

Appendix E

Red Flag Investigation and Hazardous Materials



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room IGCN 758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
(855) INDOT4U

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

Date: January 5, 2022

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation
100 N Senate Avenue, Room IGCN 758-ES
Indianapolis, IN 46204

From: Eric Jagger
Parsons
101 W Ohio Street, Suite 2121
Indianapolis, IN
Eric.Jagger@Parsons.com

Des. 1800067 is no longer associated with this project.
The new lead Des. is 1703011.

Re: RED FLAG INVESTIGATION
DES 1800067, State Project
Interchange Improvement
State Road (SR) 912 and Michigan Avenue, 1.34 Miles West of US 12
Lake County, Indiana

PROJECT DESCRIPTION

Ramp 4A is not included in this project.

Brief Description of Project: The Indiana Department of Transportation (INDOT) proposes an interchange improvement project at State Road (SR) 912 and Michigan Avenue in Lake County, Indiana. The project is located in a highly developed urban area of East Chicago surrounded by industrial, commercial, and residential properties. The ArcelorMittal steel mill is adjacent to the north and the East Chicago Water Filtration plant is adjacent to the south. The project includes reconstruction of the seven-span Michigan Avenue bridge over SR 912, ramps, and three railroads: Norfolk Southern, Indiana Harbor Belt and Wisconsin Central, and Amtrak. A new roundabout on the southern portion of the interchange is proposed. The southern ramps, Ramp H and Ramp B, will be realigned, and the Ramp H and Ramp B over Ramp B bridges will be removed. Existing retaining walls will be removed and replaced with embankments and/or walls. The northern ramps, Ramp NEC and Ramp I, and their bridges will be rehabilitated. Existing pavement, curb and gutter will be repaired or replaced as needed. A closed pedestrian bridge over the railroads will be removed. Ramp 4A will be permanently closed, therefore the pavement will be removed and replaced with soil and a standard seed mix. Additionally, drainage issues south of SR 912 will be addressed with new inlet structures and curb cuts. Replacement of overhead sign structures and installation of a new roundabout lighting system is also anticipated.

Bridge and/or Culvert Project: Yes No Structure #s 912-45-02543 B, 912-45-06596 B, 912-45-06596 JA, 912-45-02543 A RI, 912-45-02543 A NEC, and 912-45-02545 ADJ.

If this is a bridge project, is the bridge Historical? Yes No , Select Non-Select (Str. No. 912-45-06596 B)
(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).

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Proposed right of way: Temporary # Acres 0.79 Permanent # Acres N/A, Not Applicable

Type and proposed depth of excavation: Grading, trenching, boring, and/or direction drilling; ranging from the ground surface to approximately ten feet below grade south of SR 912. North of SR 912 and the railroads, work includes borings and foundation work that could extend over 15 feet below grade.

Maintenance of traffic: Will include ramp and bridge closures. Detours would be provided.

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

Infrastructure			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	17	Recreational Facilities	7
Airports ¹	2	Pipelines	4
Cemeteries	N/A	Railroads	10
Hospitals	N/A	Trails	1
Schools	2*	Managed Lands	3

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

*Includes unmapped resources

Religious Facilities: Seventeen (17) religious facilities are located within the 0.5 mile search radius. The nearest religious facility, Mount Herman Baptist Church, is located approximately 0.13 mile southwest of the project area. No impact is expected.

Airports: Although not located within the 0.5 mile search radius, one (1) public-use airport, Gary/Chicago International Airport, is located within 3.8 miles (20,000 feet) of the project area. The public-use airport is located approximately 2.0 miles southeast of the project area; therefore, early coordination with INDOT Aviation will occur.

Schools: Two (2*) schools are located within the 0.5 mile search radius. The nearest school, Eugene Field Elementary School (also known as Abraham Lincoln Elementary School), is located adjacent to the south of the project area. Coordination with the School City of East Chicago will occur.

Recreational Facilities: Seven (7) recreational facilities are located within the 0.5 search radius. Penn Center Park is mapped adjacent to the project area; however, it is located approximately 0.05 mile south of the project area. Eugene Field Elementary School (also known as Abraham Lincoln Elementary School) is located adjacent to the south of the project area. Coordination with the School City of East Chicago will occur.

Pipelines: Four (4) pipeline segments are located within the 0.5 mile search radius. One (1) pipeline segment, owned by Northern Indiana Public Service Co., crosses the project area. Coordination with INDOT Utilities and Railroads should occur.

Railroads: Ten (10) railroad segments are located within the 0.5 mile search radius. Six (6) railroad segments, Norfolk Southern Railroad and Canadian National Railroad, cross the project area. Standard coordination will occur with INDOT Utilities and Railroads by the Project Management Team or their consultant no later than the Ready for Contracts (RFC) date.

Trails: One (1) trail segment is located within the 0.5 mile search radius. The nearest trail, Linear Park Trail, is located approximately 0.08 mile southwest of the project area. No impact is expected.

Managed Lands: Three (3) Managed Lands are located within the 0.5 mile search radius. The nearest managed land, Jeorse Park, is located adjacent to the northeast of the project area. Coordination with the City of East Chicago Marina will occur.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	2
Canal Structures – Historic	N/A	Lakes	4
NPS NRI Listed	N/A	Floodplain - DFIRM	4
NWI-Lines	N/A	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	3	Sinkhole Areas	N/A
Rivers and Streams	3	Sinking-Stream Basins	N/A

IDEM 303d Listed Streams and Lakes (Impaired): Three (3) 303d Listed Lakes are located within the 0.5 mile search radius. The nearest impaired lake, Lake Michigan, is located 0.13 mile east of the project area. No impact is expected.

Rivers and Streams: Three (3) stream segments are located within the 0.5 mile search radius. The nearest river and stream, the Lake Michigan coastline, is located 0.13 mile east of the project area. No impact is expected.

NWI-Wetlands: Two (2) wetlands are located within the 0.5 mile search radius. One wetland is located approximately 0.13 mile east of the project area. No impact is expected.

Lakes: Four (4) lakes are located within the 0.5 mile search radius. Two lakes are located approximately 0.12 mile southeast of the project area. No impact is expected.

Floodplain – DFIRM: Four (4) floodplain polygons are located within the 0.5 mile search radius. The nearest floodplain polygon is located approximately 0.13 mile east of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Mineral Resources: Four (4) mineral resource facilities are located within the 0.5 mile search radius. Each of the mineral resource facilities are mapped adjacent to the project area. These facilities, owned by ArcelorMittal USA, Indiana Harbor

Works (Limekiln), Beemsterboer Slag Corp, Lafarge Corp, Slag Division, and Phoenix Services, LLC., appear to have administrative offices located at 3210 Watling Street, East Chicago, 46312. No impact is expected.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	4	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	1*	Restricted Waste Sites	N/A
State Cleanup Sites	2	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	7	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	13
Construction Demolition Waste	N/A	Institutional Controls	19
Solid Waste Landfill	N/A	NPDES Facilities	11
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	17
Leaking Underground Storage (LUST) Sites	6	Notice of Contamination Sites	N/A

*Includes unmapped facilities.

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

RCRA Generator/TSD: Four (4) RCRA generators/TSD facilities are located within the 0.5 mile search radius. The nearest sites, Primary Energy (aka Cokenergy Incorporated), AID 10840, 3210 Watling Street, and Arcelormittal USA, AID 11557, 3210 Watling Street (discussed below under RCRA Corrective Action), have offices located adjacent to the northwest of the project area. The Primary Energy facility is a large quantity generator of hazardous waste. This is a “waste heat recovery, combined heat and power facility”, located 0.15 mile northwest of the project area. Based on the May 21, 2018 IDEM Inspection Summary Letter, no violations were reported. No impact is expected.

RCRA Corrective Action Sites: One (1*) unmapped RCRA Corrective Action Site is located within the 0.5 mile search radius. Arcelormittal USA, AID 11557, 3210 Watling Street, has offices adjacent to the northwest of the project area. The steel mill begins north of the project area and extends over hundreds of acres. This facility has multiple solid waste management areas (SWMAs) under the closure process in RCRA Corrective Action. The nearest is SWMA 14, the “Former Coal Tar Plant Area”, located adjacent to the north of the project area. Based on the July 24, 2020 Second Quarter RCRA Corrective Action Status Report, dense non-aqueous phase liquid (DNAPL) monitoring and recovery continues in SWMA 14, and the organic dissolved phase plume contaminants of concern remain non-detect in downgradient wells. In the figure entitled “2nd Quarter 2020 Quarterly Report - Identified Areas of Separate Phase and Summary of Stabilization Measures” the “discontinuous coal tar DNAPL” plume appears to extend beneath the northern Michigan Avenue Bridge approach, approximately 0.03 mile north of the northern limits of work. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. In addition, coordination will be conducted with the IDEM Project Manager identified in the VFC documentation, Chris Myers, and the USEPA Project Manager, Mr. Brandon Pursel, before further site activities occur.

State Cleanup Sites: Two (2) state cleanup sites are located within the 0.5 mile search radius. The nearest site has no name, AID 23237, 3804 Guthrie Street, and is located approximately 0.39 mile south of the project area. Based on the April 22, 2004 IDEM Letter, the release involved two underground storage tanks (USTs) found during demolition. No impact is expected.

UST Sites: Seven (7) UST sites are located within the 0.5 mile search radius. The nearest site is New Fire Station No. 2, AID 23298, 3350 Michigan Avenue, located adjacent to the south of the project area. No files were found associated with this facility. No impact is expected.

Leaking Underground Storage (LUST) Sites: Six (6) LUST facilities are located within the 0.5 mile search radius. Heckett Multiserv Plant 11 A Harsco Company (aka Heckett Multiserv Division of Harsco Corporation), AID 12658, 3236 Watling Street, is incorrectly mapped 0.16 mile southwest of the project area. Based on the July 19, 2010 UST System Closure documentation, the USTs were located more than one mile north from the project area. No impact is expected.

Brownfields: Thirteen (13) Brownfield facilities are located within the 0.5 mile search radius. The nearest site, Pittsburgh Fort Wayne & Chicago Railway 4170605, AID 118255, 3507 Guthrie Street, is located approximately 0.06 mile south of the project area. Based on the August 27, 2019 IDEM Site Status Letter, groundwater is not impacted and relatively low-level contaminated soils were removed from this former coal and lumber yard. No impact is expected.

Institutional Controls: Nineteen (19) Institutional Control sites are located within the 0.5 mile search radius. The nearest site, City of East Chicago, AID 105801, 3512 Main Street, is located approximately 0.17 mile southwest of the project area. No impact is expected.

NPDES Facilities: Eleven (11) NPDES Facilities are located within the 0.5 mile search radius. Inland Steel Overpass Bridge Removal and Roundabout Construction, Object ID 24700, Michigan Ave & Inland Steel Opas, is located adjacent to the project area. This construction storm water permit was terminated on August 7, 2019. No impact is expected.

NPDES Pipe Locations: Seventeen (17) NPDES Pipe Locations are located within the 0.5 mile search radius. The nearest facility, Arcelormittal Steel USA Inc – Indiana Harbor East, is located approximately 0.39 mile north of the project area. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Lake County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/naturepreserve/files/np_lake.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a heavily developed industrial area. The September 29, 2020 inspection reports for INDOT Structure Nos. #912-45-02543 B, 912-45-06596 B, 912-45-06596 JA, 912-45-02543 A RI, 912-45-02543 A NEC, and 912-45-02545 ADJ states that no evidence of bats was seen or heard under the bridges. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent “Using the USFWS’s IPaC System for Listed Bat Consultation for INDOT Projects”.

RECOMMENDATIONS SECTION

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

The Ramp B over B Bridge (INDOT Structure No. 912-45-06596 B; NBI No. 33035) is a “Non-Select” historic structure in the Indiana Historic Bridge Inventory. The Indiana Historic Bridge Programmatic Agreement will be followed for this project.

INFRASTRUCTURE:

Airports: Although not mapped within the 0.5 mile search radius, one (1) public-use airport, Gary/Chicago International Airport, is located within 3.8 miles (20,000 feet) of the project area. Coordination with INDOT Aviation will occur.

Schools: The nearest school, Eugene Field Elementary School (also known as Abraham Lincoln Elementary School), is located adjacent to the south of the project area. Coordination with the School City of East Chicago will occur.

Recreational Facilities: Eugene Field Elementary School (also known as Abraham Lincoln Elementary School) is located adjacent to the south of the project area. Coordination with the School City of East Chicago will occur.

Pipelines: One (1) pipeline segment, owned by Northern Indiana Public Service Co., crosses the project area. Coordination with INDOT Utilities and Railroads should occur.

Railroads: Six (6) railroad segments, Norfolk Southern Railroad and Canadian National Railroad, cross the project area. Standard coordination will occur with INDOT Utilities and Railroads by the Project Management Team or their consultant no later than the Ready for Contracts (RFC) date.

Managed Lands: The nearest managed land, Jeorse Park, is located adjacent to the northeast of the project area. Coordination with the City of East Chicago Marina will occur.

WATER RESOURCES: N/A

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS:

RCRA Corrective Action Sites: Arcelormittal USA, AID 11557, 3210 Watling Street, has offices adjacent to the northwest of the project area. The steel mill begins north of the project area and extends over hundreds of acres. This facility has multiple solid waste management areas (SWMAs) under the closure process in RCRA Corrective Action. The nearest is SWMA 14, the “Former Coal Tar Plant Area”, located adjacent to the north of the project area. Based on the July 24, 2020 Second Quarter RCRA Corrective Action Status Report, dense non-aqueous phase liquid (DNAPL) monitoring and recovery continues in SWMA 14, and the organic dissolved phase plume contaminants of concern remain non-detect in downgradient wells. In the figure entitled “2nd Quarter 2020 Quarterly Report - Identified Areas of Separate Phase and Summary of Stabilization Measures” the “discontinuous coal tar DNAPL” plume appears to extend beneath the northern Michigan Avenue Bridge approach, approximately 0.03 mile north of the northern limits of work. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. In addition, coordination will be conducted with the

IDEM Project Manager identified in the VFC documentation, Chris Myers, and the USEPA Project Manager, Mr. Brandon Pursel, before further site activities occur.

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 ESD concurrence: Nicole Fohey Breting (Signature)
Digitally signed by Nicole Fohey-Breting
Date: 2022.01.19 11:01:22 -05'00'

Prepared by:
Eric Jagger
Associate Environmental Planner
Parsons

Graphics:

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

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES

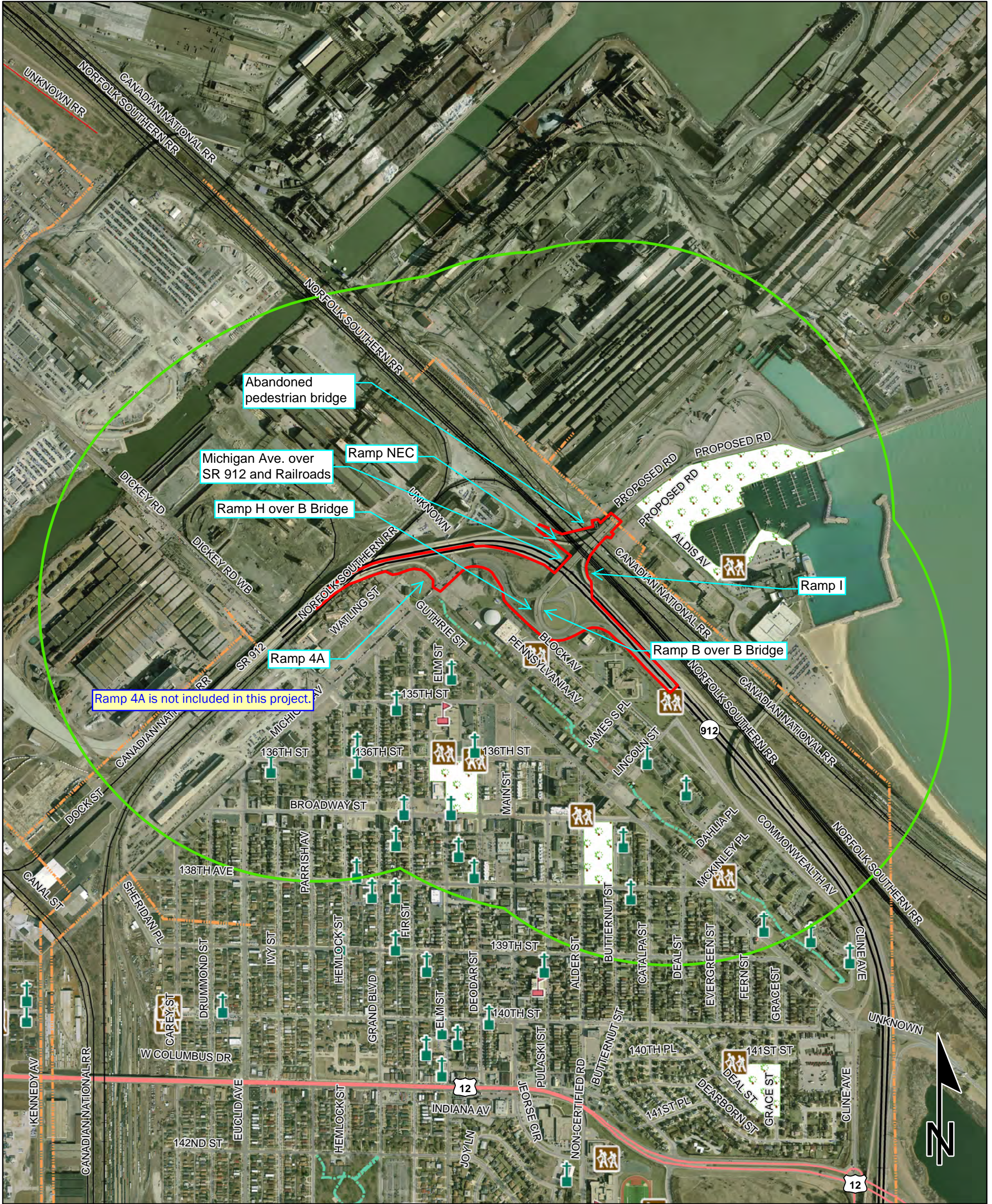
Red Flag Investigation - Infrastructure

SR 912, 1.34 Miles West of US 12

Des. 1800067, Interchange Improvement

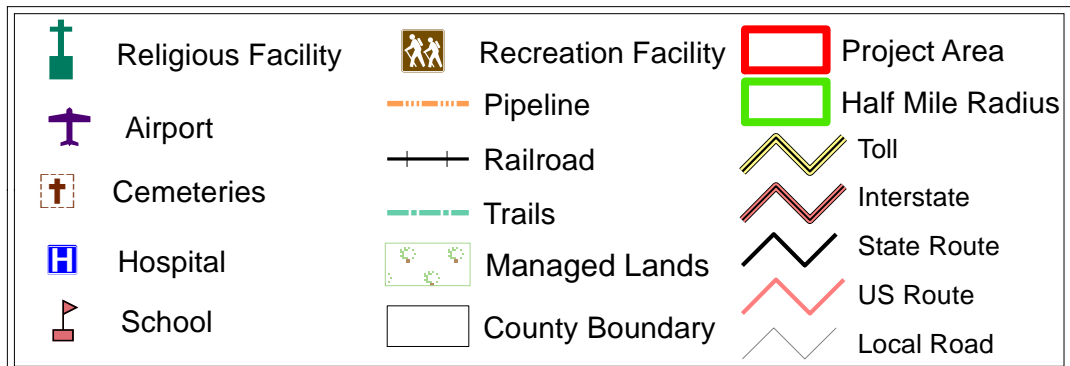
Lake County, Indiana

Des. 1800067 is no longer associated with this project.
The new lead Des. is 1703011.



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

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



Red Flag Investigation - Water Resources

SR 912, 1.34 Miles West of US 12

Des. 1800067, Interchange Improvement

Lake County, Indiana

Des. 1800067 is no longer associated with this project.
The new lead Des. is 1703011.



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Data - Obtained from the State of Indiana Geographical Information Office Library
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NWI - Point	Wetlands	Project Area
Karst Spring	Lake	Half Mile Radius
NWI- Line	Floodplain - DFIRM	Toll
Impaired_Stream_Lake	Cave Entrance Density	Interstate
NPS NRI listed	Sinkhole Area	State Route
River	Sinking-Stream Basin	US Route
Canal Structure - Historic	County Boundary	Local Road
Canal Route - Historic		

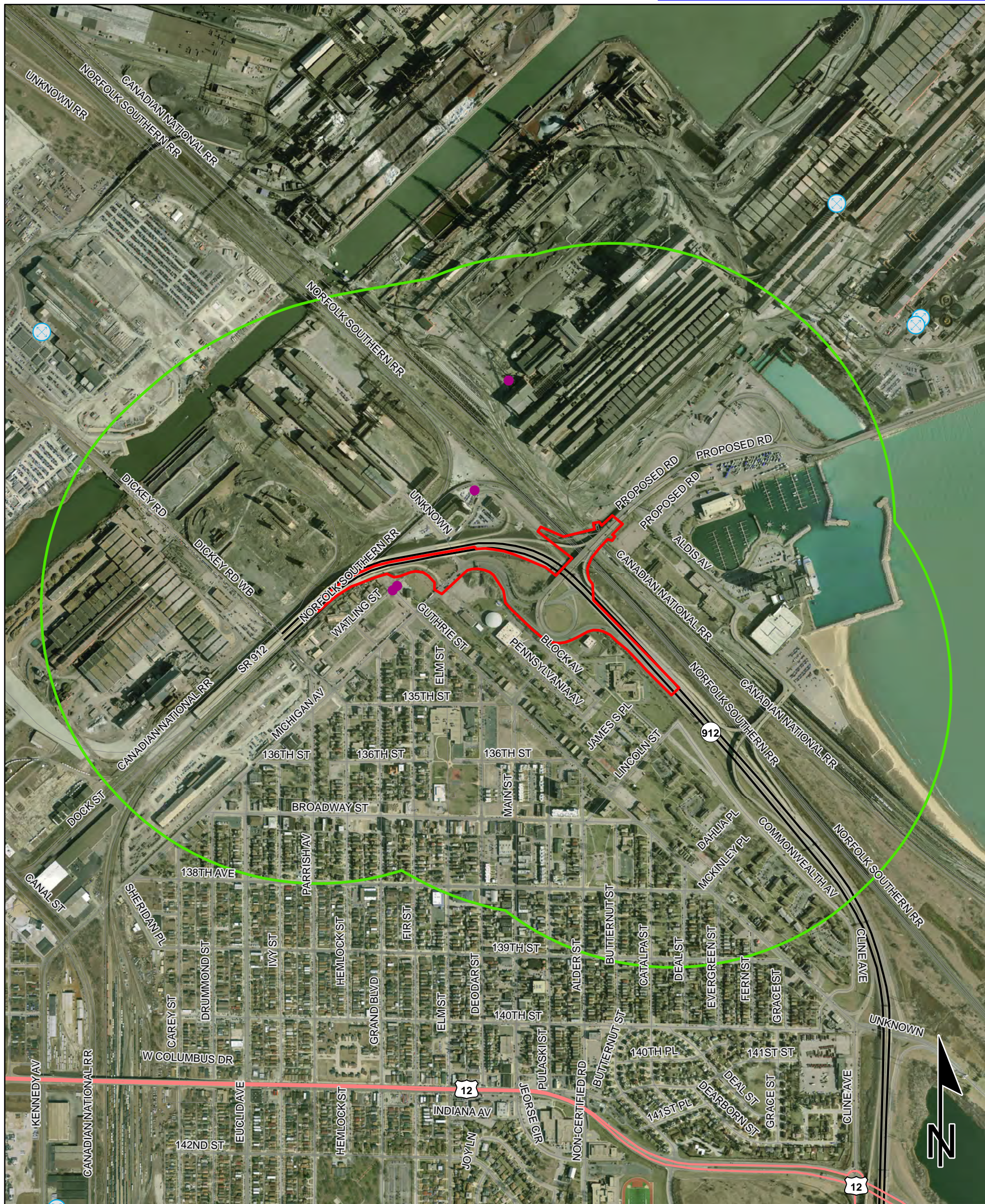
Red Flag Investigation - Mining/Mineral Exploration

SR 912, 1.34 Miles West of US 12

Des. 1800067, Interchange Improvement

Lake County, Indiana

Des. 1800067 is no longer associated with this project.
The new lead Des. is 1703011.



Sources: 0.2 0.1 0 0.2 Miles

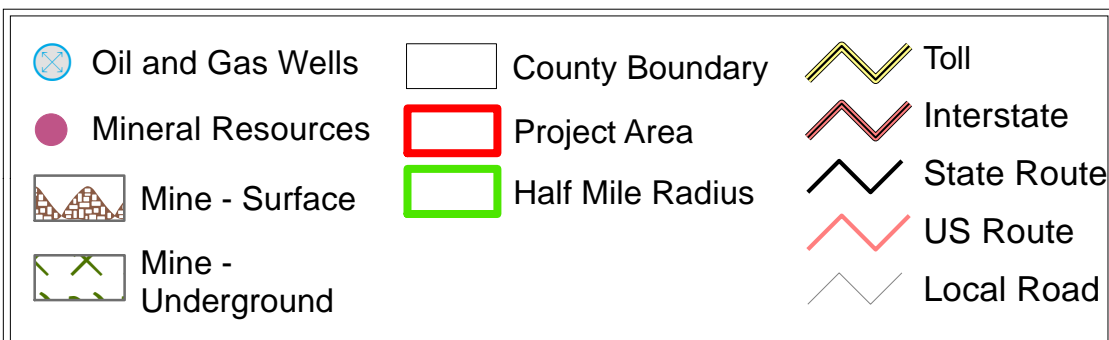
Non Orthophotography

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

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

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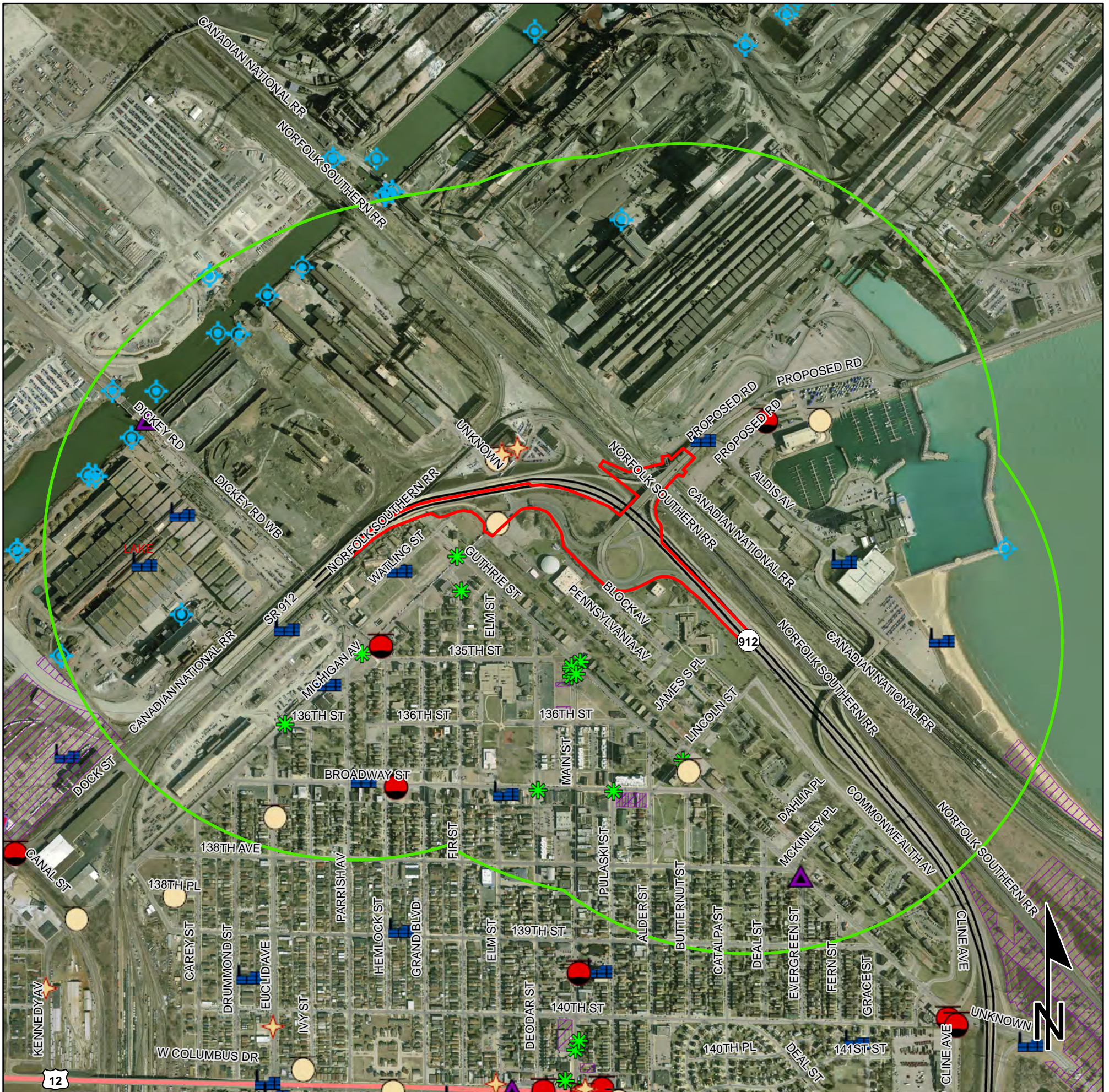
Red Flag Investigation - Hazardous Material Concerns

SR 912, 1.34 Miles West of US 12

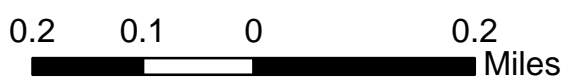
Des. 1800067, Interchange Improvement

Lake County, Indiana

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<ul style="list-style-type: none"> Brownfield RCRA Corrective Action Sites Confined Feeding Operation Notice_of_Contamination Construction/Demolition Site Infectious/Medical Waste Site Leaking Underground Storage Tank Manufactured Gas Plant NPDES Facilites NPDES Pipe Locations Open Dump Waste Site 	<ul style="list-style-type: none"> RCRA Generator/TSD Restricted Waste Site Septage Waste Site Solid Waste Landfill State Cleanup Site Superfund Tire Waste Site Underground Storage Tank Voluntary Remediation Program Waste Transfer Station 	<ul style="list-style-type: none"> Institutional Controls County Boundary Project Area Half Mile Radius Toll Interstate State Route US Route Local Road
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Des. 1703011

Appendix E

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