

RED FLAG INVESTIGATION

Washington Center Road Bridge over Spy Run Creek

Fort Wayne, Indiana (Allen County)

DES # 1382497

October 1, 2014

NARRATIVE

The Washington Center Road Bridge #95 over Spy Run Creek is an Urban Minor Arterial roadway on the northwest side of Fort Wayne. The 39 year old bridge has been identified as the number one priority bridge replacement in the 2012 National Bridge Inventory Report due to its sufficiency rating of below 40.

The bridge's below 40 sufficiency rating is causal to the conditions of its bridge beams and substructure. In addition to the structural integrity, the bridge is built on a vertical decline in the roadway and it does not have sufficient travel lanes for the decreased LOS along that corridor. Proposals for the new bridge being constructed include: the new bridge being extended in length to accommodate for the natural decline in the roadway, a larger waterway opening for Spy Run Creek, and widening the bridge to add a third lane and sidewalks for easy and efficient access of the bridge. The new bridge will be constructed at the current horizontal alignment.

Bridge design has yet to be determined. However, a concrete slab deck and three sided concrete box have been proposed as alternative options. Additional bridge approach work will be required, but the length of the approach is still to be determined. All final decisions on design for the new bridge will have to consider future widening construction as well.

SUMMARY

Infrastructure			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Religious Facilities	1	Recreational Facilities	N/A
Airports	N/A	Pipelines	1
Cemeteries	1	Railroads	2
Hospitals	N/A	Trails	N/A
Schools	N/A	Managed Lands	N/A
Museums	N/A		

Explanation:

- There is one (1) "Religious Facility" located within the half mile radius but not within the project area. The First Assembly of God is located at 1400 W Washington Center Rd. This will not be affected by the project.
- There is one (1) "Cemetery" located within the half mile radius but not within the project area. The Hatfield Cemetery is located at the southwest corner of W Washington Center Rd and Ridgebrook Blvd. This will not be affected by the project.
- There are two (2) "Railroads" located within the half mile radius but not within the project area. The north/south alignment is owned by Norfolk Southern Railway Company and the east/west alignment is owned by Consolidated Railroad Corp. These will not be affected by the project.

- There is one (1) natural gas “Pipeline” owned by Northern Indiana Public Service Company that intersects the half mile radius southwest of the project area. It is not located within the project area and will not be affected by the project.

Water Resources			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
NWI - Points	N/A	NWI - Wetlands	16
Karst Springs	N/A	IDEM 303d Listed Lakes	N/A
Canal Structures – Historic	N/A	Lakes	2
NWI - Lines	5	Floodplain - DFIRM	Yes
IDEM 303d Listed Rivers and Streams (Impaired)	5	Cave Entrance Density	N/A
Rivers and Streams	4	Sinkhole Areas	N/A
Canal Routes - Historic	N/A	Sinking-Stream Basins	N/A
Outstanding Rivers (Special Interest Waterways)	N/A	Line of Protection	N/A
*High Capacity Wells (Wellhead Protection Areas)	N/A	National River Inventory (NRI)	N/A

Explanation:

- There are five (5) “NWI – Line” segments identified within the half mile radius. Four (4) of these line segments are not within the project area and will not be affected by the project. One (1) of these wetland stream segments intersects the project area. The Spy Run Natural Drain is identified from the bridge that will be reconstructed on Washington Center Rd to about 400 feet south of the bridge. This will be affected by the project.
- There are five (5) “IDEM 303d Listed Rivers and Streams” identified within the half mile radius. Four (4) of these are not within the project area and will not be affected by the project. One (1) of these impaired streams intersects the project area and is identified as the Spy Run Creek Natural Drain which flows under the bridge that will be reconstructed on Washington Center Rd. This will be affected by the project.
- There are four (4) “Rivers and Streams” identified within the half mile radius. Three (3) of these are not within the project area and will not be affected by the project. One (1) of these streams intersects the project area and is identified as the Spy Run Creek Natural Drain which flows under the bridge that will be reconstructed on Washington Center Rd. This will be affected by the project.
- There are 16 “NWI – Wetlands” within the half mile radius. Thirteen (13) of these are not within the project area and will not be affected by the project. Three (3) of these are adjacent to or within the project area. These three (3) wetlands may be affected by the project.
- There are two (2) “Lakes” or ponds identified within the half mile radius. They are not within the project area and will not be affected by the project.
- The floodplain is identified in many locations within the half mile radius, including a section that intersects the project area. The floodplain will impact the project.
- *High Capacity Wells – To protect these features they are not identified in the water resource map due to their locational sensitivity. There were no high capacity wells found within a half mile radius of the project area.

Mining/Mineral Exploration

Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:

Petroleum Wells	N/A	Petroleum Fields	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation:

There are no mining/mineral exploration concerns within a half mile of the project location.

Hazmat Concerns

Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:

Brownfield Sites	N/A	Restricted Waste Sites	N/A
Corrective Action Sites (RCRA)	N/A	Septage Waste Sites	N/A
Confined Feeding Operations	N/A	Solid Waste Landfills	N/A
Construction Demolition Waste	N/A	State Cleanup Sites	1
Industrial Waste Sites (RCRA Generators)	2	Tire Waste Sites	N/A
*Infectious/Medical Waste Sites	N/A	Waste Transfer Stations	N/A
Lagoon/Surface Impoundments	N/A	RCRA Waste Treatment, Storage, and Disposal Sites (TSDs)	N/A
Leaking Underground Storage Tanks (LUSTs)	3	Underground Storage Tanks (USTs)	7
Manufactured Gas Plant Sites	N/A	Voluntary Remediation Program	N/A
NPDES Facilities	N/A	Superfund	N/A
NPDES Pipe Locations	N/A	Institutional Control Sites	N/A
Open Dump Sites	N/A		

Explanation:

- There are two (2) “Industrial Waste Sites (RCRA Generators)” identified within the half mile radius of the project but they are not near the project area. The industrial waste sites will not be affected by the project.
- There is one (1) “State Cleanup Site” identified within the half mile radius of the project but it is not near the project area. The state cleanup site will not be affected by the project.
- There are three (3) “Leaking Underground Storage Tanks” (LUSTs) identified within the half mile radius of the project but they are not near the project area. The LUSTs will not be affected by the project.
- There are seven (7) “Underground Storage Tanks” identified within the half mile radius of the project but they are not near the project area. The USTs will not be affected by the project.

Ecological Information

The Allen 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. Due to

the sensitive nature of identifying locations of threatened and endangered species, maps of these specific habitats are not provided.

Cultural Resources

The items below represent all properties or bridges in Fort Wayne and Allen County that have obtained any type of historic designation. The types of historic designation are: Indiana Historic Bridge Inventory, Fort Wayne Local Historic Districts, the Indiana State Register of Historic Places, the National Register of Historic Places, the Historic American Buildings Survey, and National Historic Landmark. The Items below labeled as “Potential” are items that have been identified by the Fort Wayne Historic Preservation Commission and/or Architecture and Community Heritage (ARCH) of Fort Wayne for their historical significance and potential for being listed in one of the above historical designations. Also, structures or properties from the latest County Interim Report have been identified.

Historic Features			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Historic Sites or Districts	N/A	Select Bridges	N/A
Non-Select Bridges	N/A	Potential Historic Sites or Districts	N/A
Properties identified in the latest Interim Report	1		

Explanation:

- There is one (1) “Property identified in the latest Interim Report” located within the half mile radius but not within the project area. The Hatfield Cemetery is rated as “Contributing” and is located at the southwest corner of W Washington Center Rd and Ridgebrook Blvd. This will not be affected by the project.

Pedestrian and Bus Stop Infrastructure

The project description identifies that a sidewalk will be installed on the north side of Washington Center Road within the project limits of the bridge project. Locations have been identified in the project area where pedestrian and bus stop infrastructure are needed to ensure that the pedestrian facilities are ADA compliant. All sidewalk and bus stop infrastructure must meet PROWAG (Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right of Way) standards. The list below corresponds with the attached map.

- 1) Bus stop pad installation at the existing bus stop on the southeast corner of the intersection of Washington Center Road and West Creek Boulevard.

SUMMARY/RECOMMENDATIONS

Multiple Red Flag items are located within the RFI search radius.

INFRASTRUCTURE: A total of five (5) items are identified in the Infrastructure section, however none of the items are adjacent to or within the project area. Therefore, none of the items will impact the project.

WATER RESOURCES: A total of 32 items plus a floodplain are identified in the Water Resources section, however there are only six (6) items plus the floodplain that are adjacent to or intersect the project area and

will impact the project. These items are one (1) NWI line (Spy Run Natural Drain), one (1) IDEM 303d Impaired River/Stream (Spy Run Creek Natural Drain), one (1) River/Stream (Spy Run Creek Natural Drain), three (3) wetlands and the floodplain. Please note that all the water features are part of the same water system, Spy Run Creek. Coordination with the Allen County Surveyor's Office, the City of Fort Wayne Water & Sewer office and the Department of Planning Services should be conducted.

MINING/MINERAL EXPLORATION: There are no mining/mineral exploration concerns within a half mile of the project location.

HAZMAT CONCERNS: A total of 13 items are identified in the Hazmat Concerns section, however none of the items are adjacent to the project area. Therefore, none of the items will impact the project.

ECOLOGICAL INFORMATION: Due to the sensitive nature of identifying locations of threatened and endangered species, maps of these specific habitats are not provided. A listing of endangered, threatened and rare species in Allen County is in the Graphics portion of this report. Coordination with the Indiana Department of Natural Resources should be conducted to determine if anything will be impacted by the project.

CULTURAL RESOURCES: One (1) item was identified in the Cultural Resources section from the Fort Wayne Interim Report, Indiana Historic Sites and Structures Inventory (IHSSI), however it is not adjacent to or within the project area. Further discussion with the Fort Wayne Historic Preservation Commission and Architecture and Community Heritage (ARCH) of Fort Wayne confirmed that it does not appear the project will adversely affect the property. Therefore, the item will not be impacted by the project.

PEDESTRIAN AND BUS STOP INFRASTRUCTURE: One (1) bus stop pad installation at the existing bus stop on the southeast corner of the intersection of Washington Center Road and West Creek Boulevard has been identified. All facilities must meet PROWAG requirements.

Prepared by:

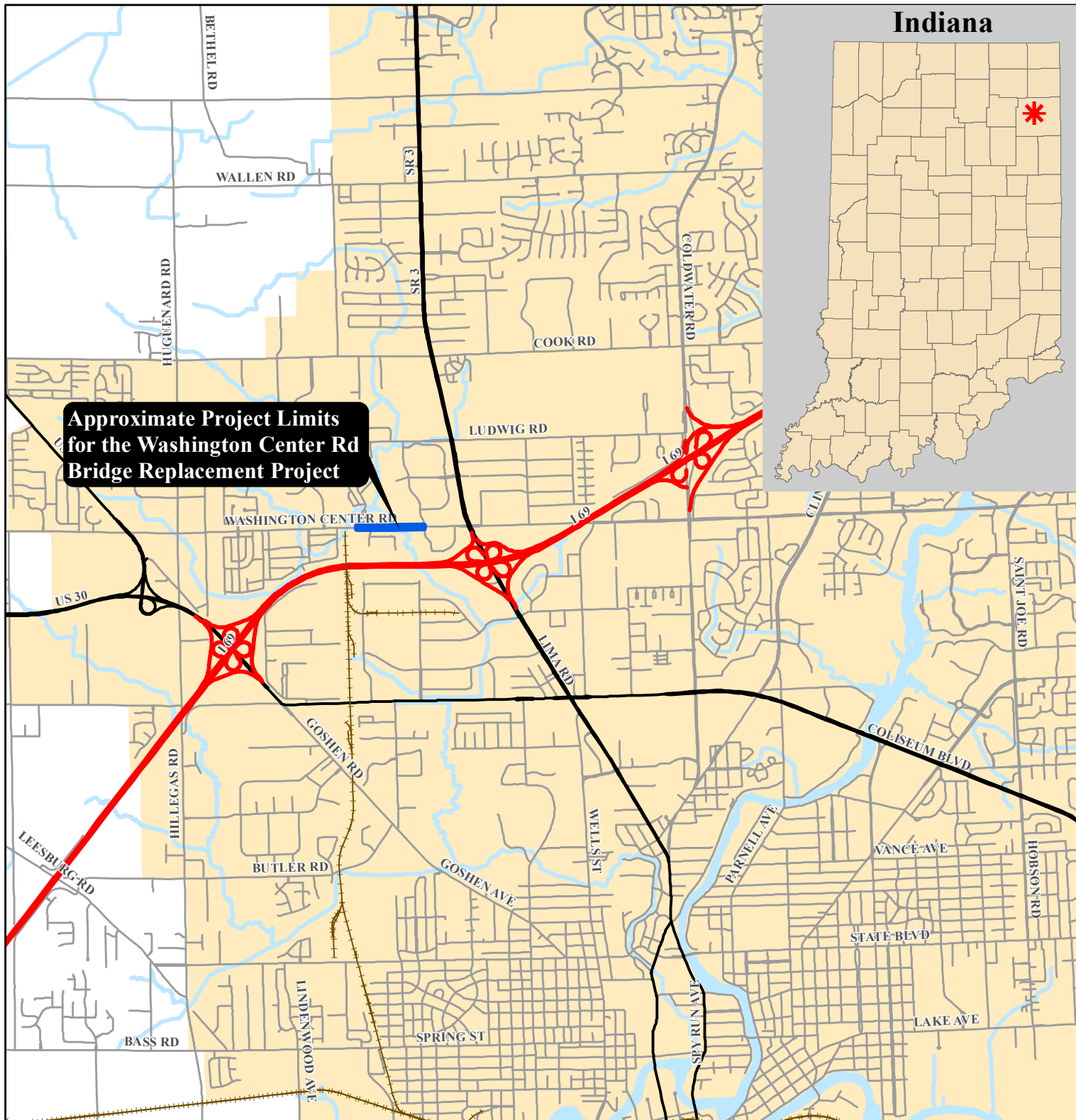
Stacey Gorsuch
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Northeastern Indiana Regional Coordinating Council
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Fort Wayne, IN 46802
Stacey.gorsuch@co.allen.in.us
260-449-7309

Graphics:

A map for each report section with a ½ mile 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:

GENERAL SITE MAP SHOWING PROJECT AREA: YES
TOPOGRAPHIC MAP SHOWING THE PROJECT AREA: YES
INFRASTRUCTURE: YES
WATER RESOURCES: YES
MINING/MINERAL EXPLORATION: YES
HAZMAT CONCERNS: YES
CULTURAL RESOURCES: YES
CITY OR COUNTY INTERIM REPORT: YES
COUNTY LIST OF THREATENED AND ENDANGERED SPECIES: YES
PEDESTRIAN AND BUS STOP INFRASTRUCTURE: YES

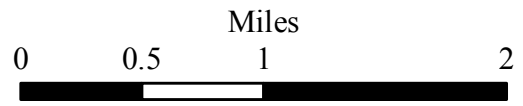
Red Flag Investigation - Project Location
 Washington Center Rd Bridge #95 – over Spy Run Creek
 Bridge Replacement
 Allen County, Indiana

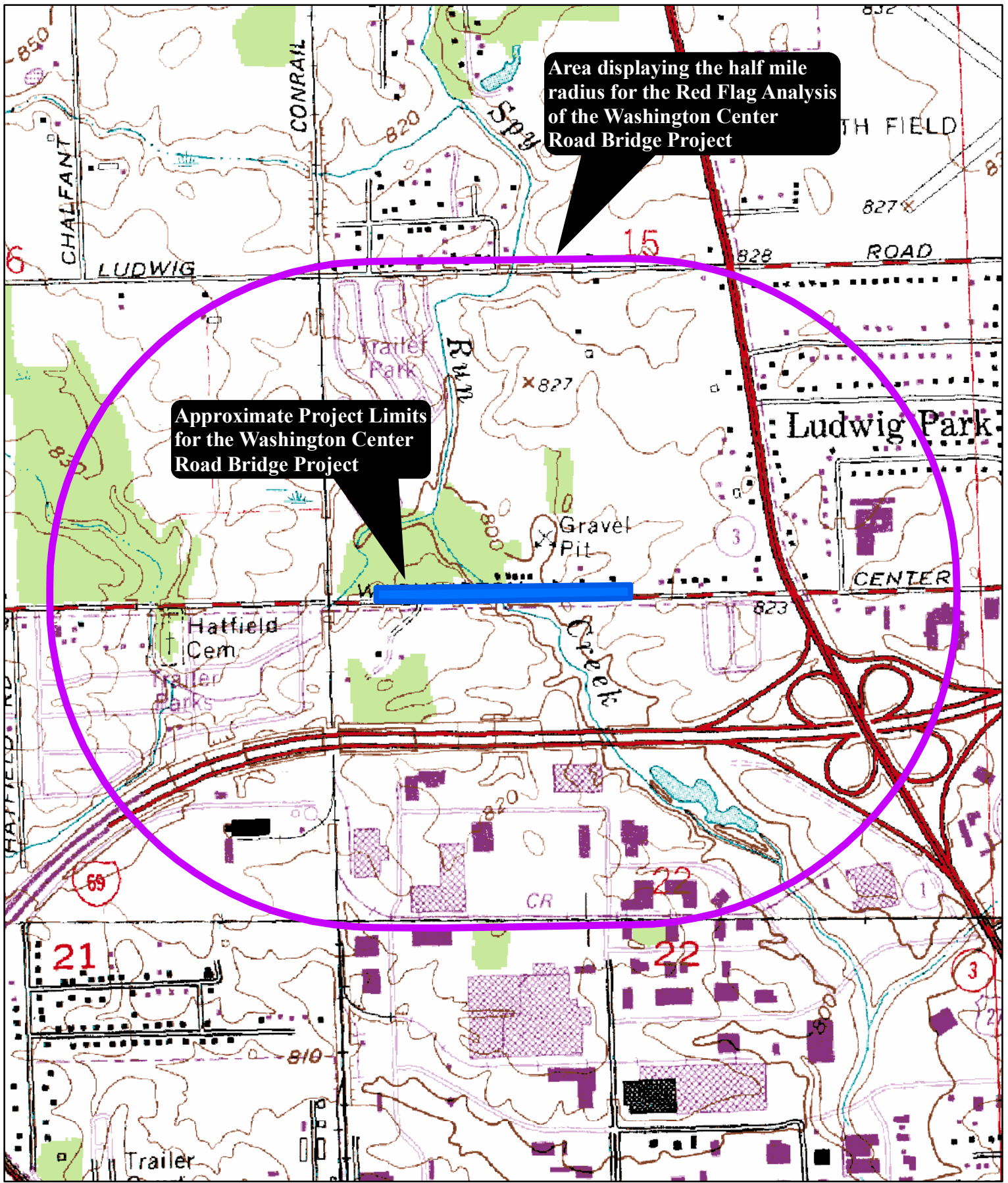


**Approximate Project Limits
 for the Washington Center Rd
 Bridge Replacement Project**

Legend

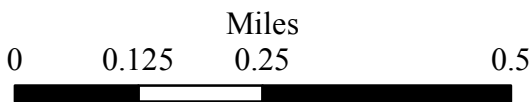
Interstates	Water
State Route	City of Fort Wayne
US Route	City of New Haven
Local Road	Railroad
<all other values>	





Approximate Project Limits
for the Washington Center
Road Bridge Project

Area displaying the half mile
radius for the Red Flag Analysis
of the Washington Center
Road Bridge Project



Red Flag Investigation - Topographic Map
Maplecrest Road Project
Allen County, Indiana
5/14

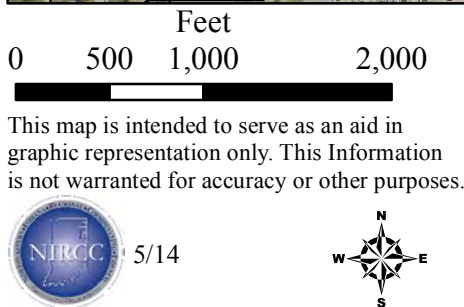
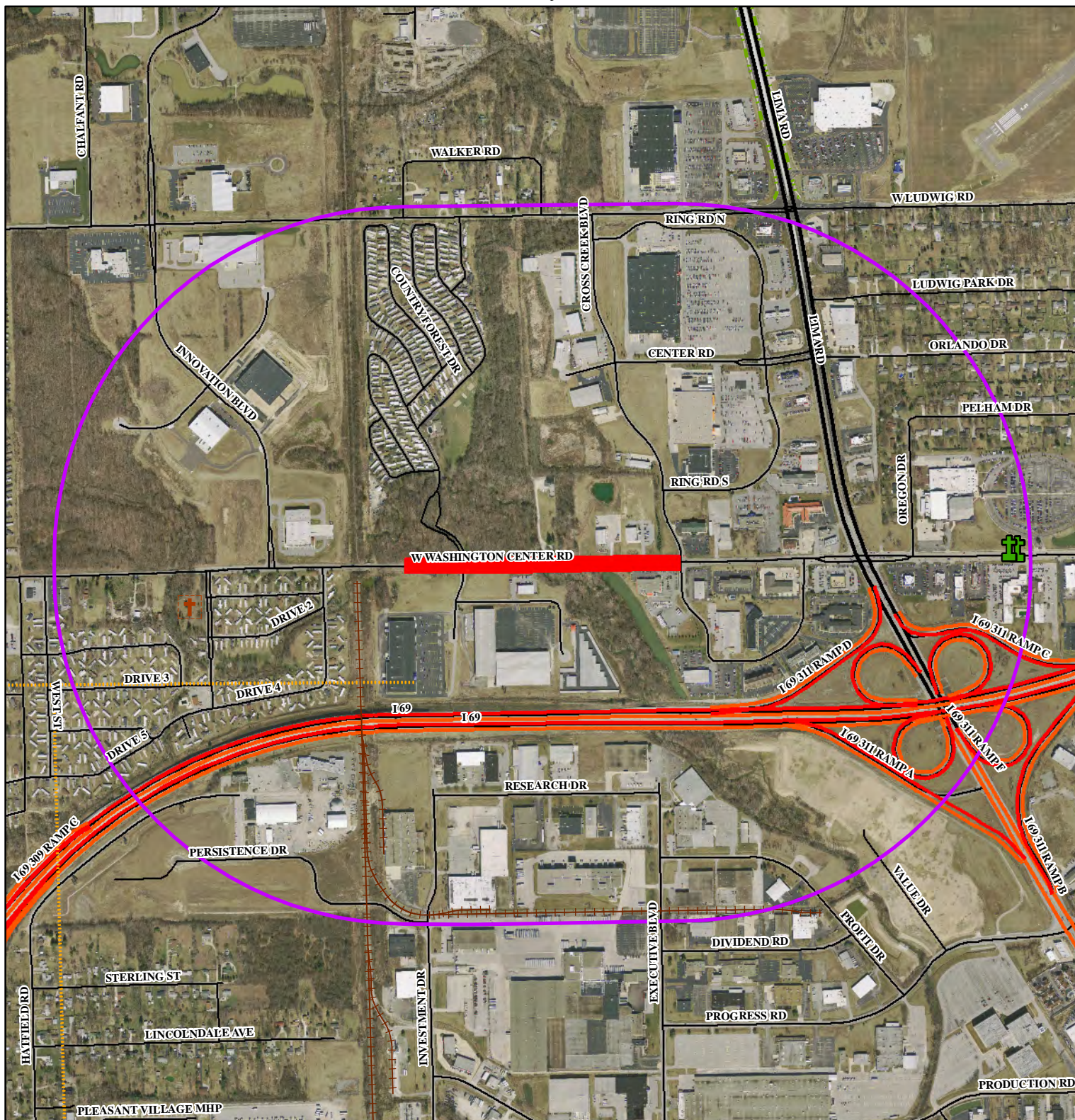


Red Flag Investigation - Infrastructure Map

Washington Center Rd Bridge #95 – over Spy Run Creek

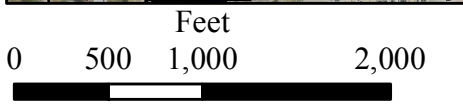
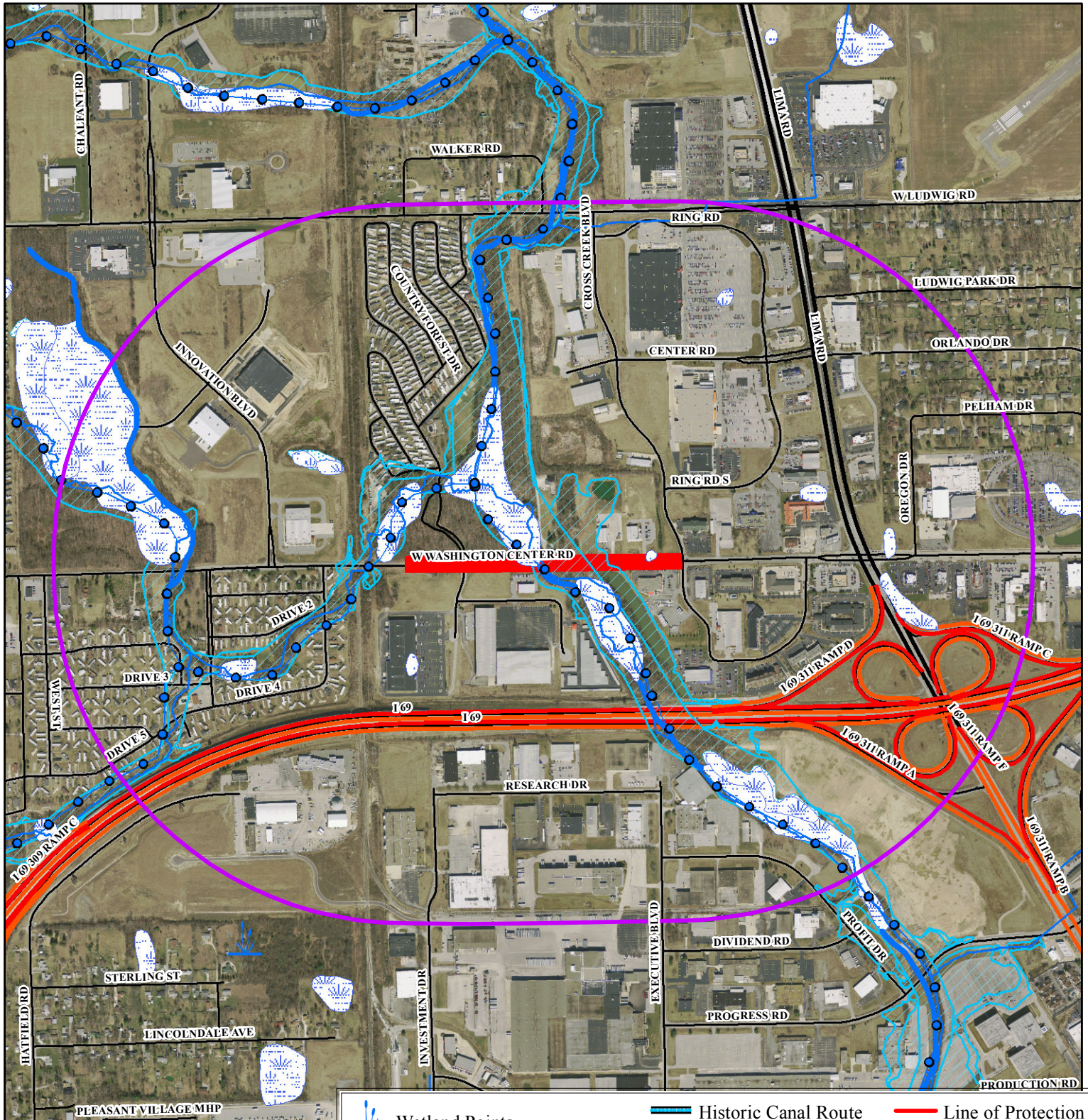
Bridge Replacement

Allen County, Indiana



	Religious Facilities		Recreational Facilities		Interstates
	Museums		Trails		State Route
	Schools		Railroad		US Route
	Hospitals		Pipelines		Local Road
	Cemetaries		Managed Lands		Half Mile Buffer
	Airports		County Boundary		Project Area

Red Flag Investigation - Water Resources Map
 Washington Center Rd Bridge #95 – over Spy Run Creek
 Bridge Replacement
 Allen County, Indiana

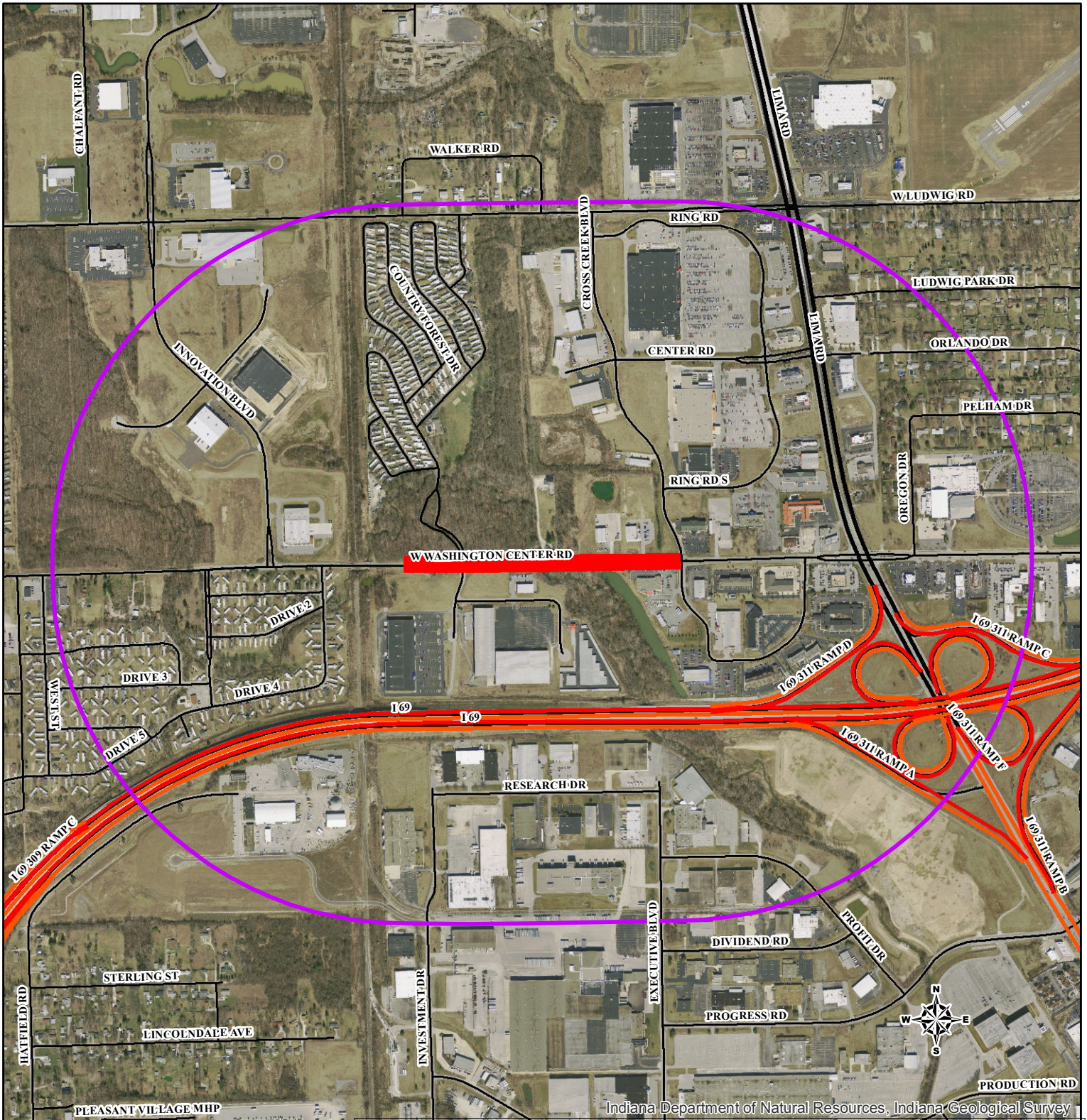


This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

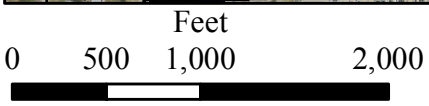


Wetland Points	Historic Canal Route	Line of Protection
Wetland Lines	Historic Canal Structure	Interstates
Wetlands	Lake - Impaired	State Route
Stream - Impaired	Floodplain	US Route
Outstanding Rivers	Karst Springs	Local Road
National River Inventory (NRI)	Cave Entrance Density	Half Mile Buffer
Linear Waterbody	Sinkhole Areas	Project Area
Waterbody Areas	Sinking-Stream Basins	

Red Flag Investigation - Mining/Mineral Exploration Map
 Washington Center Rd Bridge #95 – over Spy Run Creek
 Bridge Replacement
 Allen County, Indiana



Indiana Department of Natural Resources, Indiana Geological Survey

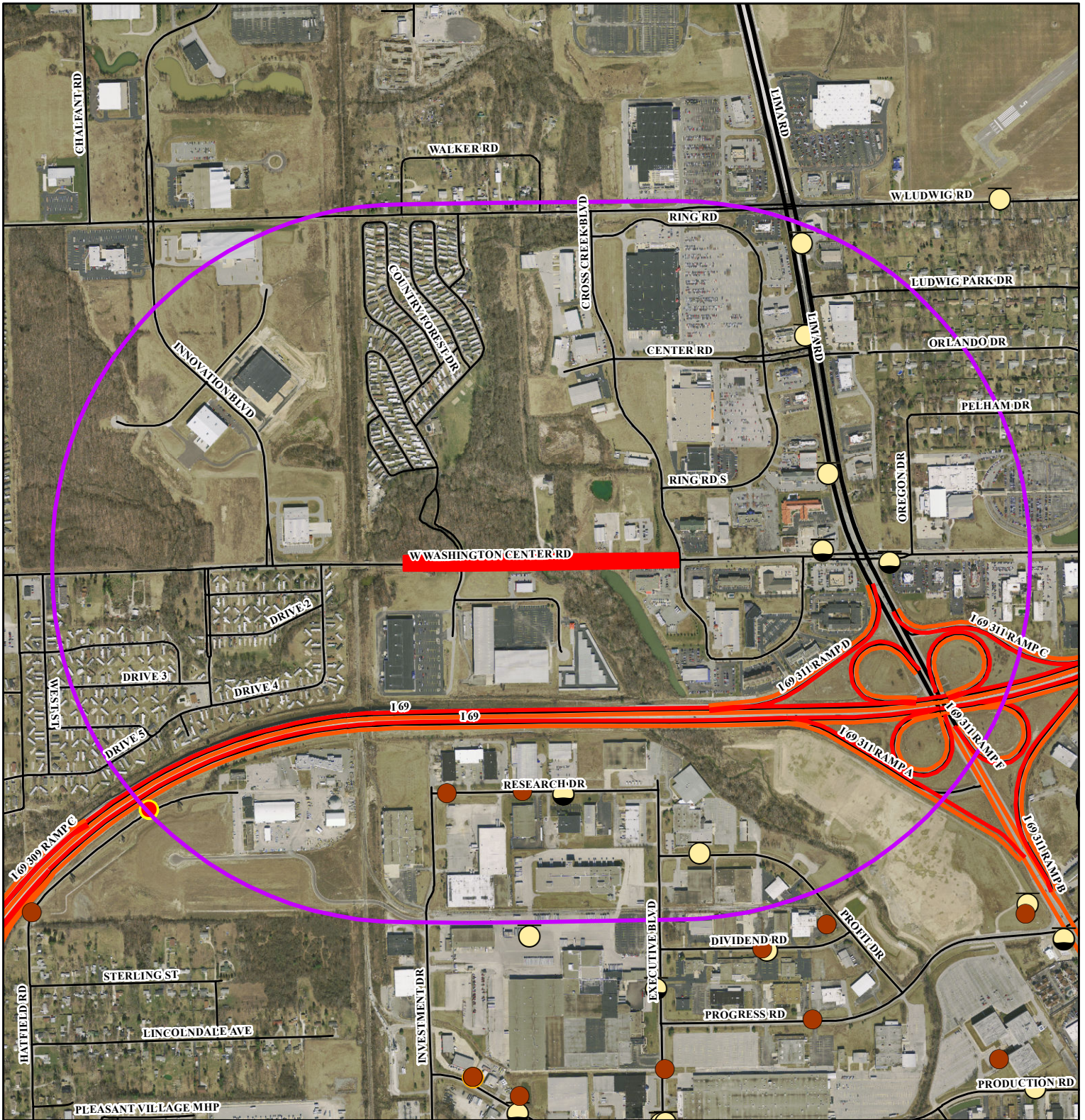


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Mines - Underground	Gas Wells	Interstates
Mines - Surface	Gas Storage Wells	State Route
Gas	Oil Wells	US Route
Oil	Service Wells	Local Road
Oil/gas	Stratigraphic Test Wells	Half Mile Buffer
	Dry Wells	Project Area
	Unknown Wells	

Red Flag Investigation - Hazmat Concerns Map
 Washington Center Rd Bridge #95 – over Spy Run Creek
 Bridge Replacement
 Allen County, Indiana



0 500 1,000 2,000
 Feet

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

***See next page for Map Legend**



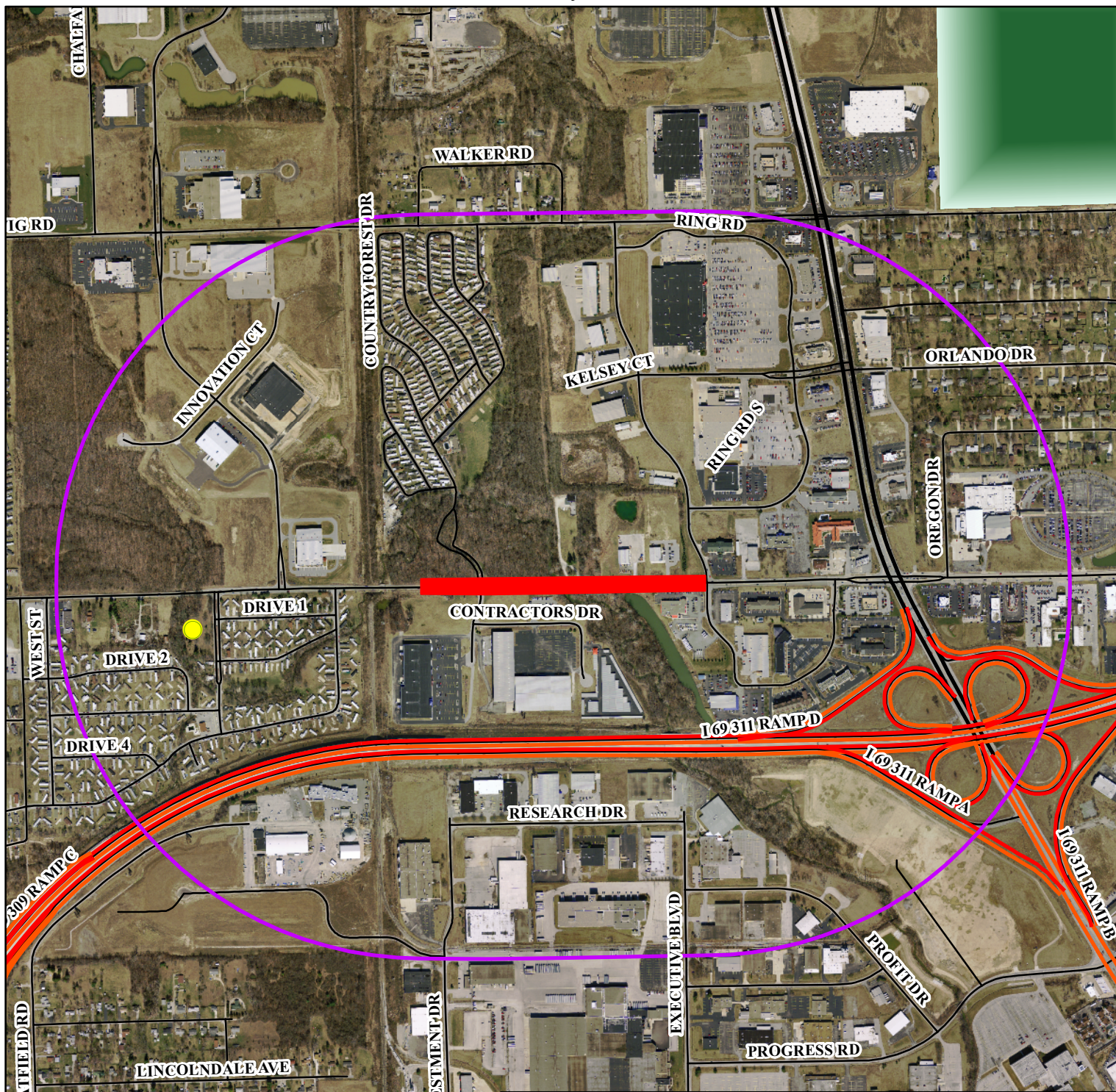
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Red Flag Investigation - Hazmat Concerns Legend
 Washington Center Rd Bridge #95 – over Spy Run Creek
 Bridge Replacement
 Allen County, Indiana

	Confined Feeding Operations		Brownfields
	Industrial Waste Site		State Cleanup Sites
	Waste Treatment Storage Disposal		Voluntary Remediation Program Sites
	Waste Septage Sites		Institutional Controls
	Waste Tire Sites		Leaking Underground Storage Tank
	Construction Demolition Waste		Underground Storage Tank
	Waste Solid Active Permitted		Manufactured Gas Plants
	Composting Facilities		Waste Transfer Stations
	Open Dumps		Waste Restricted Sites
	Waste Old Landfills		Interstates
	Landfill Sites		State Route
	NPDES Facility		US Route
	NPDES Pipe		Local Road
	Corrective Action Sites		Half Mile Buffer
	Superfund		Project Area

Red Flag Investigation - Historical Features Map
 Washington Center Rd Bridge #95 – over Spy Run Creek
 Bridge Replacement
 Allen County, Indiana



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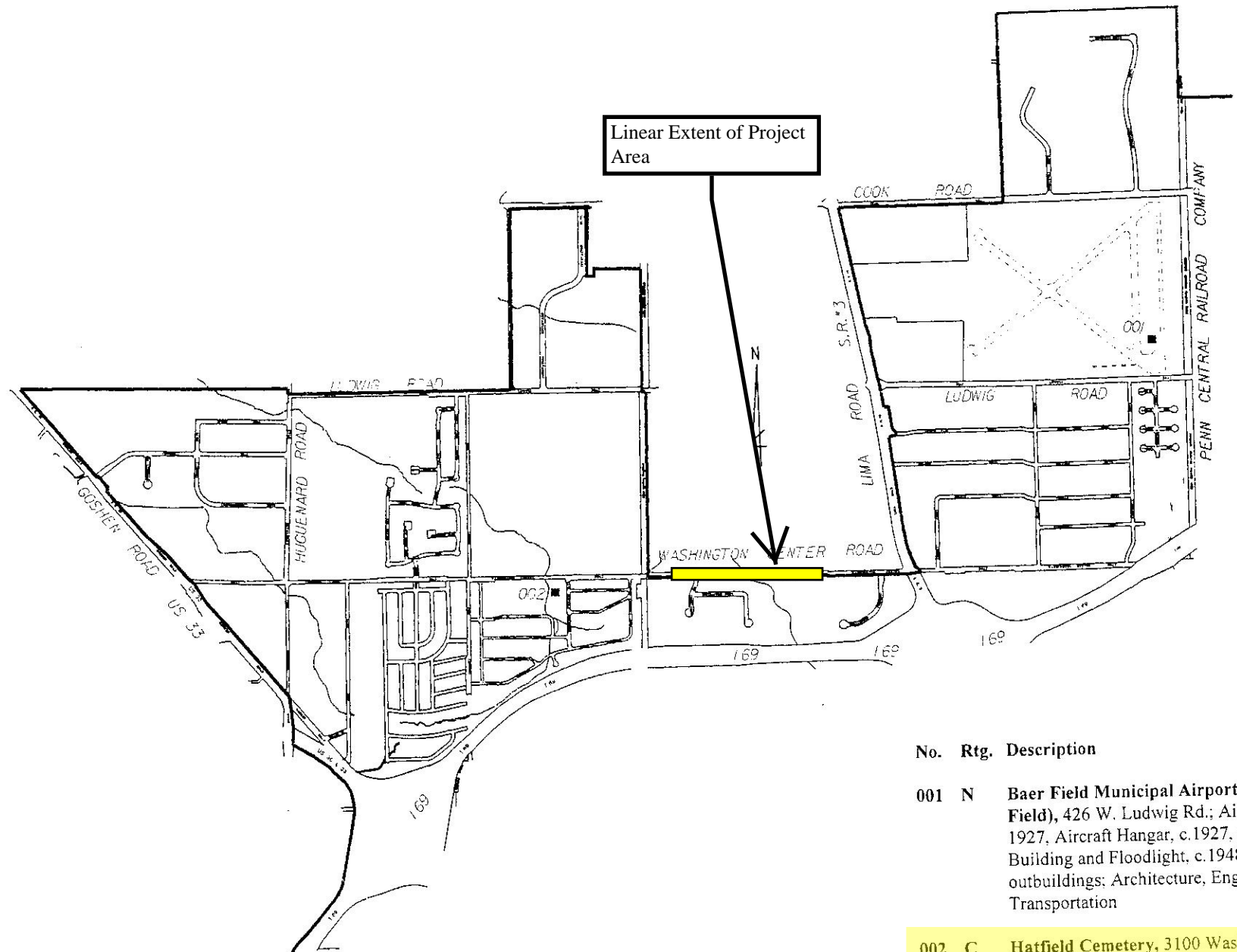


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	Potential Historic Canal Structures		Interstates
	Historic Canal Routes		State Route
	Non-Select Bridge		US Route
	Select Bridge		Local Road
	Historical Sites		Half Mile Buffer
	Potential Historical Sites		Project Area
	IHSSI Sites		
	Historical Areas or Districts		
	Potential Historical Areas or Districts		

Sector 01 (003-286-01001/01002)



No.	Rtg.	Description
001	N	Baer Field Municipal Airport (Smith Field), 426 W. Ludwig Rd.; Air Field, 1927, Aircraft Hangar, c.1927, Service Building and Floodlight, c.1948, outbuildings: Architecture, Engineering, Transportation
002	C	Hatfield Cemetery, 3100 Washington Center Rd.; c.1851-present; Exploration/settlement

Indiana County Endangered, Threatened and Rare Species List

County: **Allen**

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Epioblasma obliquata perobliqua	White Cat's Paw Pearlymussel	LE	SE	G1T1	SX
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Obovaria subrotunda	Round Hickorynut		SSC	G4	S1
Pleurobema clava	Clubshell	LE	SE	G2	S1
Ptychobranthus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Villosa fabalis	Rayed Bean	C	SSC	G2	S1
Insect: Odonata (Dragonflies & Damselflies)					
Tachopteryx thoreyi	Gray Petaltail		SR	G4	S2S3
Fish					
Moxostoma valenciennesi	Greater Redhorse		SE	G4	S2
Percina evides	Gilt Darter		SE	G4	S1
Amphibian					
Ambystoma laterale	Blue-spotted Salamander		SSC	G5	S2
Hemidactylium scutatum	Four-toed Salamander		SE	G5	S2
Rana pipiens	Northern Leopard Frog		SSC	G5	S2
Reptile					
Clemmys guttata	Spotted Turtle		SE	G5	S2
Clonophis kirtlandii	Kirtland's Snake		SE	G2	S2
Emydoidea blandingii	Blanding's Turtle		SE	G4	S2
Sistrurus catenatus catenatus	Eastern Massasauga	C	SE	G3G4T3T4Q	S2
Bird					
Asio flammeus	Short-eared Owl		SE	G5	S2
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Buteo platypterus	Broad-winged Hawk	No Status	SSC	G5	S3B
Circus cyaneus	Northern Harrier		SE	G5	S2
Dendroica cerulea	Cerulean Warbler		SE	G4	S3B
Falco peregrinus	Peregrine Falcon	No Status	SE	G4	S2B
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SE	G5	S2
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike	No Status	SE	G4	S3B
Nyctanassa violacea	Yellow-crowned Night-heron		SE	G5	S2B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Phalaropus tricolor	Wilson's Phalarope		SSC	G5	SHB
Sturnella neglecta	Western Meadowlark		SSC	G5	S2B
Tyto alba	Barn Owl		SE	G5	S2

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

Indiana County Endangered, Threatened and Rare Species List

County: Allen

Species Name	Common Name	FED	STATE	GRANK	SRANK
Wilsonia citrina	Hooded Warbler		SSC	G5	S3B
Mammal					
Lynx rufus	Bobcat	No Status	SSC	G5	S1
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Andromeda glaucophylla	Bog Rosemary		SR	G5	S2
Armoracia aquatica	Lake Cress		SE	G4?	S1
Chelone obliqua var. speciosa	Rose Turtlehead		WL	G4T3	S3
Circaea alpina	Small Enchanter's Nightshade		SX	G5	SX
Coeloglossum viride var. virescens	Long-bract Green Orchis		ST	G5T5	S2
Crataegus succulenta	Fleshy Hawthorn		SR	G5	S2
Euphorbia obtusata	Bluntleaf Spurge		SE	G5	S1
Phlox ovata	Mountain Phlox		SE	G4	S1
Platanthera psycodes	Small Purple-fringe Orchis		SR	G5	S2
Poa alsodes	Grove Meadow Grass		SR	G4G5	S2
Scutellaria parvula var. parvula	Small Skullcap		SX	G4T4	SX
Spiranthes lucida	Shining Ladies'-tresses		SR	G5	S2
Spiranthes magnicamporum	Great Plains Ladies'-tresses		SE	G4	S1
High Quality Natural Community					
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	S2
Forest - floodplain mesic	Mesic Floodplain Forest		SG	G3?	S1
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry	Dry Upland Forest		SG	G4	S4
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3
Lake - pond	Pond		SG	GNR	SNR
Prairie - dry-mesic	Dry-mesic Prairie		SG	G3	S2
Wetland - marsh	Marsh		SG	GU	S4
Wetland - swamp forest	Forested Swamp		SG	G2?	S2
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2
Other					
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.

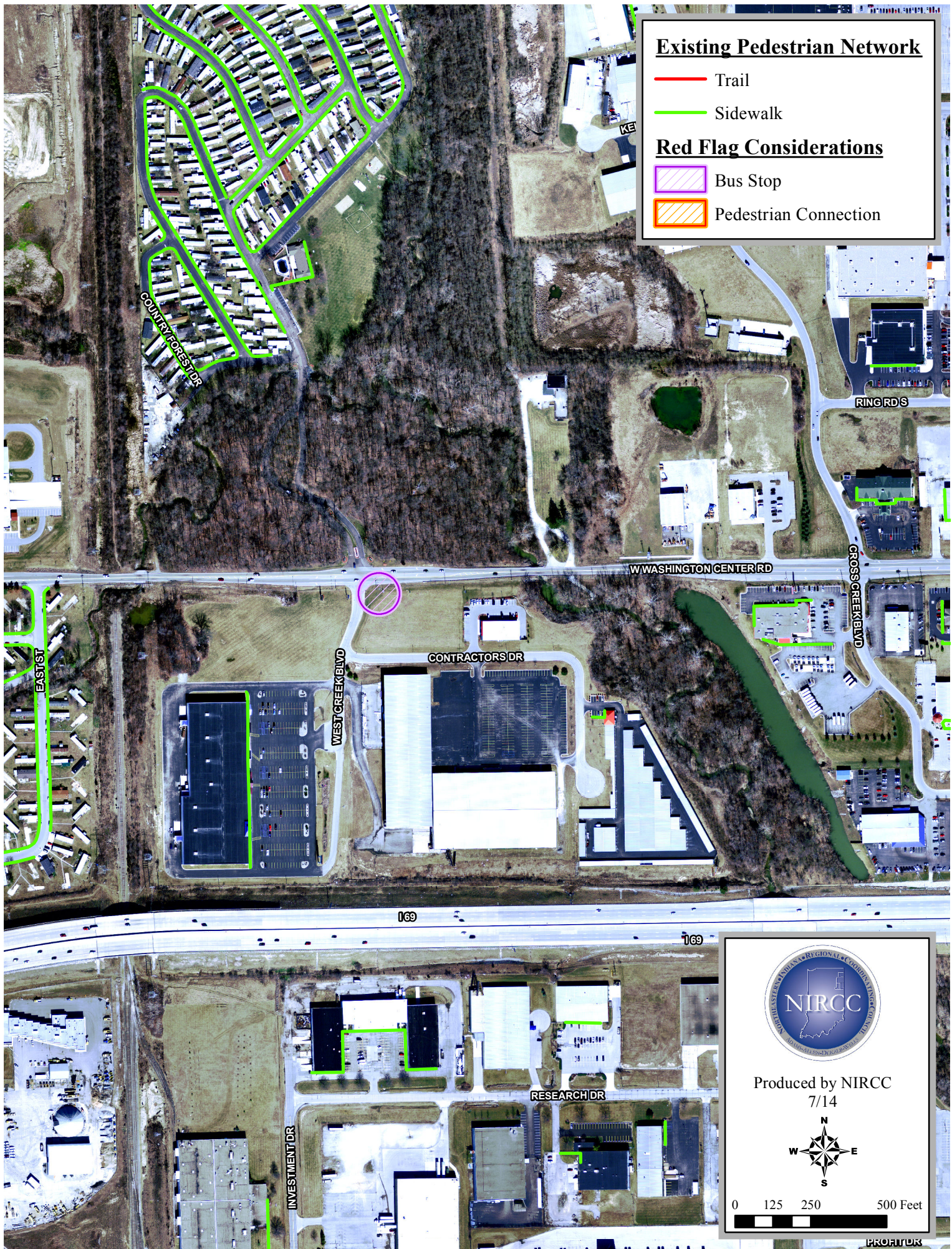
Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically 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

Existing Pedestrian Network

- Trail
- Sidewalk

Red Flag Considerations

- Bus Stop
- Pedestrian Connection



Produced by NIRCC
7/14



0 125 250 500 Feet

PROFITDR