana      County/parish/borough: Ripley      City: Friendship

Center coordinates of site (lat/long in degree decimal format):

Lat.: 38.971483      Long.: -85.152485

Universal Transverse Mercator: 16S

Name of nearest waterbody: Laughery 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.**

<b>Site number</b>	<b>Latitude (decimal degrees)</b>	<b>Longitude (decimal degrees)</b>	<b>Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)</b>	<b>Type of aquatic resource (i.e., wetland vs. non-wetland waters)</b>	<b>Geographic authority to which the aquatic resource “may be” subject (i.e., Section 404 or Section 10/404)</b>
Laughery Creek	38.9724913	-85.1530955	60 linear ft, 0.2 acre	Non-Wetland Waters	<b>Section 404</b>
UNT 1 to Laughery Creek +	38.9724431	-85.1532797	30 linear ft, 0.002 acre	Non-Wetland Waters	<b>Section 404</b>
UNT 2 To Laughery Creek +	38.9723901	-85.1534447	220 linear ft, 0.015 acres	Non-Wetland Waters	<b>Section 404</b>
UNT 3 to Laughery Creek +	38.9724562	-85.1525861	135 linear ft, 0.03 acres	Non-Wetland Waters	<b>Section 404</b>

- 1) 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 “pre-construction 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 that there “*may be*” waters of the U.S. and/or that there “*may be*” 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: See Attached
- 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: NHD map and HUC 12 watershed map.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 - Cross Plains Quadrangle
- Natural Resources Conservation Service Soil Survey. Citation: 2019 Web Soil Survey data
- National wetlands inventory map(s). Cite name: 2014 NWI Data
- State/local wetland inventory map(s): \_\_\_\_\_
- FEMA/FIRM maps: 2019 Floodplain Data
- 100-year Floodplain Elevation is: \_\_\_\_\_.(National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 2016 NAIP Aerial Imagery  
or  Other (Name & Date): Site photos: April 14, 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  
completing PJD

  
\_\_\_\_\_  
Signature and date of  
person requesting PJD  
(REQUIRED, unless obtaining  
the signature is impracticable)<sup>1</sup>  
5/27/20

<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.

Des 1700185 CE-2

Appendix G

Public Involvement

Appendix G will be updated upon completion of public involvement.



# INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Land & Aerial Survey Office  
Division of Materials & Tests Building  
120 South Shortridge Road  
Indianapolis, Indiana 46219-6705

PHONE: (317) 610-7251  
FAX: (317) 356-9351

Eric J. Holcomb, Governor  
Joe McGuinness, Commissioner

10/26/2018



## NOTICE OF SURVEY

Dear Property Owner:

The Indiana Department of Transportation (INDOT) will perform a survey for the proposed Bridge Rehabilitation project on SR62 over Laughery Creek, Des No. 1700185, in Ripley County, Indiana. A portion of this survey work may be performed on your property in order to provide design engineers information for project design. The survey work will include mapping the location of features such as trees, buildings, fences, drives, ground elevations, etc. The survey is needed for the proper planning and design of this highway project.

At this stage we generally do not know what effect, if any, our project may eventually have on your property. If we determine later that your property is involved, we will contact you with additional information.

Indiana Code 8-23-7-26 allows the USI Consultants, Inc. Survey Section, as the authorized employees of INDOT, *Right of Entry* to the project site (including private property) upon proper notification. A copy of a Notice of Survey discussion sheet, as found on INDOT's website (<http://www.in.gov/indot/2888.htm>), is attached to this letter. Pursuant to Indiana Code 8-23-7-27, this letter serves as written notification that we will be performing the above noted survey in the vicinity of your property after 10/26/2018.

USI employees will show you their identification, if you are available, before coming onto your property.

If you own but are not the tenant of this property (i.e. rental, sharecrop), please inform us so that we may also contact the actual tenant of the property prior to commencement of our work. If you have any questions or concerns regarding our proposed survey work or schedule, please contact the Bridge Department Manager. This contact information is as follows:

Mike Halterman, PE  
Bridge Department Manager  
8415 E. 56<sup>th</sup> St. Suite A  
Indianapolis, IN 46216  
[mhalterman@usiconsultants.com](mailto:mhalterman@usiconsultants.com)  
317-522-2463



## INDIANA DEPARTMENT OF TRANSPORTATION

*Driving Indiana's Economic Growth*

Land & Aerial Survey Office  
Division of Materials & Tests Building  
120 South Shortridge Road  
Indianapolis, Indiana 46219-6705

PHONE: (317) 610-7251  
FAX: (317) 356-9351

**Eric J. Holcomb, Governor**  
**Joe McGuinness, Commissioner**

Under Indiana Code 8-23-7-28, you have a right to compensation for any damage that occurs to your land or water as a result of the entry or work performed during the entry. To obtain such compensation, you should contact the Seymour District Real Estate Manager; contact information is below. The District Real Estate Manager can provide you with a form to request compensation for damages. Once you fill out this form, you can return it to the District Real Estate Manager for consideration. If you are not satisfied with the compensation that INDOT determines is owed to you, Indiana Code 8-23-7-28 provides the following:

The amount of damages shall be assessed by the county agricultural extension educator of the county in which the land or water is located and two (2) disinterested residents of the county, one (1) appointed by the aggrieved party and one (1) appointed by the department. A written report of the assessment of damages shall be mailed to the aggrieved party and the department by first class United States mail. If either the department or the aggrieved party is not satisfied with the assessment of damages, either or both may file a petition, not later than fifteen (15) days after receiving the report, in the circuit or superior court of the county in which the land or water is located.

If you have questions regarding the rights and procedures outlined in this letter, please contact the Seymour Real Estate Manager. This contact information is as follows:

Nicole Curry  
185 Agrico Ln  
Jackson County, Seymour, IN 47274  
[ncurry@indot.in.gov](mailto:ncurry@indot.in.gov)  
812-524-3970

Thank you in advance for your cooperation in this matter.

Sincerely,

A handwritten signature in green ink that reads "Michael J. Halterman".

Mike Halterman  
Bridge Department Manager

Des 1700185 CE-2

Appendix H

Air Quality

Indiana Department of Transportation (INDOT)  
 State Preservation and Local Initiated Projects FY 2018 - 2021

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
Indiana Department of Transportation	39899 / 1600696	Init.	SR 129	Box Culvert Replacement	02.60 miles N of SR 350	Seymour	0	STP		Bridge ROW	RW	\$24,000.00	\$6,000.00			\$30,000.00	
										Bridge Consulting	PE	\$104,000.00	\$26,000.00	\$100,000.00			\$30,000.00
										Bridge Construction	PE	\$20,000.00	\$5,000.00				\$25,000.00
Indiana Department of Transportation	40425 / 1600494	A 01	US 421	Bridge Replacement, Concrete	0.32 mile S SR-229, over Laughery Creek	Seymour	0	NHPP	\$1,172,928.00	Bridge Consulting	PE	\$120,000.00	\$30,000.00	\$150,000.00			
Comments:Amend PE phase in FY 2018 to the current STIP. No MPO.																	
Indiana Department of Transportation	40425 / 1602282	A 01	SR 48	Small Structure Replacement	At 3.01 miles E of SR 129	Seymour	0	STP	\$577,284.00	Bridge ROW	RW	\$8,000.00	\$2,000.00				\$10,000.00
										Bridge Consulting	PE	\$86,400.00	\$21,600.00	\$108,000.00			
Comments:Amend PE phase in FY 2018 and RW phase in FY 2021 to the current STIP. No MPO.																	
Indiana Department of Transportation	40425 / 1700202	M 09	US 421	Br Repl, Comp. Cont. Conc. Construction	00.34 mile N of SR 229 at Laughery Creek	Seymour	0	NHPP	\$1,167,248.00	Bridge Consulting	PE	\$0.00	\$0.00	(\$150,000.00)	\$150,000.00		
Comments:Move PE phase from FY 2018 to FY 2019. No MPO.																	
Indiana Department of Transportation	40428 / 1602279	A 01	SR 46	Small Structure Replacement	At 2.59 miles E of SR 229	Seymour	0	STP	\$487,804.00	Bridge ROW	RW	\$8,000.00	\$2,000.00				\$10,000.00
										Bridge Consulting	PE	\$106,400.00	\$26,600.00	\$133,000.00			
Comments:Amend PE phase in FY 2018 and RW phase in FY 2021 to the current STIP. No MPO.																	
Indiana Department of Transportation	40428 / 1602279	M 09	SR 46	Small Structure Replacement	At 2.59 miles E of SR 229	Seymour	0	STP	\$487,804.00	Bridge Consulting	PE	\$0.00	\$0.00	(\$133,000.00)	\$133,000.00		
Comments:Move PE from FY 2018 to FY 2019. No MPO.																	
Indiana Department of Transportation	40429 / 1700054	A 21	SR 229	HMA Overlay Minor Structural	1.07 mile S of SR 46 to SR 46	Seymour	1.162	STP	\$1,905,180.00	Road Consulting	PE	\$160,000.00	\$40,000.00		\$200,000.00		
Comments:Amend PE phase to FY 2019. No MPO.																	
Indiana Department of Transportation	40430 / 1700208	A 02	I 74	Replace Superstructure	CR 600 E over I-74, 3.89 miles E of SR 229	Seymour	0	NHPP	\$2,161,759.00	Bridge Consulting	PE	\$180,000.00	\$20,000.00	\$200,000.00			
Comments:Amend PE Phase in FY 2018 to the current STIP. No MPO.																	
Indiana Department of Transportation	40434 / 1600683	A 01	SR 62	Box Culvert Replacement	1.1 mile E of SR 129 E Junction	Seymour	0	STP	\$792,438.00	Bridge Consulting	PE	\$120,000.00	\$30,000.00	\$150,000.00			
Comments:Amend PE phase in FY 2018 to the current STIP. No MPO.																	
Indiana Department of Transportation	40434 / 1700185	A 02	SR 62	Replace Superstructure	03.91 miles E of SR 129 at Laughery Creek	Seymour	0	STP	\$1,934,568.00	Bridge Consulting	PE	\$140,000.00	\$35,000.00	\$175,000.00			
Comments:Amend PE phase in FY 2018 to current STIP. No MPO.																	
Batesville	40462 / 1600748	A 14	ST 1001	Bike/Pedestrian Facilities	W SR 229, N Pohlman St, E Coonhunters Rd and West/East SR 129	Seymour	1.4	STP	\$1,498,340.00	Local Funds	PE	\$0.00	\$52,167.54	\$52,167.54			

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



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

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
<b>Ripley County</b>																		
Ripley County	38183 / 1500213	Init.	VA VARI	Bridge Inspections	Countywide Bridge Inspection and Inventory Program for Cycle Years 2018-2021	Seymour	0	STPBG		Local Bridge Program	PE	\$81,445.94	\$0.00	\$4,965.60	\$71,335.54	\$5,144.80		
										Local Funds	PE	\$0.00	\$20,361.48	\$1,241.40	\$17,833.88	\$1,286.20		
Indiana Department of Transportation	39771 / 1593145	A 17	SR 62	Bridge Deck Replacement	4.93 miles E of SR 129 over Caesar Creek	Seymour	0	STBG	\$1,136,317.00	Bridge ROW	RW	\$24,000.00	\$6,000.00	\$30,000.00				
										Bridge Construction	CN	\$885,053.60	\$221,263.40		\$1,106,317.00			
Comments:No MPO. Add RW for \$30K in 2020, and add CN for \$1,106,317 in 2021. Conformity NA.																		
Indiana Department of Transportation	39895 / 1600506	Init.	US 421	Br Repl, Cont. Rc Slab	0.8 mile S of SR 129 over Graham Creek	Seymour	0	NHPP		Bridge ROW	RW	\$24,000.00	\$6,000.00	\$30,000.00				
										Bridge Construction	CN	\$748,634.40	\$187,158.60		\$935,793.00			
Indiana Department of Transportation	39899 / 1600696	Init.	SR 129	Box Culvert Replacement	02.60 miles N of SR 350	Seymour	0	STPBG		Bridge ROW	RW	\$24,000.00	\$6,000.00	\$30,000.00				
										Bridge Construction	CN	\$115,006.40	\$28,751.60		\$143,758.00			
Indiana Department of Transportation	40425 / 1600494	Init.	US 421	Bridge Replacement, Concrete	0.32 mile S SR-229, over Laughery Creek	Seymour	0	NHPP		Bridge ROW	RW	\$40,000.00	\$10,000.00		\$50,000.00			
										Bridge Construction	CN	\$2,133,610.40	\$533,402.60			\$2,667,013.00		
Indiana Department of Transportation	40429 / 1700054	Init.	SR 229	HMA Overlay Minor Structural	1.07 mile S of SR 46 to SR 46	Seymour	1.162	STPBG		Road Construction	CN	\$1,429,175.20	\$357,293.80				\$1,786,469.00	
Indiana Department of Transportation	40429 / 1700054	A 01	SR 229	HMA Overlay Minor Structural	1.07 mile S of SR 46 to SR 46	Seymour	1.162	STBG	\$1,986,469.00	Road Consulting	PE	\$160,000.00	\$40,000.00	\$200,000.00				
Comments:Amend PE to current STIP. No MPO.																		
Indiana Department of Transportation	40430 / 1700208	Init.	I 74	Replace Superstructure	CR 600 E over I-74, 3.89 miles E of SR 229	Seymour	0	NHPP		Bridge Construction	CN	\$1,789,694.10	\$198,854.90				\$1,988,549.00	
Indiana Department of Transportation	40434 / 1700185	Init.	SR 62	Replace Superstructure	03.91 miles E of SR 129 at Laughery Creek	Seymour	0	STPBG		Bridge ROW	RW	\$28,000.00	\$7,000.00		\$35,000.00			
										Bridge Construction	CN	\$1,860,700.00	\$465,175.00			\$2,325,875.00		
Batesville	40462 / 1600748	Init.	ST 1001	Bike/Pedestrian Facilities	W SR 229, N Pohlman St, E Coonhunters Rd and West/East SR 129	Seymour	1.4	STPBG		Local Transportation Alternatives	CN	\$990,000.00	\$0.00				\$990,000.00	
										Local Funds	CN	\$0.00	\$247,500.00			\$247,500.00		
Batesville	40462 / 1600748	A 07	ST 1001	Bike/Pedestrian Facilities	W SR 229, N Pohlman St, E Coonhunters Rd and West/East SR 129	Seymour	1.4	STBG	\$1,650,337.70	Local Transportation Alternatives	CN	\$8,000.00	\$0.00	\$8,000.00				

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Appendix I

Additional Studies

Des 1700185 - Ripley County LWCF Properties			
1800111	1800111	Ripley	Liberty Park & Park Reservoir
1800116	1800116	Ripley	Batesville Memorial Pool
1800171	1800171Q	Ripley	Versailles State Park
1800178	1800178	Ripley	Versailles State Park
1800181	1800181	Ripley	Versailles State Park
1800312	1800312S	Ripley	Versailles State Park
1800327	1800327M	Ripley	Versailles State Park
1800363	1800363HH	Ripley	Versailles State Park
1800378	1800378H	Ripley	Versailles State Park
1800413	1800413W	Ripley	Versailles State Park
1800471	1800471	Ripley	Milan Community Park
1800597	1800597	Ripley	Six Pines Ranch Park
1800328	1800328	Various*	Heritage program
1800594	1800594	Various*	Brown County State Park and Versailles State Park
1800611	1800611	Various*	Whitewater Memorial State Park/Salamonie Reservoir
1800626	1800626	Various*	Brown County S.P., Indiana Dunes S.P. and Cataract Falls SRA

## Environmental Justice Analysis for SR 62 Small Structure (Des 1700185)

		COC Ripley County, Indiana	AC1 Census Tract 9689, Ripley County, Indiana
<b>LOW-INCOME</b>			
B 17001001	Population for whom poverty status is determined: Total	27,855	4,867
B 17001002	Population for whom poverty status is determined: Income in past 12 months below poverty	2,916	365
<b>Percent Low-Income</b>		<b>10.5%</b>	<b>7.5%</b>
<b>125 Percent of COC</b>		<b>13.1%</b>	<b>AC&lt;125% COC</b>
<b>Potential Low-Income EJ Impact?</b>			<b>No</b>
<b>MINORITY</b>			
B 03002001	Total population: Total	28,372	8,245
B 03002002	Total population: Not Hispanic or Latino	27,863	8,226
B 03002003	Total population: Not Hispanic or Latino; White alone	27,131	8,181
B 03002004	Total population: Not Hispanic or Latino; Black or African American alone	137	22
B 03002005	Total population: Not Hispanic or Latino; American Indian and Alaska Native alone	128	0
B 03002006	Total population: Not Hispanic or Latino; Asian alone	276	23
B 03002007	Total population: Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander	0	0
B 03002008	Total population: Not Hispanic or Latino; Some other race alone	33	0
B 03002009	Total population: Not Hispanic or Latino; Two or more races	158	0
B 03002010	Total population: Hispanic or Latino	509	19
B 03002011	Total population: Hispanic or Latino; White alone	436	0
B 03002012	Total population: Hispanic or Latino; Black or African American alone	0	0
B 03002013	Total population: Hispanic or Latino; American Indian and Alaska Native alone	21	0
B 03002014	Total population: Hispanic or Latino; Asian alone	0	0
B 03002015	Total population: Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone	0	0
B 03002016	Total population: Hispanic or Latino; Some other race alone	45	19
B 03002017	Total population: Hispanic or Latino; Two or more races	7	0
<b>Number Non-White/Minority (P007001-P007003)</b>		<b>1,241</b>	<b>64</b>
<b>Percent Non-White/Minority</b>		<b>4.4%</b>	<b>0.8%</b>
<b>125 Percent of COC</b>		<b>5.5%</b>	<b>AC&lt;125% COC</b>
<b>Potential Minority EJ Impact?</b>			<b>No</b>



**Legend:**

**Your Selections**

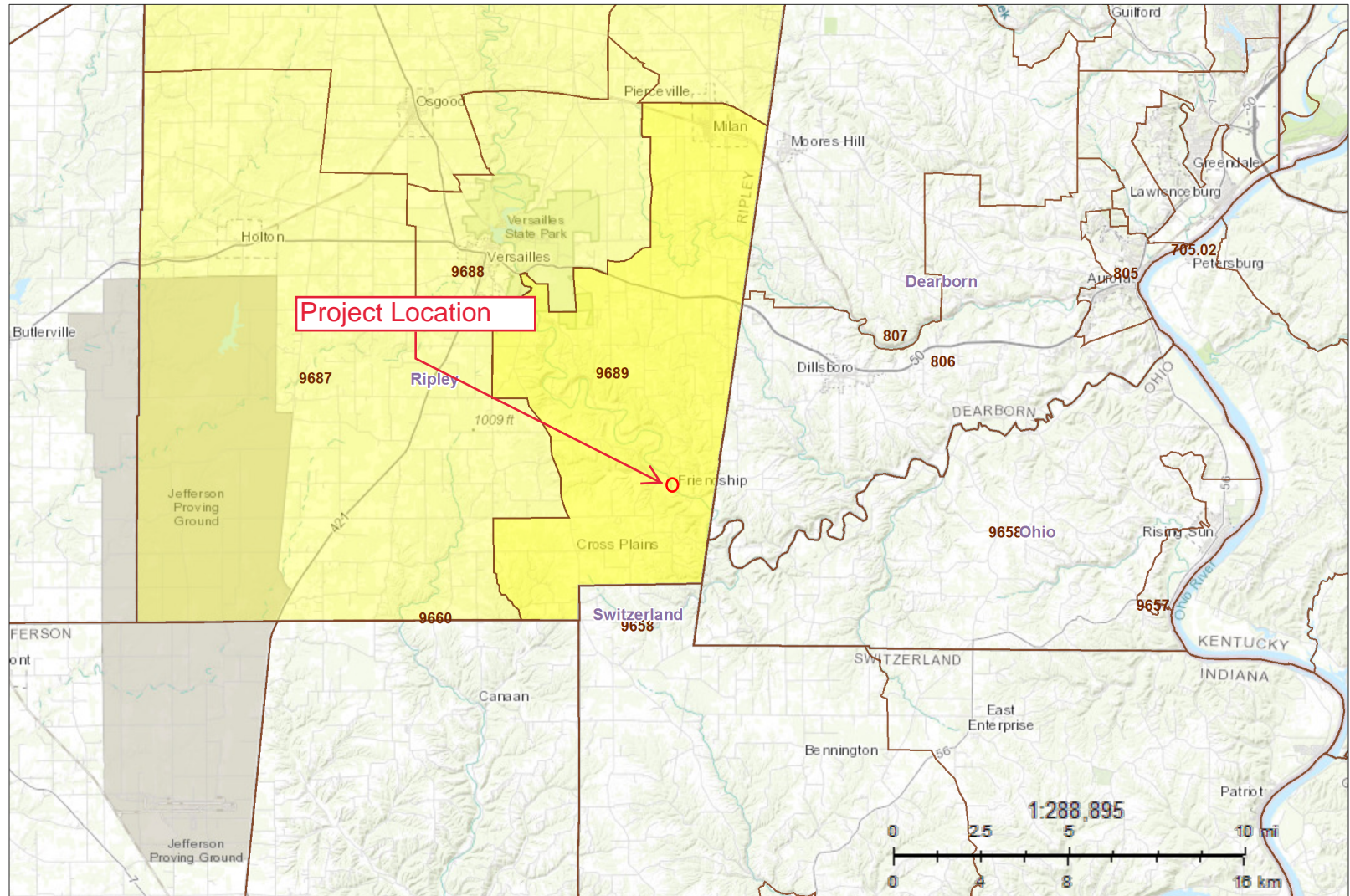
- 2017 boundaries were used to map 'Your Selections'

**Selection Results**

No Legend

**2018 Boundaries**

- County
- Census Tract





B03002

HISPANIC OR LATINO ORIGIN BY RACE  
Universe: Total population  
2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Ripley County, Indiana		Census Tract 9689, Ripley County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	28,372	*****	4,890	+/-322
Not Hispanic or Latino:	27,863	*****	4,884	+/-322
White alone	27,131	+/-47	4,831	+/-321
Black or African American alone	137	+/-83	0	+/-11
American Indian and Alaska Native alone	128	+/-33	18	+/-20
Asian alone	276	+/-140	24	+/-36
Native Hawaiian and Other Pacific Islander alone	0	+/-21	0	+/-11
Some other race alone	33	+/-39	7	+/-14
Two or more races:	158	+/-82	4	+/-10
Two races including Some other race	18	+/-28	0	+/-11
Two races excluding Some other race, and three or more races	140	+/-77	4	+/-10
Hispanic or Latino:	509	*****	6	+/-10
White alone	436	+/-56	0	+/-11
Black or African American alone	0	+/-21	0	+/-11
American Indian and Alaska Native alone	21	+/-34	0	+/-11
Asian alone	0	+/-21	0	+/-11
Native Hawaiian and Other Pacific Islander alone	0	+/-21	0	+/-11
Some other race alone	45	+/-46	6	+/-10
Two or more races:	7	+/-12	0	+/-11



	Ripley County, Indiana		Census Tract 9689, Ripley County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Two races including Some other race	3	+/-7	0	+/-11
Two races excluding Some other race, and three or more races	4	+/-8	0	+/-11

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.



B17001

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Universe: Population for whom poverty status is determined  
2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Ripley County, Indiana		Census Tract 9689, Ripley County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	27,855	+/-112	4,867	+/-326
Income in the past 12 months below poverty level:	2,916	+/-552	365	+/-138
Male:	1,317	+/-281	179	+/-90
Under 5 years	160	+/-95	22	+/-25
5 years	74	+/-49	7	+/-10
6 to 11 years	114	+/-68	12	+/-14
12 to 14 years	112	+/-52	21	+/-19
15 years	39	+/-34	0	+/-11
16 and 17 years	40	+/-25	8	+/-12
18 to 24 years	162	+/-77	20	+/-22
25 to 34 years	221	+/-99	23	+/-22
35 to 44 years	64	+/-35	16	+/-25
45 to 54 years	125	+/-66	0	+/-11
55 to 64 years	81	+/-41	33	+/-26
65 to 74 years	62	+/-45	5	+/-6
75 years and over	63	+/-38	12	+/-20
Female:	1,599	+/-326	186	+/-80
Under 5 years	138	+/-65	0	+/-11
5 years	20	+/-27	0	+/-11

	Ripley County, Indiana		Census Tract 9689, Ripley County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
6 to 11 years	196	+/-105	0	+/-11
12 to 14 years	84	+/-49	0	+/-11
15 years	2	+/-3	0	+/-11
16 and 17 years	80	+/-62	8	+/-12
18 to 24 years	131	+/-63	38	+/-37
25 to 34 years	180	+/-68	20	+/-18
35 to 44 years	202	+/-87	28	+/-36
45 to 54 years	207	+/-70	30	+/-32
55 to 64 years	157	+/-62	35	+/-39
65 to 74 years	73	+/-50	0	+/-11
75 years and over	129	+/-53	27	+/-23
Income in the past 12 months at or above poverty level:	24,939	+/-532	4,502	+/-333
Male:	12,468	+/-281	2,299	+/-190
Under 5 years	654	+/-99	167	+/-72
5 years	171	+/-71	31	+/-33
6 to 11 years	1,006	+/-138	152	+/-55
12 to 14 years	459	+/-134	136	+/-66
15 years	183	+/-79	28	+/-23
16 and 17 years	382	+/-79	86	+/-56
18 to 24 years	1,084	+/-101	166	+/-75
25 to 34 years	1,325	+/-96	219	+/-80
35 to 44 years	1,577	+/-70	297	+/-66
45 to 54 years	1,909	+/-95	417	+/-96
55 to 64 years	1,788	+/-52	308	+/-68
65 to 74 years	1,210	+/-49	181	+/-48
75 years and over	720	+/-69	111	+/-55
Female:	12,471	+/-369	2,203	+/-192
Under 5 years	685	+/-83	67	+/-37
5 years	180	+/-70	25	+/-23
6 to 11 years	1,057	+/-146	161	+/-72
12 to 14 years	358	+/-95	42	+/-29
15 years	126	+/-58	8	+/-12
16 and 17 years	427	+/-72	121	+/-69
18 to 24 years	973	+/-65	191	+/-95
25 to 34 years	1,332	+/-80	233	+/-72
35 to 44 years	1,527	+/-102	245	+/-68
45 to 54 years	1,795	+/-87	379	+/-97
55 to 64 years	1,812	+/-80	403	+/-88
65 to 74 years	1,314	+/-59	243	+/-68
75 years and over	885	+/-83	85	+/-39

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling

variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

#### Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.