

## **Appendix E**

### **Red Flag and Hazardous Materials**

<b>Item</b>	<b>Appendix Page</b>
Red Flag Investigation	E-1 to E-14



# INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue  
Room N642  
Indianapolis, Indiana 46204

PHONE: (317) 232-5113  
FAX: (317) 233-4929

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

Date: April 16, 2020

To: Site Assessment & Management  
Environmental Policy Office – Environmental Service Division  
Indiana Department of Transportation  
100 N Senate Avenue, Room N642  
Indianapolis, IN 46204

From: Mackenzie Knotts  
CHA Consulting, Inc.  
300 S. Meridian Street  
Indianapolis, IN 46225  
mknotts@chacompanies.com

Re: RED FLAG INVESTIGATION  
INDOT Des. No. 1700050, State Project  
Intersection Improvement  
SR 3 and SR 46  
Decatur County, Indiana

## PROJECT DESCRIPTION

### Brief Description of Project:

The Indiana Department of Transportation (INDOT) is proposing to proceed with the improvements of the State Road (SR) 3 and SR 46 intersection, in Washington Township, Decatur County, Indiana. This project involves reconstruction of the existing intersection as an unsignalized Median U-turn intersection. Median U-turns will be located along SR 3 800 ft. north of the main intersection, and 500 ft. south of the main intersection. This project includes removing the three existing turning roadways and replacing with standard right turn lanes. Additionally, the existing twin 34" x 22" pipes under the eastbound-southbound ramp will be removed and reset next to the existing maintenance pipes under CR 250 W. Culvert #CV 003-016-70.25, which is located 0.17 mile northeast of the intersection, will not be impacted by the project. Existing pavement will be milled and resurfaced and new pavement will be installed for new shoulders and new turning lanes. This work will be limited to the existing right-of-way, and within previously disturbed soils.

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

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

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

Proposed right of way: Temporary  # Acres n/a Permanent  # Acres n/a

Type of excavation: Excavation is planned to be three feet deep at median u-turn, road removal, and new pavement. Excavation for the removal of the twin 34" x 22" pipes, where the existing eastbound-southbound ramp is removed, is expected to be five feet.

Maintenance of traffic: Traffic will be maintained through a partial detour during construction allowing for travel in one lane in each direction along SR 3 for continued access.

Work in waterway: Yes  No ; Below ordinary high water mark: Yes  No

State Project:  LPA:

Any other factors influencing recommendations: N/A

**INFRASTRUCTURE TABLE AND SUMMARY**

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

Explanation:

*Airports:*

One (1) airport was identified within the one half mile investigation radius. The Greensburg Municipal Airport (FAA Identifier: I34) is a public airport mapped 0.36 mile south of the project area; however, the airport runway extends to 0.04 mile south of the project area. Coordination with INDOT Aviation will occur.

*Recreational Facilities:*

Four (4) recreational facilities were identified within the one half mile investigation radius. The nearest facility, Greensburg City Park, is located 0.07 mile southeast of the project area. Coordination with the Decatur County Parks and Recreation Department will occur.

*Pipelines:*

Three (3) pipelines, owned by Indiana Gas Co. Inc., were identified within the one half mile investigation radius. One (1) pipeline crosses the project area. Coordination with INDOT Utilities and Railroads should occur.

*Railroads:*

Three (3) railroads were identified within the one half mile investigation radius. One (1) railroad segment crosses the project area. Coordination with INDOT Utilities and Railroads should occur.

*Trails:*

One (1) planned trail was identified within the one half mile investigation radius. The trail, Greensburg Bicycle/Pedestrian Path, is located 0.06 mile east of the project area. Coordination with the City of Greensburg will occur.

*Managed Lands:*

One (1) managed land area was identified within the one half mile investigation radius. The managed land, Greensburg City Park, is located 0.07 mile southeast of the project area. Coordination with the Decatur County Parks and Recreation Department will occur.

**WATER RESOURCES TABLE AND SUMMARY**

<b>Water Resources</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI-Points	<b>N/A</b>	NWI - Wetlands	<b>5</b>
Karst Springs	<b>N/A</b>	IDEM 303d Listed Lakes	<b>N/A</b>
Canal Structures	<b>N/A</b>	Lakes	<b>4</b>
NWI - Lines	<b>4</b>	Floodplain - DFIRM	<b>15</b>
IDEM 303d Listed Rivers and Streams (Impaired)	<b>N/A</b>	Cave Entrance Density	<b>N/A</b>
Rivers and Streams	<b>10</b>	Sinkhole Areas	<b>N/A</b>
Canal Routes-Historic	<b>N/A</b>	Sinking-Stream Basins	<b>N/A</b>

**Explanation:**

It is likely that additional water resources, such as unnamed tributaries, regulated drains, wetlands, and roadside ditches are located in the project area. A Waters of the US Report will be prepared and coordination with INDOT Ecology and Waterway Permitting will occur.

*NWI – Lines:*

Four (4) National Wetland Inventory (NWI) lines were identified within the one half mile investigation radius. The nearest NWI-line is located 0.19 mile east of the project area. No impact is expected.

*Rivers and Streams:*

Ten (10) river and stream segments were identified within the half mile investigation radius. The nearest stream, Muddy Fork Sand Creek, is located 0.17 mile east of the project area. No impact is expected.

*NWI – Wetlands:*

Five (5) NWI wetlands were identified within the half mile investigation radius. The nearest NWI wetland is located 0.10 mile southeast. No impact is expected.

*Lakes:*

Four (4) lakes were identified within the half mile investigation radius. The nearest lake, Greensburg City Park Lake, is located 0.11 mile southeast of the project area. No impact is expected.

*Floodplains – DFIRM:*

Fifteen (15) floodplain polygons were identified within the one half mile investigation radius. The nearest floodplain is located 0.10 mile southeast of the project area. No impact is expected.

**URBANIZED AREA BOUNDARY**

This project lies within the Greensburg Urbanized Area Boundary (UAB). Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the Greensburg UAB MS4 Coordinator at 950 South Broadway Greensburg, Indiana 47240.

**MINING/MINERAL EXPLORATION TABLE AND SUMMARY**

<b>Mining/Mineral Exploration</b> Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	<b>2</b>	Petroleum Fields	<b>N/A</b>
Mines - Surface	<b>N/A</b>	Mines - Underground	<b>N/A</b>

Explanation:

*Petroleum Wells:*

Two (2) wells were identified, unknown operators, within the half mile investigation radius. The nearest petroleum well is located 0.33 mile northeast of the project area. No Impact is expected.

**HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY**

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

Explanation:

*Underground Storage Tank (UST):*

One (1) UST site, Greensburg Country Club (1630 West Park Road; AI 2156), is mapped 0.32 mile southeast of the project area. A Notification for Underground Storage Tanks filed on December 16, 1991 noted that the UST was removed and had a clean closure. No impact expected.

*Voluntary Remediation Program (VRP):*

One (1) VRP site, Advanced Bearing Materials LLC (1515 West Main Street; AI 15726), is mapped 0.45 mile east of the project area. A Remediation Progress report on March 6, 2019 noted that the contaminant Trichloroethylene (TCE) still remains in the groundwater. The groundwater flows southwest, south of the intersection. No impact expected.

*Leaking Underground Storage (LUST):*

One (1) LUST site, Printpack Inc (1505 West Main Street; AI 15005), is mapped 0.49 mile northeast of the project area. Four USTs were removed from the site on February 1, 1991. During the closure, soil contamination was noted, the soil was excavated and tested for n-Propyl acetate and n-Propyl alcohol. There were no records in the VFC at the time of this report of further investigation. The site appears to have a clean closure. IDEM issued a No Further Action letter on April 21, 1999. No impact expected.

*Confined Feeding Operations (CFO):*

One (1) CFO site, Fred Sterchi Farm (2389 West Base Road; AI 5860), is mapped 0.22 mile west-southwest of the project area. IDEM conducted a Routine CFO inspection on November 21, 2018, and the facility was found to be in compliance with animal types, manure management systems, and structures set forth in the Confined Feed Control Law (IC 13-18-10) and Confined Feeding Operation regulation (327 IAC 19). No impact is expected.

**ECOLOGICAL INFORMATION SUMMARY**

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

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

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 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**

**INFRASTRUCTURE:**

Airports: One (1) public airport, Greensburg Municipal Airport, is mapped 0.38 mile south of the project area; however, the airport runway extends to 0.04 mile south of the project area. Coordination with INDOT Aviation will occur.

Recreational Facilities: Greensburg City Park is located 0.07 mile southeast of the project area. Coordination with the Decatur County Parks and Recreation Department will occur.

Pipelines: One (1) pipeline crosses through the project area. Coordination with INDOT Utilities and Railroads will occur.

Railroads: One (1) railroad crosses through the project area. Coordination with INDOT Utilities and Railroads will occur.

Trails: One (1) planned trail, Greensburg Bicycle/Pedestrian Path, is located 0.06 mile east of the project area. Coordination with the City of Greensburg will occur.

Managed Lands: One (1) managed land, Greensburg City Park, is located 0.07 mile southeast of the project area. Coordination with the Decatur County Parks and Recreation Department will occur.

**WATER RESOURCES:**

The presence of the following water resources will require the preparation of a Waters of the US Report and coordination with INDOT ES Ecology and Waterway permitting:


It is likely that additional water resources, such as unnamed tributaries, regulated drains, wetlands, and roadside ditches are located in the project area.

**URBANIZED AREA BOUNDARY:** This project lies within the Greensburg Urbanized Area Boundary (UAB). Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the Greensburg UAB MS4 Coordinator at 950 South Broadway Greensburg, Indiana 47240.

**MINING/MINERAL EXPLORATION:** N/A

**HAZMAT 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 for INDOT Projects".

INDOT Environmental Services concurrence: Aaron Aldred  Digitally signed by Aaron Aldred  
Date: 2020.04.16 10:45:32 -04'00' (Signature)

Prepared by:

  
CHA Consulting, Inc.  
Mackenzie Knotts, Environmental Scientist

**Graphics:**

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: YES

MINING/MINERAL EXPLORATION: YES

HAZMAT CONCERNS: YES



Red Flag Investigation - Site Location  
 SR 46 and SR 3 Intersection Improvement  
 Des. No. 1700050, Roadway Improvements  
 Decatur County, Indiana



Sources: 0.15 0.075 0 0.15 Miles  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83  
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

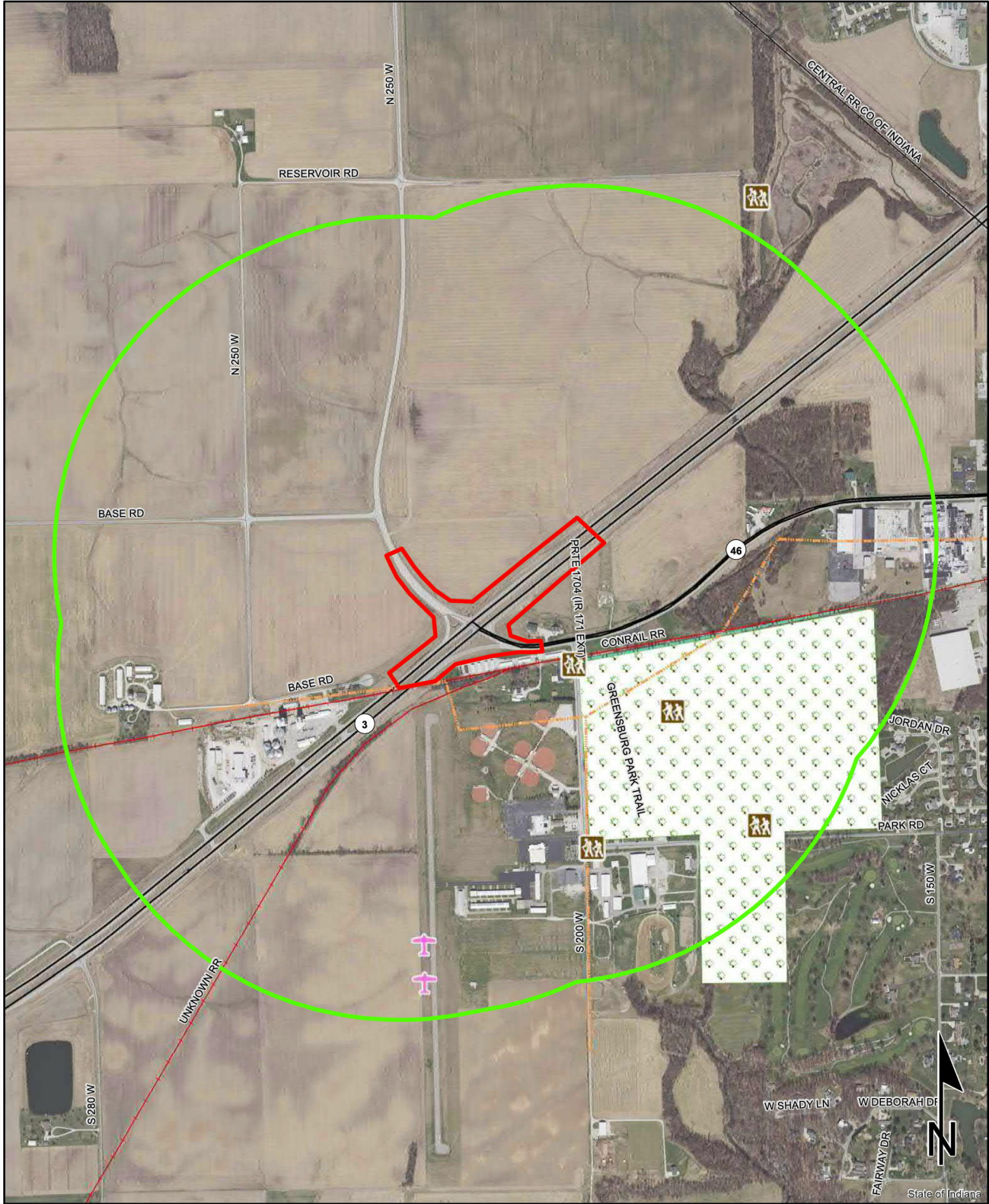
FOREST HILL QUADRANGLE  
 INDIANA  
 7.5 MINUTE SERIES  
 (TOPOGRAPHIC)

# Red Flag Investigation - Infrastructure

## SR 46 and SR 3 Intersection Improvement

### Des. No. 1700050, Roadway Improvements

### Decatur County, Indiana



**Sources:** 0.15 0.075 0 0.15 Miles

**Non Orthophotography Data** - Obtained from the State of Indiana Geographical Information Office Library

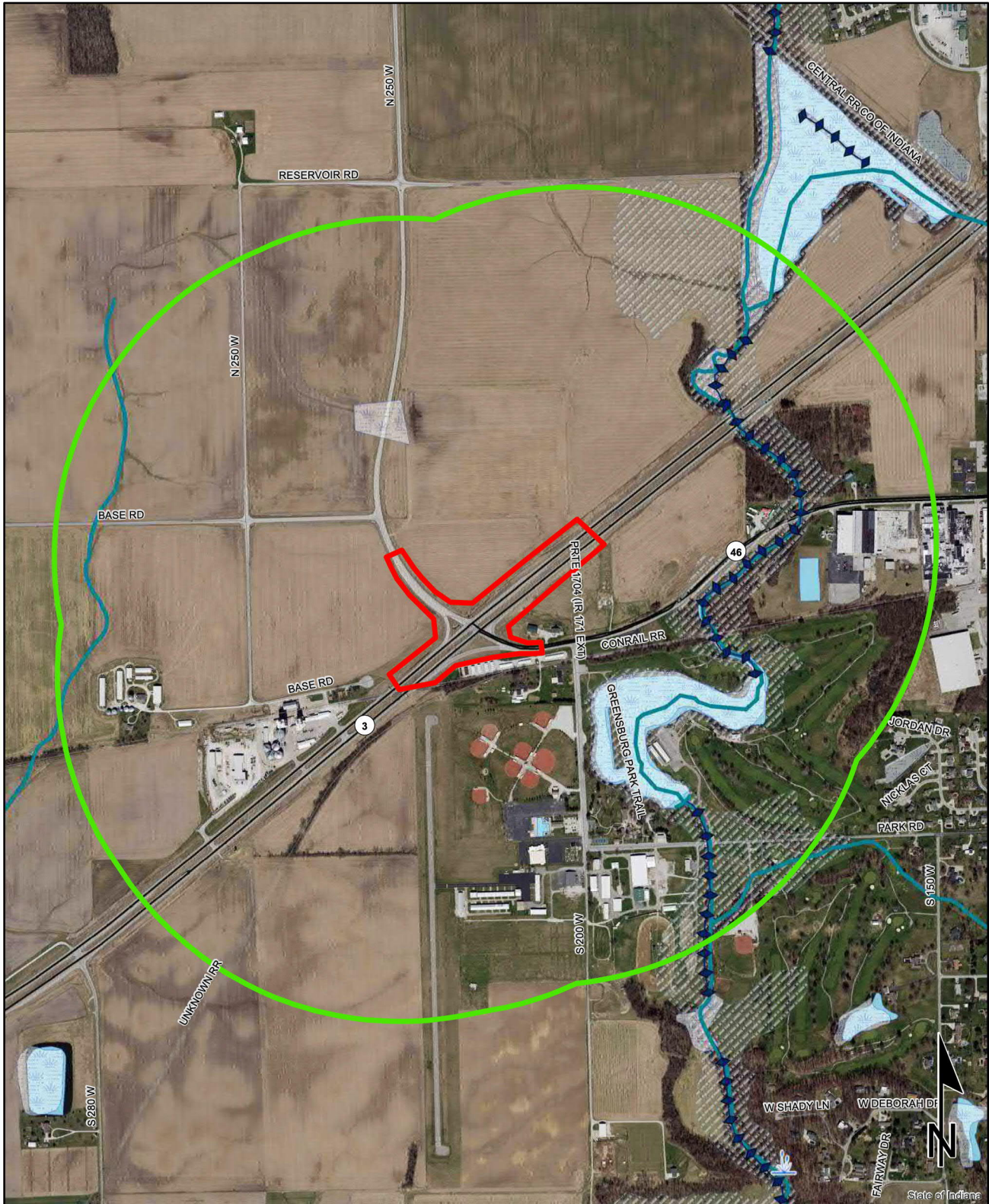
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))

**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

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

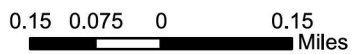
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

# Red Flag Investigation - Water Resources SR 46 and SR 3 Intersection Improvement Des. No. 1700050, Roadway Improvements Decatur County, Indiana



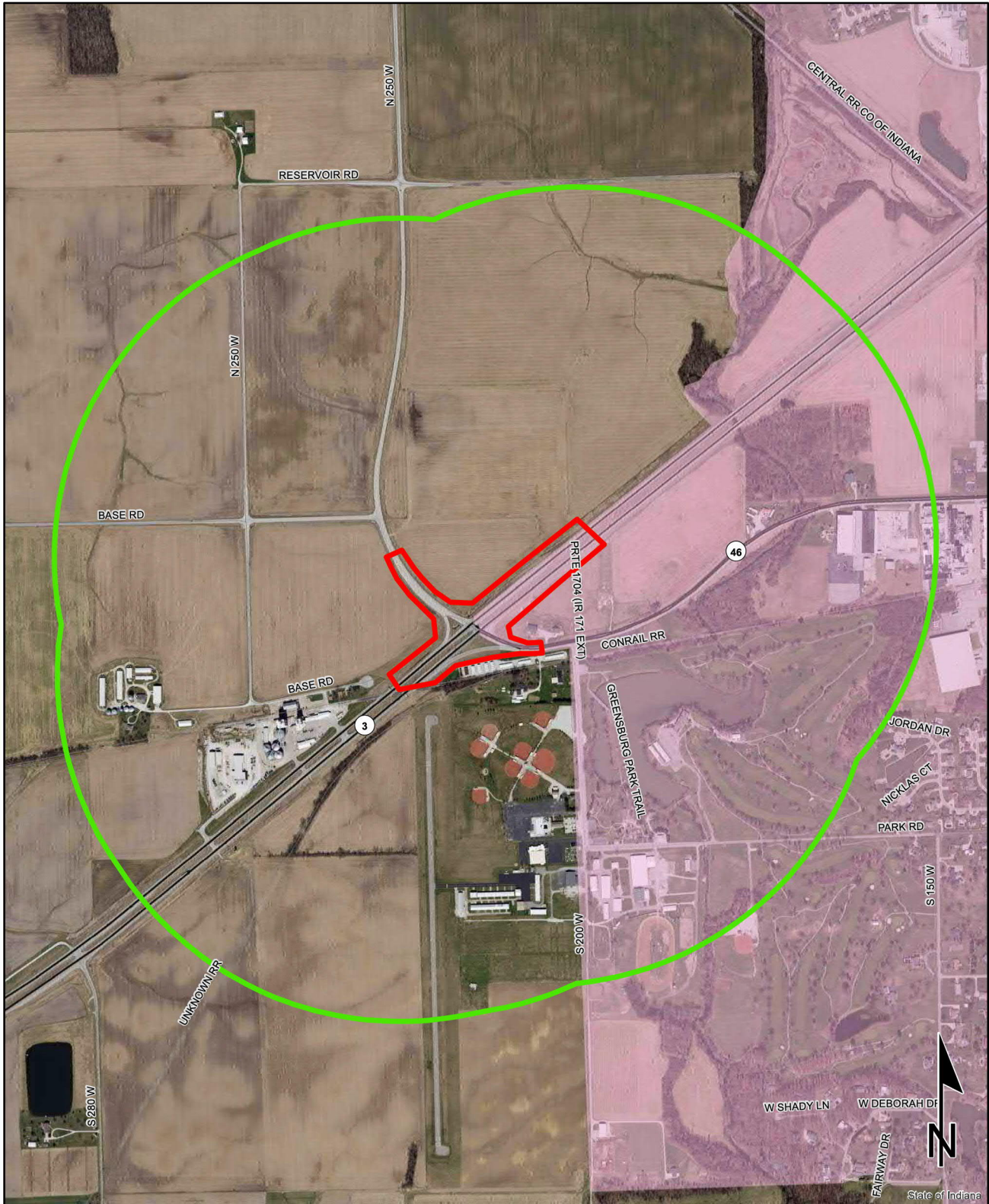
**Sources:**  
**Non Orthophotography Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

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

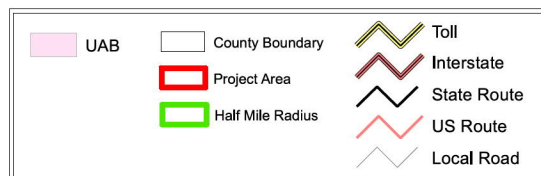


NWI - Point	Wetlands	Project Area
Karst Spring	Lake	Half Mile Radius
NWI - Line	Floodplain - DFIRM	Toll
Impaired_Stream_Lake	Cave Entrance Density	Interstate
NPS NRI listed	Sinkhole Area	State Route
River	Sinking-Stream Basin	US Route
Canal Structure - Historic	County Boundary	Local Road
Canal Route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

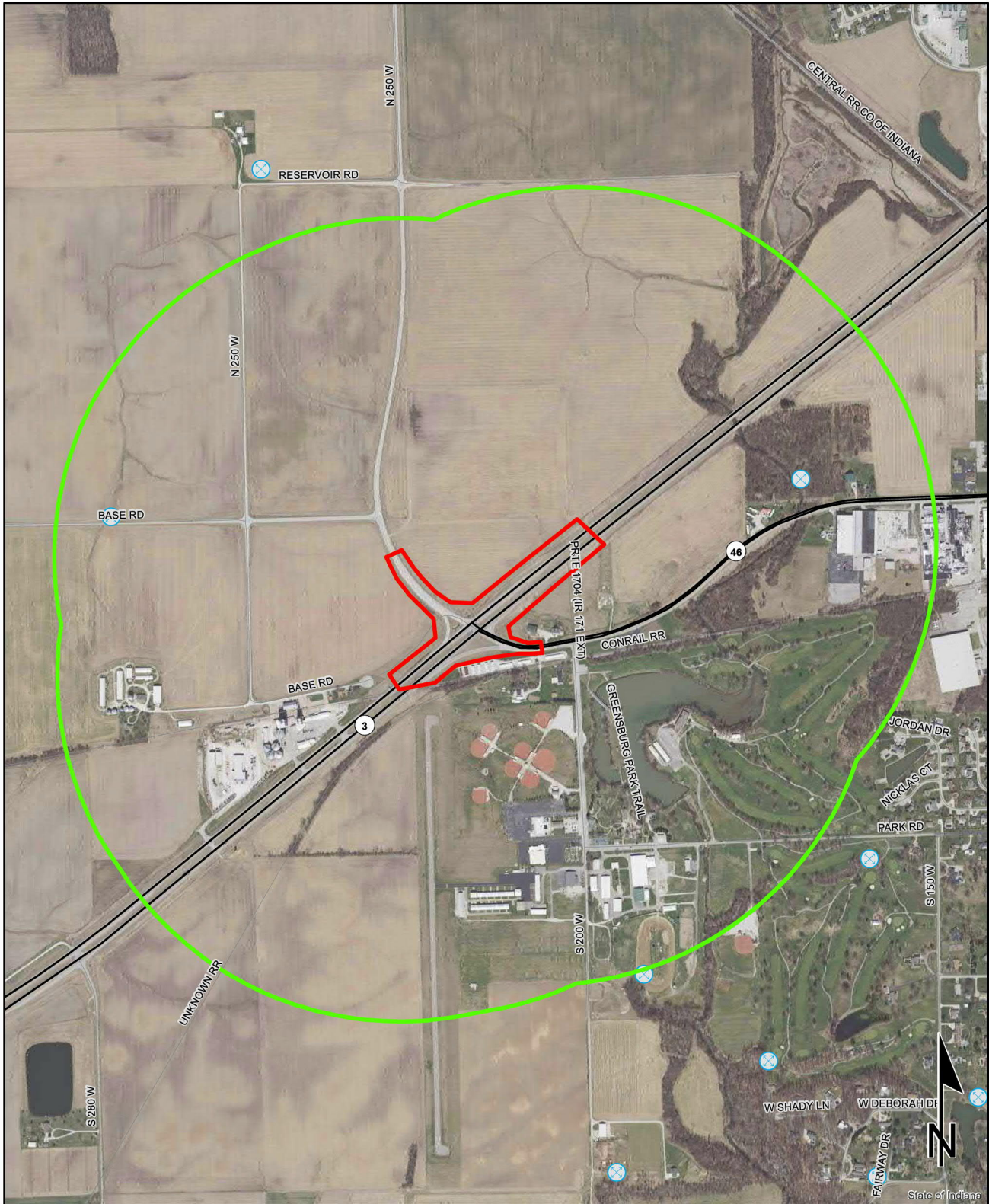
Red Flag Investigation - Urbanized Area Boundary  
 SR 46 and SR 3 Intersection Improvement  
 Des. No. 1700050, Roadway Improvements  
 Decatur County, Indiana



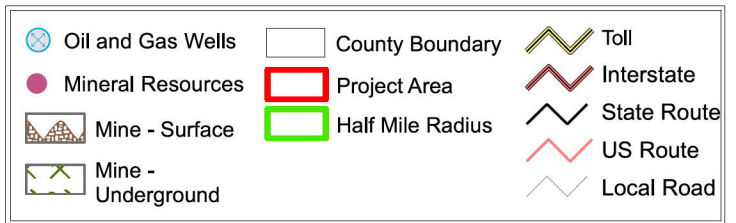
Sources: 0.15 0.075 0 0.15 Miles  
**Non Orthophotography**  
 Data - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
 Map Projection: UTM Zone 16 N Map Datum: NAD83  
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.



Red Flag Investigation - Mining/Mineral Exploration  
 SR 46 and SR 3 Intersection Improvement  
 Des. No. 1700050, Roadway Improvements  
 Decatur County, Indiana



Sources: 0.15 0.075 0 0.15 Miles  
**Non Orthophotography**  
 Data - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
 Map Projection: UTM Zone 16 N Map Datum: NAD83  
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

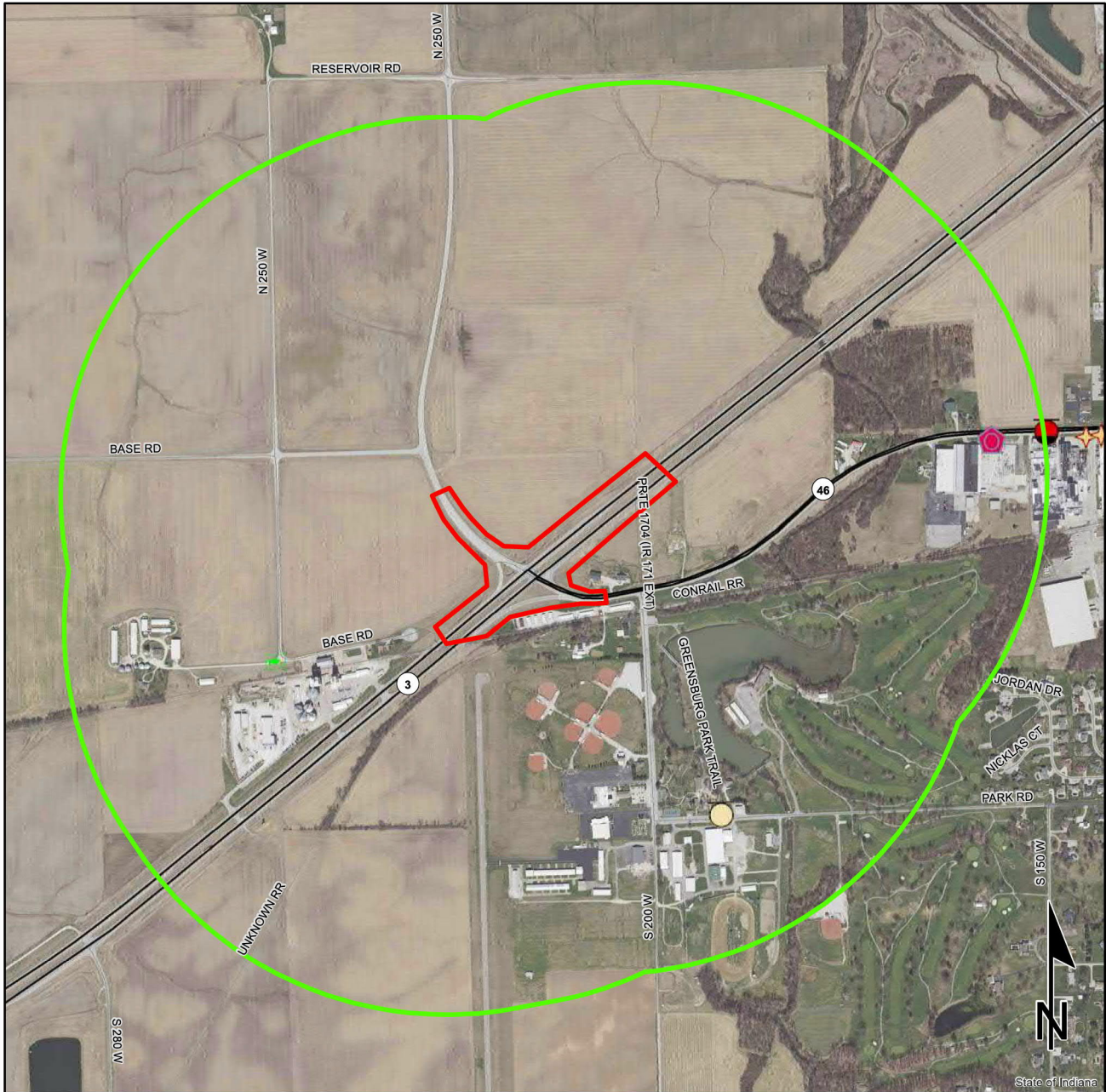


# Red Flag Investigation - Hazardous Material Concerns

## SR 46 and SR 3 Intersection Improvement

### Des. No. 1700050, Roadway Improvements

#### Decatur County, Indiana



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

0.15 0.075 0 0.15  
Miles

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

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

## Indiana County Endangered, Threatened and Rare Species List

County: **Decatur**

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Crustacean: Malacostraca</b>					
<b>Caecidotea rotunda</b>	<b>Northeastern Cave Isopod</b>		<b>SR</b>	<b>G2G4</b>	<b>S3</b>
<b>Mollusk: Bivalvia (Mussels)</b>					
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
<b>Pleurobema clava</b>	<b>Clubshell</b>	<b>LE</b>	<b>SE</b>	<b>G1G2</b>	<b>S1</b>
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
Toxolasma lividus	Purple Lilliput	C	SSC	G3Q	S2
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
<b>Insect: Odonata (Dragonflies &amp; Damselflies)</b>					
Tachopteryx thoreyi	Gray Petaltail		WL	G4	S3
<b>Reptile</b>					
<b>Clonophis kirtlandii</b>	<b>Kirtland's Snake</b>		<b>SE</b>	<b>G2</b>	<b>S2</b>
<b>Bird</b>					
Aimophila aestivalis	Bachman's Sparrow			G3	SXB
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
<b>Mammal</b>					
Taxidea taxus	American Badger		SSC	G5	S2
<b>Vascular Plant</b>					
<b>Carex flava</b>	<b>Yellow Sedge</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Conioselinum chinense</b>	<b>Hemlock Parsley</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Crataegus coccinea var. coccinea</b>	<b>Scarlet Hawthorn</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Juglans cinerea</b>	<b>Butternut</b>		<b>ST</b>	<b>G4</b>	<b>S2</b>
Linum striatum	Ridged Yellow Flax		WL	G5	S3
Panax trifolius	Dwarf Ginseng		WL	G5	S3
<b>High Quality Natural Community</b>					
Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	G3	S2
Forest - upland dry-mesic Bluegrass	Bluegrass Dry-mesic Upland Forest		SG	GNR	S1
Wetland - fen	Fen		SG	G3	S3
<b>Other Significant Feature</b>					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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

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