

AREA PLAN COMMISSION

OF TIPPECANOE COUNTY

20 NORTH 3RD STREET
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SALLIE DELL FAHEY
EXECUTIVE DIRECTOR

Date: December 30, 2013

Re: RED FLAG INVESTIGATION
DES # TBD
Cumberland Avenue
Cumberland Avenue Phase 4
West Lafayette, Tippecanoe County, Indiana

NARRATIVE

The proposed project limits begin at the intersection of Cumberland and US 52 and run west approximately ½ mile. The project will include road widening to provide a four-lane section as well as additional sidewalks, trail connections, lighting and landscaping. Utilities will be relocated. Earthwork will be minimal but may involve poor soils. The project does not include intersection improvements at US 52.

SUMMARY

INFRASTRUCTURE			
As identified below the following items of concern were found within ½ mile:			
Religious Facilities	N/A	Recreational Facilities	N/A
Airports	N/A	Pipelines	2
Cemeteries	N/A	Railroads	N/A
Hospitals	N/A	Trails	12
Schools	N/A	Managed Lands	3

There are two natural gas pipelines within a ½ mile radius of the project. Both are owned by Vectren. One is in the intersection at the eastern terminus of the project. The other runs immediately adjacent to the project. Both require prior coordination with utilities.

Twelve trail facilities fall within a ½ mile radius of the project. Seven are currently open while five remain in the planning stages. The Cumberland Avenue Trail and Celery Bog Nature Trails are in the immediate vicinity of the project and will be affected by construction.

The only managed land within a ½ mile radius of the project is the Celery Bog and it is currently managed by the West Lafayette Parks and Recreation department. The Celery Bog is in the immediate project area and will require prior coordination.

WATER RESOURCES			
As identified below the following items of concern were found within ½ mile:			
NWI - Points	N/A	NWI - Wetlands	24
Karst Springs	N/A	IDEM 303d Listed Lakes	N/A
Canal Structures – Historic	N/A	Lakes	6
NWI - Lines	N/A	Floodplain - DFIRM	1
IDEM 303d Listed Rivers and Streams (Impaired)	N/A	Cave Entrance Density	N/A
Rivers and Streams	N/A	Sinkhole Areas	N/A
Canal Routes - Historic	N/A	Sinking-Stream Basins	N/A

Wetlands, lakes and the floodplain are all associated with the Celery Bog. Prior coordination will be necessary as all are in the immediate project area.

MINING/MINERAL EXPLORATION			
As identified below the following items of concern were found within ½ mile:			
Petroleum Wells	N/A	Petroleum Fields	N/A
Mines – Surface	N/A	Mines – Underground	N/A

There are no mining concerns with a ½ mile radius of the project.

HAZMAT CONCERNS			
As identified below the following items of concern were found within ½ mile:			
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	0 (see notes)
Industrial Waste Sites (RCRA Generators)	4	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)	1	Underground Storage Tanks	3
Manufactured Gas Plant Sites	N/A	Voluntary Remediation Program	N/A
NPDES Facilities	1	Superfund	N/A
NPDES Pipe Locations	2	Institutional Control Sites	N/A
Open Dump Sites	N/A		

RCRA Generators within a ½ mile radius are McConnaughay Technologies Incorporated, CTS Corporation Micro Electronics, Bioanalytical Systems Incorporated and Great Lakes Chemical Corporation.

Data provided by INDOT indicates one State Cleanup Site exists at Ross-Ade Stadium. The location of this site is questionable.

Three underground storage tanks are within a ½ mile radius of the project. One is at INDOT’s Division of Research and Training and two are at Great Lakes Chemical Corporation. None are in the immediate project area.

One Leaking Underground Storage Tank is within the ½ mile radius, located at a Speedway gas station. It is not in the immediate project area.

One NPDES facility is within ½ mile of the project area at CTS Microelectronics. It is not in the immediate area.

Two NPDES pipe facilities are within the ½ mile radius, at CTS Microelectronics and the Speedway gas station. Neither is in the immediate construction area.

Eight additional hazmat sites, identified only as “spills”, were found within the ½ mile radius.

Ecological Information

The Tippecanoe County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached. The ETR species on the state or federal registers are highlighted.

Cultural Resources

No listed historic structures or districts (state or national) fall within ½ mile of the project.

RECOMMENDATIONS

INFRASTRUCTURE: Coordination with Vectren will be necessary to assess possible pipeline impacts. The West Lafayette Parks Department and relevant state agencies should be involved in any Celery Bog assessments.

WATER RESOURCES: Coordination with Celery Bog’s managing agencies is needed to minimize potential effects on managed lands.

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: While questionable, the state cleanup site at Ross-Ade stadium will need confirmation. While no underground storage tanks or pipe facilities are likely to be affected by project right of way requirements state agencies should be contacted.

ECOLOGICAL INFORMATION: Coordination with IDNR will be needed to determine if any listed species and/or habitats may be impacted by the proposed project.

CULTURAL RESOURCES: N/A

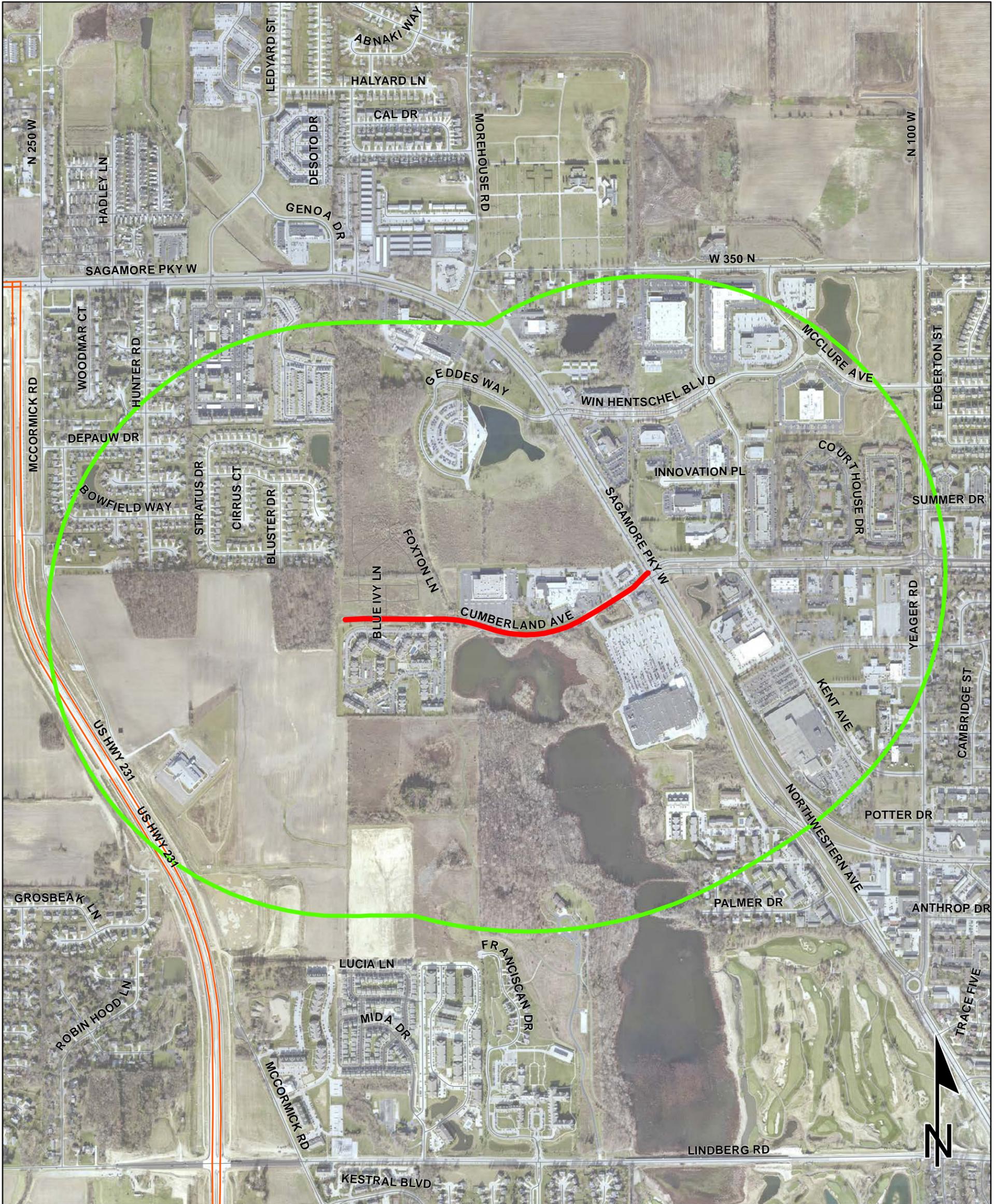
Prepared by:
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Transportation GIS Specialist
Area Plan Commission of Tippecanoe County

PROJECT AREA

Cumberland Avenue Phase 4

Des. No. TBD, Road Reconstruction

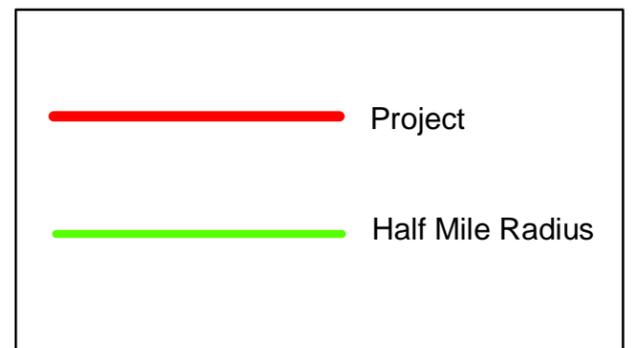
Tippecanoe County, Indiana



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



Project Area Map



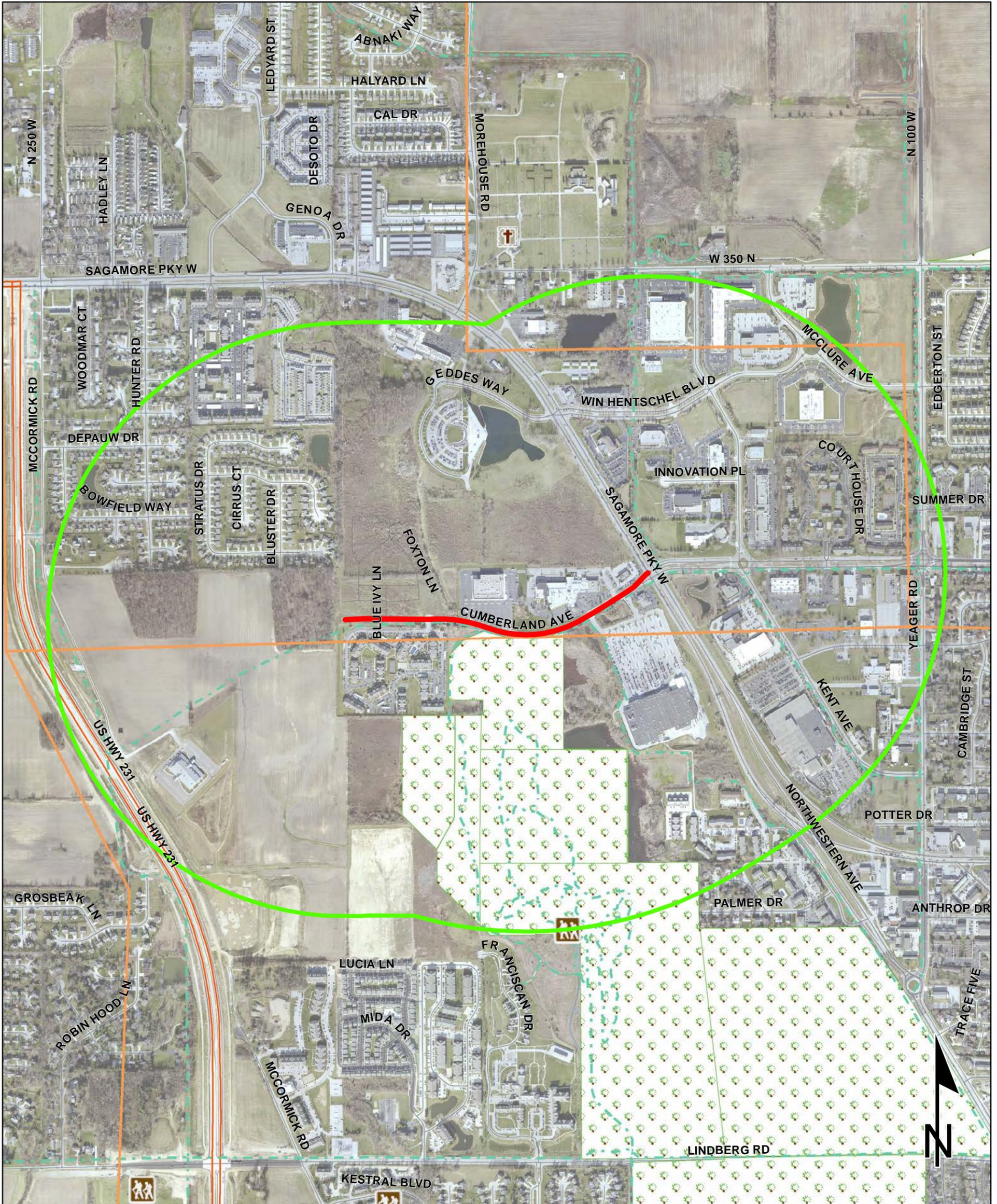
This map is intended to serve as an aid in graphic representation only and was provided by INDOT. This information is not warranted for accuracy or other purposes.

INFRASTRUCTURE

Cumberland Avenue Phase 4

Des. No. TBD, Road Reconstruction

Tippecanoe County, Indiana



Sources: 0.1 0.05 0 0.1 Miles
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Infrastructure Legend

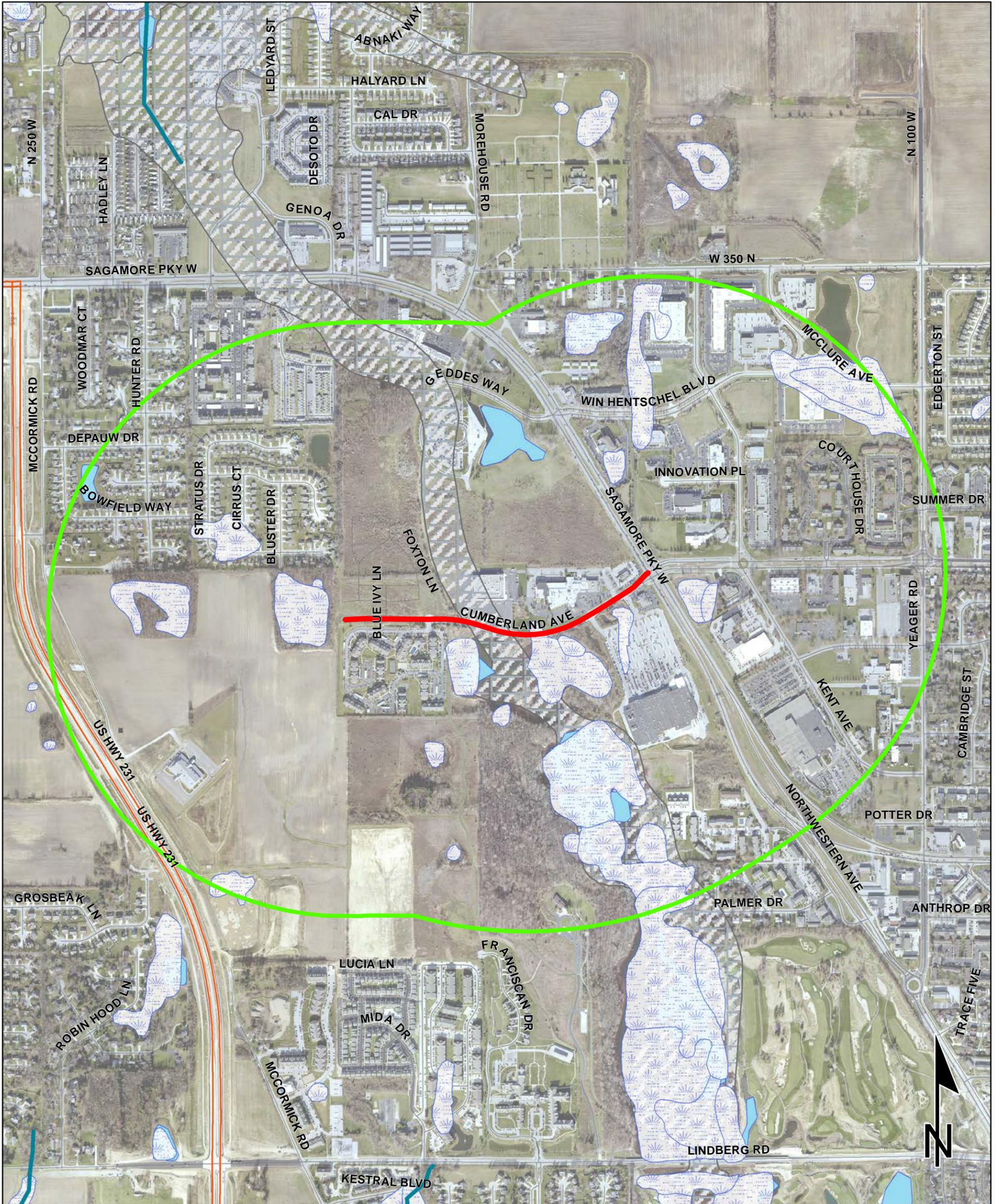
	Religious Bldg		Recreation		Project Area
	Religious Bldg		Pipeline		Half Mile Radius
	Airport		Railroad		Interstate
	Cemeteries		Trails		State Route
	Hospital		Managed Lands		US Route
	School		County Boundary		Local Road

WATER RESOURCES

Cumberland Avenue Phase 4

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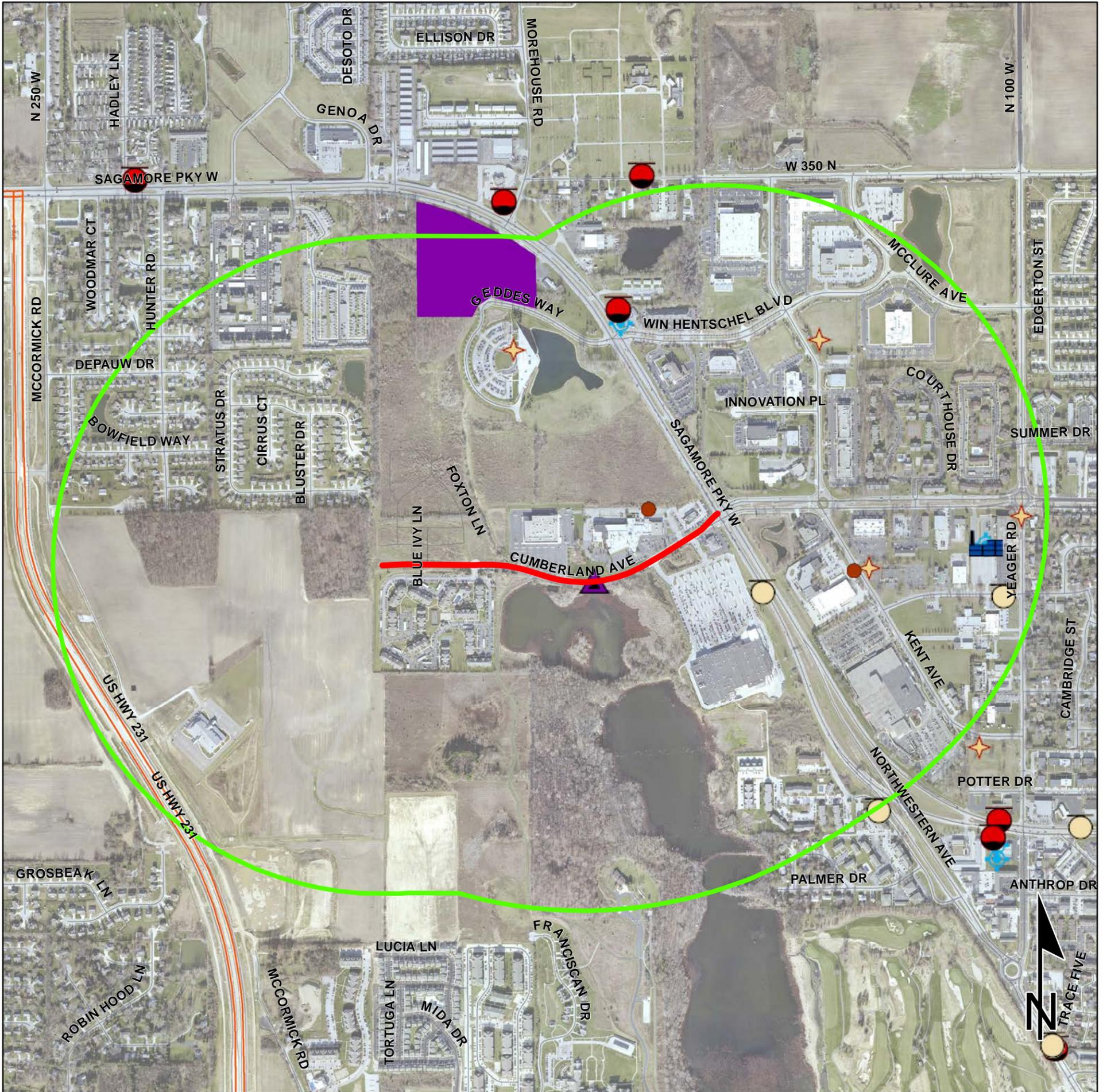
Water Resources Legend

NWI - Point	Wetlands	Project Area
Canal Structure - Historic	Lake - Impaired	Half Mile Radius
NWI - Line	Lake	Interstate
Stream - Impaired	Floodplain - DFIRM	State Route
NPS NRI listed	County Boundary	US Route
River		Local Road
Canal Route - Historic		

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HAZMAT CONCERNS

Cumberland Avenue Phase 4 Des. No. TBD, Road Reconstruction Tippecanoe County, Indiana



HazMat Concerns Legend

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

0.15 0.075 0 0.15
Miles

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Indiana County Endangered, Threatened and Rare Species List

County: Tippecanoe

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Cyprogenia stegaria	Eastern Fanshell Pearlymussel	LE	SE	G1Q	S1
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Epioblasma torulosa torulosa	Tubercled Blossom	LE	SE	G2TX	SX
Epioblasma triquetra	Snuffbox	LE	SE	G3	S1
Fusconaia subrotunda	Longsolid		SE	G3	SX
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Lampsilis ovata	Pocketbook			G5	S2
Leptodea leptodon	Scaleshell	LE	SX	G1G2	SX
Ligumia recta	Black Sandshell			G5	S2
Obovaria retusa	Ring Pink	LE	SX	G1	SX
Obovaria subrotunda	Round Hickorynut		SSC	G4	S1
Plethobasus cicatricosus	White Wartyback	LE	SE	G1	SX
Plethobasus cyphus	Sheepnose	LE	SE	G3	S1
Pleurobema clava	Clubshell	LE	SE	G2	S1
Pleurobema cordatum	Ohio Pigtoe		SSC	G4	S2
Pleurobema plenum	Rough Pigtoe	LE	SE	G1	S1
Pleurobema rubrum	Pyramid Pigtoe		SE	G2G3	SX
Potamilus capax	Fat Pocketbook	LE	SE	G1G2	S1
Ptychobranhus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Simpsonaias ambigua	Salamander Mussel		SSC	G3	S2
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Villosa fabalis	Rayed Bean	LE	SSC	G2	S1
Insect: Coleoptera (Beetles)					
Lissobiops serpentinus	A Rove Beetle		SE	GNR	S1
Insect: Ephemeroptera (Mayflies)					
Paracloeodes minutus	A Small Minnow Mayfly		SR	G5	S2
Insect: Lepidoptera (Butterflies & Moths)					
Speyeria idalia	Regal Fritillary		SE	G3	S1
Insect: Mecoptera					
Merope tuber	Earwig Scorpionfly		SE	G3G5	S1
Insect: Odonata (Dragonflies & Damselflies)					
Erpetogomphus designatus	Eastern Ringtail		ST	G5	S2
Somatochlora tenebrosa	Clamp-tipped Emerald		SR	G5	S2S3
Fish					
Etheostoma tippecanoe	Tippecanoe Darter		SSC	G3G4	S3
Amphibian					
Hemidactylum scutatum	Four-toed Salamander		SSC	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
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Species Name	Common Name	FED	STATE	GRANK	SRANK
Reptile					
Clemmys guttata	Spotted Turtle		SE	G5	S2
Emydoidea blandingii	Blanding's Turtle		SE	G4	S2
Liochlorophis vernalis	Smooth Green Snake		SE	G5	S2
Terrapene carolina carolina	Eastern Box Turtle		SSC	G5T5	S3
Terrapene ornata ornata	Ornate Box Turtle		SE	G5T5	S1
Bird					
Aimophila aestivalis	Bachman's Sparrow			G3	SXB
Ammodramus henslowii	Henslow's Sparrow		SE	G4	S3B
Ardea herodias	Great Blue Heron			G5	S4B
Asio flammeus	Short-eared Owl		SE	G5	S2
Asio otus	Long-eared Owl			G5	S2
Aythya collaris	Ring-necked Duck			G5	SHB
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Botaurus lentiginosus	American Bittern		SE	G4	S2B
Buteo platypterus	Broad-winged Hawk	No Status	SSC	G5	S3B
Carduelis pinus	Pine Siskin			G5	S3N
Cistothorus platensis	Sedge Wren		SE	G5	S3B
Dendroica cerulea	Cerulean Warbler		SE	G4	S3B
Falco peregrinus	Peregrine Falcon	No Status	SE	G4	S2B
Grus canadensis	Sandhill Crane	No Status	SSC	G5	S2B,S1N
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SSC	G5	S2
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike	No Status	SE	G4	S3B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Rallus elegans	King Rail		SE	G4	S1B
Sturnella neglecta	Western Meadowlark		SSC	G5	S2B
Tyto alba	Barn Owl		SE	G5	S2
Mammal					
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat		SSC	G3G4	SH
Geomys bursarius	Plains Pocket Gopher		SSC	G5	S2
Lasiurus borealis	Eastern Red Bat		SSC	G5	S4
Mustela nivalis	Least Weasel		SSC	G5	S2?
Myotis septentrionalis	Northern Myotis		SSC	G4	S3
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Nycticeius humeralis	Evening Bat		SE	G5	S1
Reithrodontomys megalotis	Western Harvest Mouse			G5	S2
Spermophilus franklinii	Franklin's Ground Squirrel		SE	G5	S2
Taxidea taxus	American Badger		SSC	G5	S2

Vascular Plant

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County: Tippecanoe

Species Name	Common Name	FED	STATE	GRANK	SRANK
Androsace occidentalis	Western Rockjasmine		ST	G5	S2
Arenaria patula	Pitcher's Stitchwort		SE	G4	S1
Aster oblongifolius	Aromatic Aster		SR	G5	S2
Astragalus tennesseensis	Tennessee Milk-vetch		SRE	G3	SX
Bacopa rotundifolia	Roundleaf Water-hyssop		ST	G5	S1
Besseyia bullii	Kitten Tails		SE	G3	S1
Botrychium matricariifolium	Chamomile Grape-fern		SR	G5	S2
Botrychium simplex	Least Grape-fern		SE	G5	S1
Camassia angusta	Wild Hyacinth		SE	G5?Q	S1
Carex flava	Yellow Sedge		ST	G5	S2
Carex gravida	Heavy Sedge		SE	G5	S1
Chelone obliqua var. speciosa	Rose Turtlehead		WL	G4T3	S3
Chrysopsis villosa	Hairy Golden-aster		ST	G5	S2
Circaea alpina	Small Enchanter's Nightshade		SX	G5	SX
Cirsium hillii	Hill's Thistle		SE	G3	S1
Coeloglossum viride var. virescens	Long-bract Green Orchis		ST	G5T5	S2
Crataegus pedicellata	Scarlet Hawthorn		ST	G5	S2
Cypripedium candidum	Small White Lady's-slipper		WL	G4	S2
Eriophorum angustifolium	Narrow-leaved Cotton-grass		SR	G5	S2
Erysimum capitatum	Prairie-rocket Wallflower		ST	G5	S2
Euphorbia obtusata	Bluntleaf Spurge		SE	G5	S1
Gentiana alba	Yellow Gentian		SR	G4	S2
Houstonia nigricans	Narrowleaf Summer Bluets		SR	G5	S2
Linum sulcatum	Grooved Yellow Flax		SR	G5	S2
Lithospermum incisum	Narrow-leaved Puccoon		SE	G5	S1
Melampyrum lineare	American Cow-wheat		SR	G5	S2
Muhlenbergia cuspidata	Plains Muhlenbergia		SE	G4	S1
Napaea dioica	Glade Mallow		SR	G4	S2
Onosmodium hispidissimum	Shaggy False-gromwell		SE	G4	S1
Orobanche riparia	Bottomland Broomrape		SE	G5	S2
Oryzopsis racemosa	Black-fruit Mountain-ricegrass		SR	G5	S2
Panicum rigidulum var. pubescens	Long-leaved Panic-grass		SX	G5T5?	SX
Plantago cordata	Heart-leaved Plantain		SE	G4	S1
Poa paludigena	Bog Bluegrass		WL	G3	S3
Psoralea tenuiflora	Few-flowered Scurf-pea		SX	G5	SX
Sanguisorba canadensis	Canada Burnet		SE	G5	S1
Selaginella apoda	Meadow Spike-moss		WL	G5	S1
Silene regia	Royal Catchfly		ST	G3	S2
Trichostema dichotomum	Forked Bluecurl		SR	G5	S2
Viola pedatifida	Prairie Violet		ST	G5	S2

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County: Tippecanoe

Species Name	Common Name	FED	STATE	GRANK	SRANK
High Quality Natural Community					
Barrens - gravel	Gravel Slope Barrens		SG	G3	S1
Barrens - sand	Sand Barrens		SG	G3	S2
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3
Lake - lake	Lake		SG	GNR	S2
Prairie - dry-mesic	Dry-mesic Prairie		SG	G3	S2
Wetland - fen	Fen		SG	G3	S3
Wetland - marsh	Marsh		SG	GU	S4
Wetland - seep circumneutral	Circumneutral Seep		SG	GU	S1
Other Significant Feature					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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